

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/51068956>

# A Global Perspective on Child Sexual Abuse: Meta-Analysis of Prevalence Around the World

Article in *Child Maltreatment* · May 2011

DOI: 10.1177/1077559511403920 · Source: PubMed

---

CITATIONS

1,806

---

READS

9,616

4 authors, including:



**Marije Stoltenborgh**

Erasmus University Rotterdam

14 PUBLICATIONS 4,299 CITATIONS

SEE PROFILE



**Marinus H. van IJzendoorn**

University College London

996 PUBLICATIONS 81,747 CITATIONS

SEE PROFILE



**Marian bakermans-kranenburg**

ISPA Instituto Universitário

650 PUBLICATIONS 54,360 CITATIONS

SEE PROFILE

# Child Maltreatment

<http://cmx.sagepub.com/>

---

## **A Global Perspective on Child Sexual Abuse: Meta-Analysis of Prevalence Around the World**

Marije Stoltenborgh, Marinus H. van IJzendoorn, Eveline M. Euser and Marian J. Bakermans-Kranenburg

*Child Maltreat* 2011 16: 79 originally published online 21 April 2011

DOI: 10.1177/1077559511403920

The online version of this article can be found at:

<http://cmx.sagepub.com/content/16/2/79>

---

Published by:



<http://www.sagepublications.com>

On behalf of:



American Professional Society on the Abuse of Children

**Additional services and information for *Child Maltreatment* can be found at:**

**Email Alerts:** <http://cmx.sagepub.com/cgi/alerts>

**Subscriptions:** <http://cmx.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

**Citations:** <http://cmx.sagepub.com/content/16/2/79.refs.html>

>> [Version of Record](#) - May 9, 2011

[OnlineFirst Version of Record](#) - Apr 21, 2011

[What is This?](#)

# A Global Perspective on Child Sexual Abuse: Meta-Analysis of Prevalence Around the World

Marije Stoltenborgh<sup>1</sup>, Marinus H. van IJzendoorn<sup>1</sup>,  
Eveline M. Euser<sup>1</sup>, and Marian J. Bakermans-Kranenburg<sup>1</sup>

## Abstract

Our comprehensive meta-analysis combined prevalence figures of childhood sexual abuse (CSA) reported in 217 publications published between 1980 and 2008, including 331 independent samples with a total of 9,911,748 participants. The overall estimated CSA prevalence was 127/1000 in self-report studies and 4/1000 in informant studies. Self-reported CSA was more common among female (180/1000) than among male participants (76/1000). Lowest rates for both girls (113/1000) and boys (41/1000) were found in Asia, and highest rates were found for girls in Australia (215/1000) and for boys in Africa (193/1000). The results of our meta-analysis confirm that CSA is a global problem of considerable extent, but also show that methodological issues drastically influence the self-reported prevalence of CSA.

## Keywords

child sexual abuse, epidemiology, gender/sex differences, community samples, adult retrospective reports, cultural/ethnic issues

There is no question about the negative effects of child sexual abuse (CSA) on children's psychological well-being and their development into adulthood. CSA is associated with a variety of problems in the short and the long term for both male and female victims (Beitchman, Zucker, Hood, Dacosta, & Akman, 1991; Beitchman et al., 1992; Browne & Finkelhor, 1986; Chapman et al., 2004; Jumper, 1995; Kendall Tackett, Williams, & Finkelhor, 1993; Paolucci, Genuis, & Violato, 2001; Romano & De Luca, 2001; Spatz Widom, Czaja, & Dutton, 2008; Spatz Widom, DuMont, & Czaja, 2007). Although there seems to be some consensus on the global and persistent occurrence of CSA, controversy exists as to the overall prevalence of CSA with rates varying from 0.1% (Mackenzie, Blaney, Chivers, & Vincent, 1993) to 71.0% (Everill & Waller, 1995). We conducted a comprehensive meta-analysis of 217 publications on CSA published from 1982 to 2008, including 331 independent samples with a total of 9,911,748 participants, aiming to reveal the extent of the problem and to examine the influence of geographical and sample characteristics as well as procedural factors on the estimated prevalence of CSA.

geographical origin of the samples may influence prevalence. Although geographical area and culture are not isomorphic, differences in cultural beliefs and values might be the underlying mechanism affecting the estimated prevalence of CSA across countries and continents (Kenny & McEachern, 2000b). For example, in collectivist cultures like the Asians the needs of a group tend to be considered somewhat more important than those of an individual (Hofstede, 2001). This might result in ignoring the abuse experiences of an individual family member in order to protect the family from the shame associated with a reported case of abuse (Back et al., 2003). Also, cultural differences with regard to sexuality and to sexual restraint might influence the prevalence of sexual abuse and/or the willingness of sexual abuse victims to disclose their experiences (Kenny & McEachern, 2000b; Runyan, 1998). Examples are the taboo around girls losing their virginity before marriage and the taboo on boys' homosexual experiences that are often found in Hispanic cultures (Kenny & McEachern, 2000b).

Despite the fact that the body of international research about sexual abuse has widely expanded since Finkelhor (1994)

## *Influence of Geographical and Sample Characteristics*

Higher prevalences of CSA among girls than among boys are consistently found (Finkelhor & Baron, 1986; Finkelhor, 1994; Pereda, Guilera, Forns, & Gomez-Benito, 2009a; Pereda, Guilera, Forns, & Gomez-Benito, 2009b; Putnam, 2003; Rind, Tromovitch, & Bauserman, 1998). Besides gender, the

<sup>1</sup>Centre for Child and Family Studies, Leiden University, Leiden, The Netherlands

## Corresponding Author:

Marinus H. van IJzendoorn, Centre for Child and Family Studies, Leiden University, PO Box 9555, 2300 RB Leiden, The Netherlands  
Email: vanijzen@fsw.leidenuniv.nl

called for more prevalence studies, not much research has compared prevalence rates among countries or continents. One meta-analysis reported that the highest prevalence rates were found in Africa and the lowest in Europe (Pereda et al., 2009b). A clue as to what to expect might also come from studies comparing different ethnic groups in predominantly Caucasian countries like the United States. In this type of study, Asian minorities often show lower prevalence rates whereas Hispanic minorities often show higher prevalence rates compared to Caucasians (Kenny & McEachern, 2000b). Findings are not unequivocal, however, and it remains to be seen whether the pattern that is found for immigrant groups also emerges from comparisons among continents.

### Procedural Factors

Sampling has been identified more than once as contributing to the diversity in CSA prevalence rates (Goldman & Padayachi, 2000; Wyatt & Peters, 1986). It has been argued that lower prevalence rates are found in convenience samples such as college student samples that are widely used for research on CSA, compared to random samples representing the wider community (Goldman & Padayachi, 2000). A possible reason for the lower prevalence in college samples is that they may be a psychologically healthier group (Goldman & Padayachi, 2000). CSA is found to be related to adverse psychological adjustment (Jumper, 1995) and as such, better psychological health may be associated with lower CSA prevalence. College students may also be more aware of the study's aims and thus more liable to response biases.

Studies on CSA also differ in the method of data collection. Studies in which children or adults report on their own CSA experiences mainly use interviews and questionnaires. Whether or not differences between these two data collection methods are related to differences in prevalence rates of CSA remains unclear. Some reviews have noted that studies using interviews show higher prevalence rates than those using questionnaires (Pereda et al., 2009a; Wyatt & Peters, 1986) while others did not report such a difference (Goldman & Padayachi, 2000; Pereda et al., 2009b; Wyatt & Peters, 1986). It should be noted that both interviews and questionnaires are based on self-reported retrospective recollection (Fergusson & Mullen, 1999), with some uncertainty about whether the reported experiences actually took place (Goldman & Padayachi, 2000), although according to Koss (1993) it is widely accepted that the underreporting of rape is a greater threat to validity than fabrication. Reports of professionals, dossier or chart reviews, and informant observations of children such as teachers observing their students in primary schools, do not rely on potentially biased memories of the respondents and document child abuse from the view of a trained observer or expert. A possible drawback of such informant studies is that CSA may be difficult to be detected by informants because CSA might be less "visible" to outsiders than other types of abuse.

### Incidence and Prevalence

For the difference between studies using self-report measures of CSA and informant studies the distinction between incidence and prevalence rates might be of interest. *Prevalence* refers to the number of individuals having experienced sexual abuse during childhood (Fallon et al., 2010; Peters, Wyatt, & Finkelhor, 1986). Life-time prevalences are generally assessed in self-report studies, since participants are usually asked to report on their experiences of abuse during their entire childhood and adolescence. *Incidence*, on the other hand, refers to the number of new cases of abuse reported or detected during a specific, restricted period of time (Fallon et al., 2010; Peters et al., 1986), often in the context of child protective services. Incidence studies may underestimate the occurrence of CSA (Leventhal, 1998) because only a small proportion of abuse cases may be reported to child protective services or other authorities (Goldman & Padayachi, 2000; Leventhal, 1998; Peters, Wyatt, & Finkelhor, 1986). Moreover, incidence studies capture fewer CSA experiences than prevalence studies because the time frame of incidence studies is more limited than the life-time reports in prevalence studies.

However, with regard to studies of CSA based on informants (in combination with child protective services files) the distinction between incidence and prevalence may not be as clear-cut as it seems to be. First, the informants might cover more cases than those that are officially reported to child protective services, certainly in countries without the legal obligation to report (Euser, Van IJzendoorn, Prinzie, & Bakermans-Kranenburg, 2010). Second, it is impossible to ascertain that the cases reported by informants in incidence studies are the very first sexual abuse experiences of a child and therefore incidence studies of CSA might better be regarded as studies of the current prevalence of CSA during a limited period of time (Van IJzendoorn et al., 2007). Based on the above discussion, prevalence rates from informant studies might underestimate the prevalence of CSA whereas rates from self-report studies might have a bias toward overestimation (Van IJzendoorn, 2007).

### Defining CSA

In self-report studies, participants are sometimes asked questions about CSA without specification of experiences or behaviors that constitute CSA. The answers to these questions may be heavily influenced by the participants' subjective perceptions and definitions of CSA. An extreme example is "Have you been sexually abused?" (e.g., Diaz, Simantov, & Rickert, 2002; Hibbard, Ingersoll, & Orr, 1990). This type of question does not include a clear operationalization of CSA as presented by the researcher. How CSA is defined and subsequently operationalized might have an impact on the reported prevalence. Of course, this is true for both self-report and informant studies. A definition of CSA includes several aspects. Defining the cut-off age for childhood is an important factor, as is the decision whether or not to define a minimum age difference between victim and perpetrator to rule out sexual activity among peers.

Moreover, the acts that constitute CSA are a crucial criterion that could influence the reported CSA prevalence. It is easy to imagine that including, for example, noncontact abuse such as sexual propositions and exhibitionism would yield higher prevalence rates than including contact abuse only. However, Pereda et al. (2009b) found no difference in combined prevalence rates between their broad definition (including noncontact CSA) and their narrow definition (including contact CSA only). According to these authors, this puzzling finding is due to the inclusion of some experiences in both their broad definition and their narrow definition. Related to this issue, the number of questions asked in order to assess CSA may affect the prevalence estimates to some extent because multiple questions can include more specific information about the definition of CSA than a single question can, and more questions might also cover more aspects of CSA, and thus lead to higher prevalence rates.

### This Study

The current meta-analysis aims at providing an estimate of the world-wide prevalence of CSA by integrating prevalence figures from a large body of research on CSA and its correlates. We focused on unraveling the substantial variation in prevalence figures reported in primary studies by analyzing the effects of geographical and sample characteristics and of procedural factors on combined prevalence rates. It is crucial to know whether design and measurement differences between prevalence studies partly or largely determine the outcomes. Meta-analyses might help to identify the set of studies with optimal design features for comparison across time and cultures.

We replicated and extended a previous meta-analysis on the same subject (Pereda et al., 2009b) by including a considerably larger number of studies (331 studies in our meta-analysis versus 100 in Pereda et al., 2009b) and a larger number of moderators. A larger number of studies has several advantages. It increases the power of the analyses, which is important for the detection of smaller effect sizes and imperative in case of methodological heterogeneity of the studies included in the analyses (Valentine, Pigott, & Rothstein, 2010). Furthermore, the larger number of studies allows us to test the influence of moderators on estimates of prevalence rates separately for girls and boys, which was not done by Pereda et al. (2009b). CSA experiences of boys and girls show considerable divergence in prevalence and consequences.

Another important difference between Pereda et al. (2009b) and our meta-analysis is that Pereda et al. (2009b) included only self-report studies whereas we also included informant studies using reports of professionals. Exploring potential differences in prevalence estimates resulting from these rather different approaches is important because policy decisions regarding several aspects of (the prevention of) CSA are often based on government initiated informant studies such as the National Incidence Study of Child Abuse and Neglect (NIS; Sedlak, 2001) in the United States, the Canadian Incidence Study of Reported Child Maltreatment (CIS; Trocmé, Tourigny, MacLaurin, & Fallon, 2003) in Canada, and the Nationale Prevalentiestudie

Mishandeling van Kinderen en Jeugdigen (NPM; Van IJzendoorn et al., 2007) in the Netherlands. We expected prevalence rates to be higher for self-report studies than for informant studies, in which case policy decisions might be based on a possible underestimate of CSA prevalence if we have reason to suspect that self-reported prevalences would be closer to the true rate in the population.

We also expected combined rates to be higher for girls than for boys, and higher for studies using a more inclusive definition of CSA compared to studies using a more exclusive definition of CSA. Since previous results were inconclusive with regard to the influence on CSA prevalence of geographical area of origin of the sample, the method of sampling, and the method of data collection, analyses on these moderator variables were exploratory.

## Method

### Literature Search

Three search methods were used to identify eligible studies, published between January 1980 and January 2008. First, we searched the electronic databases PubMed, Online Contents, Picarta, ERIC, PsychInfo, and Web of Science for empirical articles using the terms *prevalence* and/or *incidence* combined with one of the following terms: (*child\**) (*sexual*) *maltreatment*, (*sexual*) *abuse*, and *victimization*. Second, we electronically searched the specialized journals *Child Abuse and Neglect* and *Child Maltreatment* with the same terms as mentioned above. Third, the references of the collected articles, dissertations, and book chapters were searched for relevant studies, as were other reviews and meta-analyses on child sexual abuse (CSA). Studies were included if the prevalence of CSA was reported (a) in terms of proportions at child level (excluding studies only reporting estimates of the family level) (b) for victims under the age of 18 years in (c) nonclinical samples, and (d) if sufficient data were provided to determine this proportion as well as the sample size.

If publications reported on the same sample or on overlapping samples, the publication providing the maximum of information was included in the meta-analysis. Thus, the independence of samples and the inclusion of every participant only once in the pertinent meta-analysis were ascertained. When possible and necessary, the coding form (Table 1) for the study was supplemented with information from the other—excluded—publications on the same sample. When a publication reported the prevalence of CSA for more than one sample separately, for example, for male and female participants or for participants of different ethnicities, these subsamples were treated as independent studies. This procedure yielded 217 publications, published from 1982 to 2008, covering a total of 331 samples.

### Data Extraction

We coded three types of moderators: sample characteristics, procedural moderators, and publication moderators (see Table 1).

**Table 1.** Coding System

| Variable                                |   | Coding                   | Description   |
|---|---|--------------------------|---|
| <u>Sample characteristics</u>           |   |                          |   |
| Continent                               | 1 | Australia                | Including New Zealand<br>Including USA and Canada   |
|   | 2 | North America            |   |
|   | 3 | Europe                   |   |
|   | 4 | Africa                   |   |
|   | 5 | South America            |   |
|   | 6 | Asia                     |   |
| Country's level of economic development | 1 | Developing               |   |
|   | 2 | Developed                |   |
| Ethnicity                               | 1 | African American         | Predominance in sample, based on reports in the study   |
|   | 2 | Caucasian                |   |
|   | 3 | Asian                    |   |
|   | 4 | Hispanic                 |   |
|   | 5 | African                  |   |
| Age of respondent at assessment         |   |                          | Continuous  |
| Gender distribution in sample           | 1 | Male                     |   |
|   | 2 | Female                   |   |
|   | 3 | Mixed                    |   |
| <u>Procedural moderators</u>            |   |                          |   |
| Definition of abuse                     | 1 | According to NIS-3       | Based on the types of behavior included in the definition                                     |
|   | 2 | Broader than NIS-3       |   |
|   | 3 | Stricter than NIS-3      |   |
| Prevalence period                       | 1 | 0–12                     | Age criterion that was used to define CSA; each participant was included in a single category |
|   | 2 | 0–13                     |   |
|   | 3 | 0–14                     |   |
|   | 4 | 0–15                     |   |
|   | 5 | 0–16                     |   |
|   | 6 | 0–17                     |   |
|   | 7 | 0–18                     |   |
|   | 8 | Limited period: 1 year   |   |
|   | 9 | Limited period > 1 year  |   |
| Age difference                          | 1 | Difference specified     | The minimum age difference between victim and perpetrator in the definition of CSA            |
|   | 2 | No difference specified  |   |
| Type of instrument                      | 1 | Questionnaire            |   |
|   | 2 | Interview face-to-face   |   |
|   | 3 | Telephone interview      |   |
|   | 4 | Computerized interview   |   |
|   | 5 | Observation              |   |
|   | 6 | Reports of professionals |   |
|   | 7 | Dossier or chart study   |   |
| Instrument validated                    | 1 | No                       |   |
|   | 2 | Yes                      |   |
| Number of questions regarding CSA       |   |                          | Continuous; if a range was provided, the minimum number was coded                             |
| Respondent                              | 1 | Child or adolescent      |   |
|   | 2 | Parent                   |   |
|   | 3 | Adult                    |   |
| Response rate                           |   |                          | Continuous  |
| Sampling procedure                      | 1 | Random                   |   |
|   | 2 | Modified random          |   |
|   | 3 | Convenience sample       |   |
| Sample size                             |   |                          | Continuous  |
| Evidence maltreatment                   | 1 | Self-report              | Self-report was coded when parents were respondents   |
|   | 2 | Informant                |   |
| <u>Publication moderators</u>           |   |                          |   |
| Year of publication                     |   |                          | Continuous  |
| Publication outlet                      | 1 | Journal article          |   |
|   | 2 | Dissertation             |   |
|   | 3 | Book chapter             |   |

Note: CSA = childhood sexual abuse.

*Sample characteristics* comprised the geographical area from which the sample originated (Australia/New Zealand, North America, Europe, Africa, South America, Asia), the level of economic development of the sample's country of origin (high-resource or low-resource according to the World Economic Outlook Database [International Monetary Fund, 2010]), the predominant ethnicity of the sample (only used for the subset of studies originating from the United States and Canada), the age of the respondent at the time of assessment (recoded into three categories using the 33rd and 67th percentile scores: <20 years, 20–30 years, >30 years), and the gender distribution in the sample (100% female, 100% male, or mixed). The coded outcome was the proportion of children sexually abused. In order to be able to weight effect sizes, sample size was also coded.

Procedural moderators included the definition of CSA that was coded in accordance with the acts of perpetrators covered by the definition used by the third National Incidence Study (Sedlak, 2001; see Appendix). This resulted in three categories ranging from stricter to broader than the NIS-3 definition. When the definition of CSA included a smaller set of indicators than specified in the Appendix (in most cases, implying indicators restricted to penetration), “stricter than NIS-3” was coded. When no more and no less than the perpetrator acts specified in the appendix were included in a study's definition of CSA, “according to NIS-3” was coded. “Broader than NIS-3” was coded when noncontact abuse (such as exhibitionism) was included in the study's CSA definition.

Furthermore, procedural moderators included the period of prevalence (0–12, 0–13, 0–14, 0–15, 0–16, 0–17, 0–18, limited period 1 year, limited period >1 year; each participant was included in a single category), and whether the definition of CSA in the study included the specification of an age difference between victim and perpetrator (difference specified, no difference specified). Procedural moderators regarding the measurement of CSA were the type of instrument used for the study (questionnaire, face-to-face interview, telephone interview, computerized interview, observation, reports of professionals, dossier/chart study), whether the instrument was validated (as reported by the studies; yes or no), and the number of questions asked (recoded into three categories using the 33rd and 67th percentile scores: less than 3, 3–7, 8 or more). Other procedural moderators included who the respondent was in the case of self-report (children/adolescents, adults, parents), the response rate (recoded into three categories using the 33rd and 67th percentile scores: low [<66.8%], medium [66.8–85.2%], high [>85.2%]), the sampling procedure (randomized—including random and modified random samples—, convenience, or other), the sample size (recoded into three categories using the 33rd and 67th percentile scores: small [<265], medium [265–733], large [>733]), and the kind of evidence used to determine CSA (self-report—scored also when parents reported on abuse of their children—vs. informant, based on clinical judgment, medical evaluation, or jurisprudence).

*Publication moderators* were publication outlet (journal article, dissertation, book chapter, other) and year of publication (recoded into decades). To assess intercoder reliability,

30 publications were coded by two coders. Agreement between the coders for moderators and outcome variables was satisfactory ( $\kappa$ s for categorical variables between .52 and 1.00, average .78, and agreement between 65 and 100%, average 86%; intraclass correlations for continuous variables between .78 and 1.00, average .95; lowest interrater agreement for *period of prevalence*, complete agreement for *continent*, *economic development*, *ethnicity*, *age respondent*, *gender*, *sample size*, *evidence*, *year of publication*, *publication outlet*).

### Meta-Analytic Procedures

Meta-analytical approaches are well-known in medical science, for example, to test the effectiveness of an intervention on a disease. This type of research question requires methodological homogeneity of the studies included that ideally should be randomized controlled trials. In contrast, our meta-analysis included studies that were heterogeneous in their methodology, and one of our aims was to explore the possible influence of methodological factors on reported prevalence. This type of approach has been used earlier in other meta-analyses aiming at estimating prevalence (e.g., De Sanjose et al., 2007; Pereda et al., 2009b; Van Os, Linscott, Myin-Germeys, Delespaul, & Krabbendam, 2009), as well as in many meta-analyses on non-experimental, correlational studies in human development (e.g., Barel, Van IJzendoorn, Sagi-Schwartz, & Bakermans-Kranenburg, 2010; Cyr, Euser, Bakermans-Kranenburg, & Van IJzendoorn, 2010; Juffer, & Van IJzendoorn, 2005).

The meta-analysis was performed using the Comprehensive Meta-Analysis (CMA) program (Borenstein, Rothstein, & Cohen, 2005). For each study, the proportion of abused children was transformed into a logit event rate effect size and the corresponding standard error was calculated (Lipsey & Wilson, 2001). After the analyses, the logits were retransformed into proportions to facilitate interpretation of the results. Combined effect sizes were computed using CMA. Analyses were carried out both including and excluding outlying logit event rates and including and excluding multivariate outlying studies. Multivariate outliers were detected after multiple imputation of missing values, using the missing values analysis in SPSS 17.0. Because no significant differences were found between analyses including and excluding outliers, results are reported including outliers.

Significance tests and moderator analyses were performed through random effects models (Borenstein, Hedges, & Rothstein, 2007). Fixed effects models are based on the assumption that effect sizes observed in a study estimate the corresponding population effect with random error that stems only from the chance factors associated with subject-level sampling error in that study (Lipsey & Wilson, 2001; Rosenthal, 1991). This assumption is not made in random effects models (Hedges & Olkin, 1985). Random effects models allow for the possibility that there are also random differences between studies that are associated with variations in procedures, measures, or settings that go beyond subject-level sampling error and thus point to different study populations (Lipsey & Wilson, 2001).

To test the homogeneity of the overall set and specific sets of effect sizes, we computed  $Q$ -statistics (Borenstein et al., 2005). In addition, we computed 95% confidence intervals (CIs), again based on random estimates, around the point estimate of each set of effect sizes.  $Q$ -statistics and  $p$ -values were also computed to assess differences between combined effect sizes for specific subsets of studies grouped by moderators. Again, the more conservative random effects model tests were used. Contrasts were only tested when at least two of the subsets consisted of at least four studies (Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2003).

We used the “trim and fill” method (Duval & Tweedie, 2000a, 2000b) to calculate the effect of potential publication bias on the outcomes of the meta-analyses. Using this method, a funnel plot is constructed of each study’s effect size against its precision (usually plotted as  $1/SE$ ). These plots should be shaped like a funnel if no publication bias is present. However, since smaller studies and studies with nonsignificant results are less likely to be published, studies in the bottom left-hand corner are often omitted (Duval & Tweedie, 2000b; Sutton, Duval, Tweedie, Abrams, & Jones, 2000). We used the logit of the reported prevalence as effect size. The  $k$  right-most studies considered to be symmetrically unmatched were trimmed. The trimmed studies can be replaced and their missing counterparts imputed or “filled” as mirror images of the trimmed outcomes. This then allows for the computation of adjusted overall effect sizes and confidence intervals (Gilbody, Song, Eastwood, & Sutton, 2000; Sutton et al., 2000).

## Results

### Combined Prevalence

The combined prevalence for the total set of studies ( $k = 331$ ,  $N = 9,911,748$ ) was 11.8% (95% CI: 10.0–13.8%;  $p < .01$ ). The set of studies was heterogeneous,  $Q(330) = 269,244.78$ ;  $p < .01$ , indicating that differences among the effect sizes existed within this set of studies that originate from another source than sampling error. We conducted a moderator analysis contrasting self-report studies with studies based on informants, which was significant,  $Q(1) = 30.03$ ;  $p < .01$ , reflecting a difference in combined prevalence between studies using informants and studies using self-report measures of CSA. The combined prevalence was 0.4% (95% CI: 0.1–1.5%) for informant studies ( $k = 8$ ,  $N = 9,500,797$ ) and 12.7% (95% CI: 10.7–15.0%) for self-report studies ( $k = 323$ ,  $N = 410,951$ ). The confidence intervals of informant and self-report studies did not overlap. Therefore, these sets of studies were treated as representing separate populations of studies. We report the results of the moderator analyses for the set of self-report studies only because moderator analyses were not possible within the set of informant studies due to the small number of studies.

Duval and Tweedie’s (2000a, 2000b) trim and fill method revealed no asymmetry in the funnel plots for self-report and informant studies. The absence of unmatched studies on the right side suggests that asymmetrical publication bias is unlikely.

### Moderator Analyses

The results of all moderator analyses on the set of self-report prevalence studies are presented in Table 2, in the left-hand column for girls and in the right-hand column for boys. The results of the moderator analyses using *gender* are presented separately in the next paragraph.

*Sample characteristics.* The result of the moderator analysis for gender (female, male, mixed) was significant,  $Q(2) = 105.33$ ;  $p < .01$ , as was the result of the analysis contrasting studies with female and male samples,  $Q(1) = 92.63$ ;  $p < .01$ . The combined prevalence for female samples was 18.0% (95% CI: 16.4–19.7%;  $p < .01$ ), for male samples 7.6% (95% CI: 6.6–8.8%;  $p < .01$ ), and for samples with mixed gender 8.7% (95% CI: 6.5–11.6%;  $p < .01$ ). Because the confidence intervals of female and male samples did not overlap, we decided to conduct further moderator analyses separately for female and male samples (see Table 2).

Significant differences were found between the *continents* of origin of the sample for girls as well as for boys. The highest combined prevalence was found in Australia for girls and in Africa for boys whereas the lowest combined prevalence was found in Asia for both genders. This can also be seen in Figure 1, representing the results of moderator analyses using gender, carried out separately for each continent. Significant gender differences were found in Asia, Australia, Europe, and United States/Canada, with girls showing a higher combined prevalence than boys. With respect to the level of *economic development* of the sample’s country of origin, significant differences were found for boys but not for girls. For boys, the combined prevalence was higher in low-resource countries than in high-resource countries. When *ethnicity* was used as a moderator on the subsample of studies with samples originating from the United States and Canada, differences between ethnic groups were found for boys but not for girls. For boys only, the combined prevalence for African American samples was higher than for Caucasian samples. No significant differences were found related to the *age of the respondent* at the time of the study, indicating a comparable combined prevalence for studies using respondents younger than 20-years-old, 20–30-years-old, and older than 30 years.

*Procedural moderators.* Figure 2 shows the procedural moderator analyses resulting in significant effects for girls, boys, or both genders. Regarding the *definition* of CSA, significant differences were found for girls only, with the studies using the NIS-3 definition yielding the highest combined prevalence, followed by studies using a broader definition. Studies using a stricter definition reported the lowest combined prevalence. For girls, the combined prevalence differed according to the *period of prevalence* used in studies in order to assess the occurrence of CSA. The combined prevalence was highest in studies using a 0–14 year period, followed by 0–16 and 0–18 periods and by 0–17 and 0–15 periods. The lowest combined prevalence was reported in studies using a 0–13 period. For girls and boys, the reported prevalence was significantly influenced by the inclusion or exclusion of an *age difference*

**Table 2.** Results of Moderator Analyses for Self-Report Studies: Number of Studies and Participants, and Combined Prevalence Including 95% Confidence Intervals (CI)

|   | Female Samples       |         |                |           |                               |                      | Male Samples |                |          |                               |  |
|---|----------------------|---------|----------------|-----------|-------------------------------|----------------------|--------------|----------------|----------|-------------------------------|--|
|   | <i>k<sup>c</sup></i> | N       | Combined       |           | Contrast <i>Q<sup>a</sup></i> | <i>k<sup>c</sup></i> | N            | Combined       |          | Contrast <i>Q<sup>a</sup></i> |  |
|   |                      |         | Prevalence (%) | 95% CI    |                               |                      |              | Prevalence (%) | 95% CI   |                               |  |
| <b>Sample characteristics</b>           |                      |         |                |           |                               |                      |              |                |          |                               |  |
| Continent                               |                      |         |                |           |                               |                      |              |                |          |                               |  |
|   | 8                    | 13,318  | 20.2**         | 13.1–29.7 | 19.28**                       | 5                    | 1,403        | 19.3*          | 8.9–37.0 | 10.59*                        |  |
| Asia                                    | 11                   | 5,466   | 11.3**         | 7.5–16.6  |                               | 8                    | 3,888        | 4.1**          | 2.0–8.3  |                               |  |
| Australia                               | 12                   | 16,372  | 21.5**         | 15.3–29.3 |                               | 8                    | 10,775       | 7.5**          | 3.8–14.2 |                               |  |
| Europe                                  | 39                   | 35,468  | 13.5**         | 11.0–16.5 |                               | 24                   | 26,513       | 5.6**          | 3.8–8.4  |                               |  |
| South America                           | 3                    | 1,564   | 13.4**         | 6.2–26.5  |                               | 2                    | 415          | 13.8*          | 3.7–40.0 |                               |  |
| USA/Canada                              | 120                  | 143,883 | 20.1**         | 18.1–22.4 |                               | 57                   | 99,681       | 8.0**          | 6.2–10.2 |                               |  |
| <b>Economic development</b>             |                      |         |                |           |                               |                      |              |                |          |                               |  |
| High-resource                           | 174                  | 196,830 | 18.3**         | 16.7–20.0 | 0.89                          | 91                   | 138,398      | 6.8**          | 5.5–8.2  | 7.02**                        |  |
| Low-resource                            | 19                   | 19,241  | 15.9**         | 11.9–20.9 |                               | 13                   | 4,277        | 14.0**         | 8.5–22.2 |                               |  |
| <b>Ethnicity<sup>b</sup></b>            |                      |         |                |           |                               |                      |              |                |          |                               |  |
| African American                        | 12                   | 3,332   | 26.3**         | 19.9–33.9 |                               | 6                    | 1,588        | 16.5**         | 7.6–32.1 |                               |  |
| Asian                                   | 1                    | 278     | 25.0           | 9.0–53.0  | 5.15                          | 1                    | 192          | 11.0*          | 1.5–49.5 |                               |  |
| Caucasian                               | 71                   | 121,455 | 18.7**         | 16.6–21.0 |                               | 34                   | 88,096       | 7.2**          | 5.1–9.9  |                               |  |
| Hispanic                                | 6                    | 2,427   | 22.2**         | 14.7–32.2 |                               | 3                    | 1,864        | 7.7**          | 2.3–23.2 |                               |  |
| <b>Age of respondent</b>                |                      |         |                |           |                               |                      |              |                |          |                               |  |
| Under 20 years                          | 40                   | 18,586  | 19.8**         | 16.4–23.8 | 2.61                          | 19                   | 9,020        | 6.6**          | 4.2–10.1 | 2.92                          |  |
| 20–30 years                             | 34                   | 15,949  | 21.0**         | 17.1–25.5 |                               | 25                   | 15,344       | 10.4**         | 7.2–14.7 |                               |  |
| Over 30 years                           | 40                   | 47,346  | 16.8**         | 13.8–20.4 |                               | 15                   | 23,194       | 7.2**          | 4.4–11.4 |                               |  |
| <b>Procedural moderators</b>            |                      |         |                |           |                               |                      |              |                |          |                               |  |
| Definition CSA                          |                      |         |                |           |                               |                      |              |                |          |                               |  |
| Broader than NIS-3                      | 59                   | 44,365  | 19.1**         | 16.3–22.2 | 8.72**                        | 38                   | 70,949       | 7.0**          | 5.0–9.7  | 2.57                          |  |
| Stricter than NIS-3                     | 61                   | 82,403  | 15.1**         | 12.9–17.7 |                               | 38                   | 51,320       | 6.9**          | 5.0–9.5  |                               |  |
| According to NIS-3                      | 47                   | 71,117  | 21.2**         | 17.8–25.0 |                               | 17                   | 11,906       | 10.7**         | 6.6–16.8 |                               |  |
| <b>Period of prevalence<sup>d</sup></b> |                      |         |                |           |                               |                      |              |                |          |                               |  |
| 0–12                                    | 3                    | 2,248   | 6.6**          | 3.0–13.9  | 24.32**                       | 2                    | 287          | 11.2*          | 3.0–34.0 | 4.26                          |  |
| 0–13                                    | 8                    | 2,562   | 6.6**          | 4.0–10.7  |                               | 7                    | 2,120        | 10.0**         | 5.0–19.1 |                               |  |
| 0–14                                    | 7                    | 2,623   | 28.8*          | 19.2–40.8 |                               | 4                    | 4,030        | 9.4**          | 3.7–21.7 |                               |  |
| 0–15                                    | 14                   | 20,390  | 16.4**         | 11.9–22.3 |                               | 5                    | 4,073        | 12.8**         | 5.8–26.0 |                               |  |
| 0–16                                    | 43                   | 36,657  | 19.0**         | 15.9–22.5 |                               | 27                   | 24,667       | 7.0**          | 4.9–9.9  |                               |  |
| 0–17                                    | 14                   | 11,045  | 16.2**         | 11.7–21.9 |                               | 10                   | 39,949       | 5.5**          | 3.1–9.8  |                               |  |
| 0–18                                    | 94                   | 135,778 | 18.7**         | 16.6–21.0 |                               | 46                   | 56,566       | 6.8**          | 5.1–9.0  |                               |  |
| <b>Age difference</b>                   |                      |         |                |           |                               |                      |              |                |          |                               |  |
| Difference specified                    | 54                   | 31,689  | 22.0**         | 18.8–25.6 | 8.29**                        | 25                   | 18,935       | 12.9**         | 9.0–18.1 | 11.8**                        |  |
| No difference specified                 | 139                  | 184,382 | 16.7**         | 15.0–18.4 |                               | 79                   | 123,740      | 6.2**          | 5.0–7.7  |                               |  |
| <b>Type of instrument</b>               |                      |         |                |           |                               |                      |              |                |          |                               |  |
| Interview face-to-face                  | 41                   | 21,889  | 17.4**         | 14.4–20.9 | 10.52*                        | 11                   | 8,645        | 6.5**          | 3.5–11.6 | 3.75                          |  |
| Interview telephone                     | 14                   | 33,727  | 13.8**         | 9.9–18.8  |                               | 12                   | 21,149       | 5.4**          | 3.0–9.4  |                               |  |
| Questionnaire                           | 127                  | 139,125 | 19.7**         | 17.8–21.8 |                               | 71                   | 98,008       | 8.2**          | 6.5–10.3 |                               |  |
| Questionnaire computer                  | 5                    | 10,082  | 9.7**          | 5.4–16.9  |                               | 6                    | 12,252       | 4.5**          | 2.0–9.7  |                               |  |

(continued)

Table 2 (continued)

|                       | Female Samples |         |                         |           |                | Male Samples |         |                         |          |                |
|-----------------------|----------------|---------|-------------------------|-----------|----------------|--------------|---------|-------------------------|----------|----------------|
|                       | $k^c$          | N       | Combined Prevalence (%) | 95% CI    | Contrast $Q^a$ | $k^c$        | N       | Combined Prevalence (%) | 95% CI   | Contrast $Q^a$ |
| Instrument validated  |                |         |                         |           |                |              |         |                         |          |                |
| No                    | 112            | 142,622 | 17.6**                  | 15.7–19.8 | 0.07           | 72           | 110,655 | 6.6**                   | 5.2–8.4  | 1.82           |
| Yes                   | 69             | 68,899  | 18.1**                  | 15.6–20.8 |                | 26           | 29,124  | 9.0**                   | 6.1–13.0 |                |
| Number of questions   |                |         |                         |           |                |              |         |                         |          |                |
| under 3               | 43             | 94,548  | 12.0**                  | 10.0–14.3 |                | 28           | 73,051  | 4.8**                   | 3.3–7.0  |                |
| 3–7                   | 49             | 60,761  | 19.9**                  | 17.0–23.1 |                | 28           | 33,808  | 10.4**                  | 6.2–12.7 |                |
| 8 and over            | 47             | 26,807  | 22.5**                  | 19.2–26.1 |                | 21           | 14,425  | 7.9**                   | 5.2–11.8 |                |
| Respondent            |                |         |                         |           |                |              |         |                         |          |                |
| Adult                 | 156            | 124,449 | 18.4**                  | 16.7–20.2 | 0.30           | 78           | 99,769  | 8.6**                   | 7.0–10.7 | 6.84*          |
| Child                 | 36             | 90,889  | 17.3**                  | 14.2–21.0 |                | 24           | 42,017  | 4.7**                   | 3.2–7.1  |                |
| Response rate         |                |         |                         |           |                |              |         |                         |          |                |
| Low                   | 51             | 59,139  | 20.4**                  | 17.2–24.1 |                | 25           | 70,781  | 6.1**                   | 4.1–9.0  |                |
| Moderate              | 48             | 65,601  | 14.9**                  | 12.4–17.9 |                | 32           | 50,039  | 5.0**                   | 3.5–7.1  |                |
| High                  | 45             | 72,091  | 18.8**                  | 15.6–22.5 |                | 27           | 15,852  | 11.1**                  | 7.7–15.8 |                |
| Sampling procedure    |                |         |                         |           |                |              |         |                         |          |                |
| Convenience           | 106            | 60,308  | 19.1**                  | 17.0–21.3 | 1.93           | 53           | 76,953  | 10.3*                   | 7.9–13.3 | 12.31**        |
| Randomized            | 86             | 155,711 | 16.9**                  | 14.8–19.2 |                | 51           | 65,722  | 5.2*                    | 3.9–6.8  |                |
| Sample size           |                |         |                         |           |                |              |         |                         |          |                |
| Small                 | 54             | 9,733   | 22.0**                  | 18.8–25.4 |                | 29           | 4,760   | 12.0**                  | 8.6–16.5 | 12.35**        |
| Medium                | 51             | 34,215  | 19.8**                  | 17.5–22.3 |                | 39           | 13,804  | 7.2**                   | 5.4–9.7  |                |
| Large                 | 55             | 172,123 | 13.0**                  | 11.1–15.2 |                | 36           | 124,111 | 5.4**                   | 4.0–7.2  |                |
| Background moderators |                |         |                         |           |                |              |         |                         |          |                |
| Year of publication   |                |         |                         |           |                |              |         |                         |          |                |
| Before 1990           | 24             | 10,969  | 18.3**                  | 14.4–23.1 | 4.10           | 10           | 7,177   | 5.6**                   | 2.9–10.7 | 1.48           |
| 1990–1999             | 80             | 52,202  | 19.8**                  | 17.4–22.4 |                | 44           | 29,413  | 6.9**                   | 5.4–9.7  |                |
| After 1999            | 89             | 152,900 | 16.5**                  | 14.6–18.7 |                | 50           | 106,083 | 8.3**                   | 4.0–7.2  |                |
| Publication outlet    |                |         |                         |           |                |              |         |                         |          |                |
| Dissertation          | 5              | 1,822   | 31.8*                   | 19.6–47.0 | 5.24*          | 1            | 213     | 12.2                    | 1.7–52.7 | —              |
| Journal               | 186            | 206,035 | 17.8**                  | 16.3–19.4 |                | 102          | 135,434 | 7.4**                   | 6.1–9.0  |                |

Note: CSA = childhood sexual abuse.

<sup>a</sup> Subgroups with  $k < 4$  or "other" categories are excluded from contrasts.

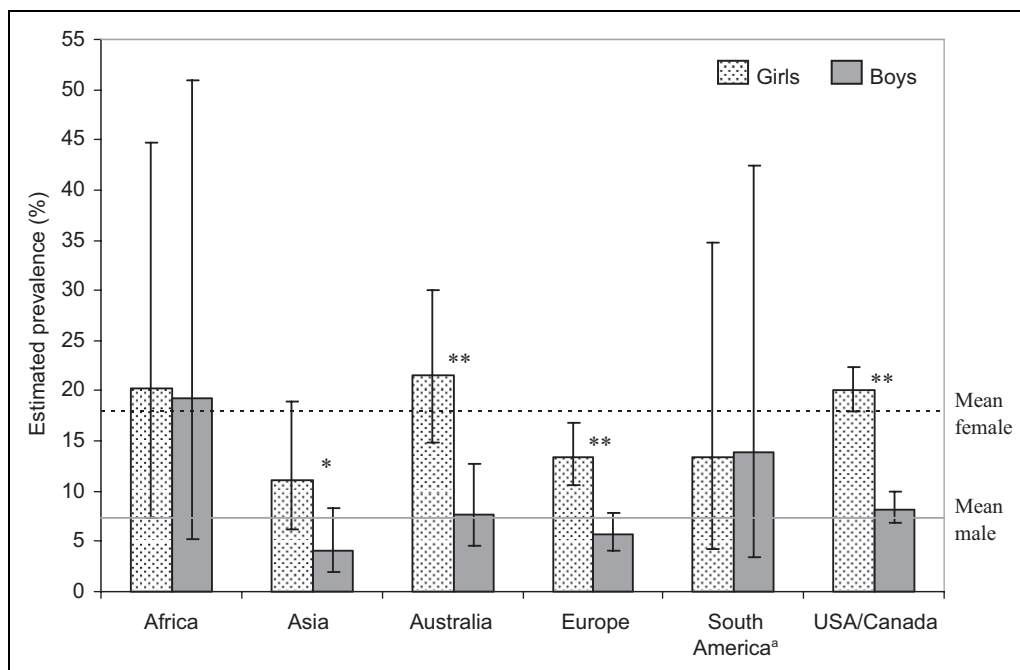
<sup>b</sup> For the subset of studies originating from the United States and Canada.

<sup>c</sup> Differences in totals of  $k$  are due to the exclusion from the pertinent analysis of studies with missing values.

<sup>d</sup> All participants are included in a single category.

\* $p < .05$ .

\*\* $p < .01$ .



**Figure 1.** Estimated combined prevalence for self-report studies of CSA, separated according to geographical area of origin of the sample and to gender, including the overall combined prevalence for girls and boys. Stars represent a significant difference between girls and boys within a geographical area of origin of the sample (\* $p < .05$ ; \*\* $p < .01$ ).

<sup>a</sup>The significance of the analyses on the South American samples could not be tested, due to  $k < 4$ .

criterion between perpetrator and victim. The reported age difference was usually 5 years (52 out of 54 studies on girls and all of the studies on boys), and only twice an age difference of 3 years was used. The combined prevalence of studies including such an age-difference criterion was higher than the combined prevalence of studies without an age-difference criterion.

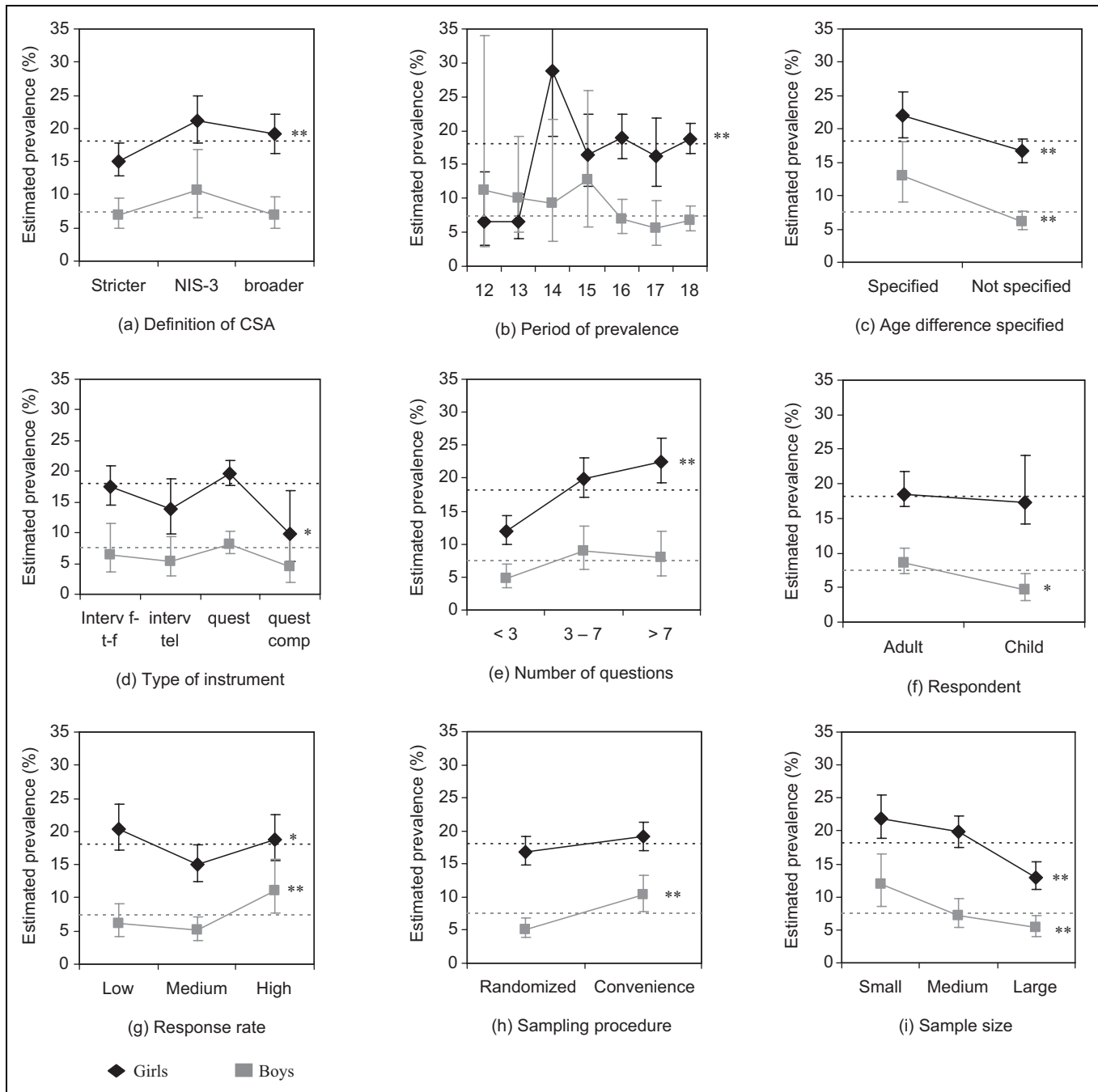
For girls but not for boys, the combined prevalence differed between the *types of instrument* used to assess CSA. The lowest combined prevalence was found in studies using a computerized questionnaire, the highest in studies using paper-and-pencil questionnaires. The combined prevalence of both types of interviews – face-to-face and by telephone – was in between the types of questionnaires. For both genders, whether studies used a *validated* or a non-validated instrument was not a factor of influence on combined prevalence. With respect to *number of questions*, a larger number of questions about CSA concurred with a higher combined prevalence for girls but not for boys. For boys but not for girls, the *respondent* used in studies mattered with respect to the combined prevalence, with adult men showing a higher combined prevalence than boys.

Regarding *response rate*, the lowest combined prevalence was found in the medium range for both genders, the highest in the low range for girls and in the high range for boys. The results of moderator analyses with *sampling procedure* were significant for boys only. The combined prevalence reported in studies using male convenience samples was approximately twice the combined prevalence reported in studies using male randomized samples. Furthermore, the larger the *sample size*, the lower the combined prevalence for both girls and boys.

*Publication moderators.* No significant differences in combined prevalence existed with regard to the *year of publication*, independent of the gender of the sample. For girls but not for boys, the result of the analysis with *publication outlet* was significant. The combined prevalence of the studies reported in dissertations was significantly higher than the combined prevalence in studies reported in journals.

## Discussion

Using meta-analytical methods, we combined prevalence figures on CSA reported in 217 publications published between 1982 and 2008. The global prevalence of CSA was estimated to be 11.8% or 118 per 1000 children, based on 331 independent samples with a total of 9,911,748 participants. As hypothesized, a gap existed between the combined prevalence from self-report studies and from informant studies. The difference was much larger than expected with self-report studies yielding a combined rate that was 30 times higher than the rate of informant studies (127 per 1000 children vs. 4 per 1000 children). Sample characteristics and methodological aspects of the informant studies might account for part of the difference in reported prevalence. For example, four out of eight informant studies were based on reports of CSA during the last year whereas most of the self-report studies used an up-to-18 year's period of prevalence. Reporting CSA over a one year period limits the time frame and reduces the number of persons that experienced CSA compared to reporting CSA over the entire childhood



**Figure 2.** The influence on estimated prevalence of self-report studies of CSA of (a) the definition of CSA, (b) the period of prevalence, (c) whether an age difference was specified in the definition of CSA, (d) the type of instrument, (e) the number of questions that were used to assess CSA, (f) the respondent, (g) the response rate, (h) the sampling procedure, and (i) the sample size. Dotted lines represent the overall mean estimated reported prevalence for girls and boys. Stars represent a significant difference between categories within female or male studies (\* $p < .05$ ; \*\* $p < .01$ ).

period. Also, seven out of eight informant studies used randomized samples whereas only about half of the self-report studies did so. In the set of male self-report studies random sampling resulted in a lower reported prevalence compared to convenience samples, which points to the possibility that randomized studies are associated with lower estimates. Last but not least, all informant studies used reports registered by

professionals, thus excluding unreported cases of CSA that might have been reported had self-report measures been used.

### Gender

A substantial difference in the prevalence of self-reported CSA was found between girls and boys. This was true globally and

for most continents separately. Women reported CSA more often than men, which is convergent with the meta-analysis by Pereda et al. (2009b). The prevalence rates we found were comparable to those reported in Pereda et al. (2009b): 18.0% for girls and 7.6% for boys (Pereda et al., 2009b: 19.7% and 7.9%, respectively). Gender differences for reported prevalence of CSA may be due to either higher occurrence of CSA among girls than among boys, or to boys' more reluctant attitude toward disclosing their CSA experiences, or both causes might play a role (Dhaliwal, Gauzas, Antonowicz, & Ross, 1996; Finkelhor & Baron, 1986; O'Leary & Barber, 2008; Romano & De Luca, 2001). Men might be reluctant to disclose CSA for several reasons, among which feelings of weakness and of failure because of society's traditional view of men as aggressors rather than as victims (Dhaliwal et al., 1996; Romano & De Luca, 2001).

Moreover, boys might be afraid of being considered the instigator of CSA rather than the victim (Dhaliwal et al., 1996), or they may not view their sexual experiences with older women as sexual abuse because of sex stereotypes (Coxell, King, Mezey, & Gordon, 1999). As the majority of CSA perpetrators are male, male victims may also fear being regarded as homosexual (Dhaliwal et al., 1996; Romano & De Luca, 2001). Male victims who disclose their CSA experiences tend to do so later than female victims (O'Leary & Barber, 2008). On average, it would take most male CSA victims more than 10 years before they start to discuss their CSA experiences. For women, the average period between the CSA experiences and disclosure was found to be much shorter (O'Leary & Barber, 2008). This might contribute to higher rates for girls than for boys, and explain our finding that for boys the prevalence was higher in adult samples than in child samples, a finding that was not replicated for girls.

### *Continent of Origin of the Sample*

Continent of origin of the sample influenced the CSA prevalence as well. This converges with the results of the meta-analysis of Pereda et al. (2009b) but in that meta-analysis separate prevalences for boys and girls per continent were not reported. It should be noted that most prevalence studies have not been conducted with the explicit goal to compare prevalence rates across a variety of cultures. In fact, the cultural perspective on prevalence of child maltreatment across cultures is still underdeveloped although recently some progress has been made (Mbagaya, 2010). Geographical area and culture may be overlapping but are not necessarily similar, and any comparison between countries or continents might not be generalized to cultural differences. Nevertheless, Hofstede (2001) proposed some major cultural dimensions that are globally related to countries and geographic areas, and one of the dimensions is individualism or the emphasis on the collective (Hofstede, 2001), which might be relevant to child maltreatment prevalence estimates.

For example, for girls and boys, we found the lowest combined prevalence in Asia. The fairly low CSA rates for both

genders in Asia seem to be consistent with the idea that abuse experiences are less often disclosed in a collectivist culture than in individualistic cultures. The highest prevalence for girls found in more individualistic countries like Australia and New Zealand might partially stem from culturally based willingness to disclose their sexual experiences and the ease with which they talk about sexuality (Kenny & McEachern, 2000b; Runyan, 1998). Values related to taboos on sexuality found in many Hispanic cultures, or shame associated with disclosure of CSA, are thought to prevent abused persons from talking about their experiences. In the Hispanic cultures of South America one might expect to find fairly low rates of reported prevalence because of the secrecy around early sexual experiences. The high combined rate of 22.2% among the female Hispanic American samples is not consistent with this expectation. Unfortunately, the number of studies originating from South America was too small to be contrasted with those of other continents. More studies on the prevalence of CSA research in this geographical area are badly needed.

The alternative explanation would be that differences between continents reflect real differences in the prevalence of CSA. Mbagaya (2010), for example, argued that differences in prevalence rates between countries may not (only) be due to disclosure issues but to real socioeconomic and cultural differences. On the African continent, initiation rites representing the "transition into adulthood" in early and mid-adolescence may encourage sexual behaviors with older persons (Mbagaya, 2010). Myths associated with HIV cure and avoidance strategies may increase the prevalence of CSA in sub-Saharan Africa (Lalor, 2008). In addition, young partners are considered less likely to have HIV, and are thus preferred as sexual partners (Madu & Peltzer, 2000). Furthermore, Madu and Peltzer (2000) pointed out that the male dominant society in South Africa may be responsible for high CSA rates because men in such societies feel that they have authority over women and children. The socialization of African children to unquestioningly obey older people puts them at risk for sexual abuse by people to whom they are expected to pay their respects (Lalor, 2008; Mbagaya, 2010). Lastly, the rapid social changes in Africa along with increases in urbanization and individualism have led to greater isolation of families. In situations where children are left with biologically unrelated caregivers when parents go to work, the risk of sexually abusive experiences increases (Mbagaya, 2010).

### *Procedural Moderators*

Some procedural factors influenced self-reported prevalence of CSA for boys and girls (e.g., sample size showing the same pattern of influence for both genders), other factors influenced the prevalence for only one of the genders (e.g., number of questions showed a significant effect for girls but not for boys).

Based on the effects on reported prevalence of procedural moderators in our set of self-report studies, and the speculation that the combined prevalence from informant studies might underestimate while the combined prevalence from self-report

studies might overestimate the CSA prevalence rate, we suggest some recommendations aiming at the reduction of possible biases in estimations of CSA prevalence in self-report studies. The use of sufficiently large population-based randomized samples is indicated, and this not only because of the formal aspect of generalizability to the general population of a country. In our meta-analysis, a lower combined prevalence for self-report studies was found in male randomized samples compared to male convenience samples, and self-report studies with larger sample sizes resulted in a lower combined prevalence compared to studies with medium or small sample sizes for both genders. The findings indicate that studies with better methodological qualities yield lower estimated prevalence rates. Tentatively, this could be seen as evidence that lower prevalence estimates could be more accurate compared to higher prevalence estimates.

### *Limitations and Future Research*

The heterogeneity in the subsets of studies, despite the moderators that were taken into account, indicates that the sample characteristics and methodological factors included in this meta-analysis did not yet fully explain the vast variation in self-reported rates of CSA. Unfortunately, the small number of informant studies did not allow for examining the influence of sample characteristics and methodological factors on the estimated prevalence. Comparing moderators of prevalence estimates for informant and self-report studies could add to our understanding of the strengths and weaknesses of both types of studies.

Studies using both informants and self-report data within a single, nationally representative randomized sample could contribute to clarifying the large difference in reported prevalence between these two study types. To ensure comparability of the prevalence rates it would be imperative that identical, clearly operationalized criteria for CSA are used for both the informant and the self-report measurements. We would recommend using CSA criteria that correspond to the legal definition of CSA in the specific country, so that the results of studies will be useful for local policymakers. Alternatively, the criteria for CSA could be derived from official international organizations, for example, the definition provided by the Consultation on Child Abuse Prevention of the World Health Organization (1999). This would ensure the comparability of prevalence among countries.

With regard to the measurement of CSA, the results of this meta-analysis emphasize the recommendation of the use of multiple behaviorally specific questions instead of a single-item label question, in line with Koss' (1993) recommendation with regard to rape. By analogy with the measurement of infant temperament, answers on behaviorally specific questions such

as "During the past week, when being undressed, how often did your baby cry?" (Infant Behavior Questionnaire; Rothbart, 1981) provide more precise information than broad questions such as "How much does your baby fuss/cry in general?" (Infant Characteristics Questionnaire; Bates, Bennett Freeland, & Lounsbury, 1979). In this study, the use of one or two questions was associated with a stricter definition of CSA whereas a broader definition of CSA was reflected in the use of more questions. The use of behaviorally specific questions about CSA would also eliminate a possible drawback of self-report studies that leave the interpretation of the global term "sexual abuse" to the participants' subjective perceptions and definitions. Developing an instrument including behaviorally specific questions based on the rather broad, non behaviorally specific definitions of CSA provided by international organizations might prove to be quite challenging, especially if one would like the instrument to be universally applicable. The development of such an instrument might be preceded by a clearer specification of the acts that constitute CSA according to international organizations and across a wide variety of cultures. An empirical conceptual analysis focusing at more concrete and precise operationalizations of CSA might be especially useful. Such an approach has, for example, been successful in the area of attachment and sensitivity research (De Wolff & Van IJzendoorn, 1997; Posada et al., 2008).

In our opinion, the large costs to society of (the consequences of) CSA would warrant the investment in a study using both informant and self-report measures including multiple behaviorally specific questions in the same large, randomized, population-based sample, as such a study could provide the most accurate estimate of CSA prevalence as a basis for preventive policy measures.

### **Conclusion**

The current meta-analysis shows that CSA is a global problem of considerable extent, even though methodological differences between studies have an impact on the reported prevalence of CSA. The prevalence rates contrast sharply with the United Nations' Convention on the Rights of the Child (1989) in which the 194 ratifying countries (November 2009) explicitly state that they shall take all appropriate legislative, administrative, social, and educational measures, either nationally, bilaterally, or multilaterally, in order to protect children from sexual abuse. The results of our meta-analysis show a lower limit estimate of self-reported CSA prevalence in girls of 164/1000 and an upper limit estimate of 197/1000. For boys, the lower limit is 66/1000 and the upper limit is 88/1000. Even the lower bound estimates are alarming in their demonstration that CSA is a global phenomenon affecting the lives of millions of children.

**Appendix A**NIS-3 Definitions of Child Sexual Abuse<sup>a</sup>

| Specific Form of Maltreatment (NIS-3 code) | Acts/Omissions Included   |
|--|---|
| Penile intrusion (01.0)                    | Sexually assaulting or exploiting a child or permitting sexual assault or exploitation of a child where acts involving penile penetration of or by child have occurred. Such acts include oral (fellatio), anal (sodomy), or genital intercourse, whether heterosexual or homosexual. Category includes cases where sexual exploitation (involving intrusion) by other persons was knowingly permitted by a person responsible for the child (e.g., child's prostitution, child's involvement in pornography with intrusion, child's nonvoluntary involvement in intrusion sex). Category does not include sexual abuse of an unknown nature, situations encompassed by categories in 02 or 03, nor inadequate supervision of child's voluntary sexual activities. The mere presence of venereal disease does not constitute adequate evidence to support that this form of maltreatment occurred.  |
| Intrusion by finger or any object (01.1)   | Sexually assaulting or exploiting a child or permitting sexual assault or exploitation of a child where acts involving penetration with fingers or any object, of or by child, have occurred.   |
| Molestation with genital contact (02.0)    | Sexually assaulting or exploiting a child or permitting sexual assault or exploitation of a child where acts involving genital contact of or by child—but not involving (specific indications of) actual intrusion—have occurred. Such acts would include penile or vaginal fondling or stimulation of or by child, whether heterosexual or homosexual.   |
| Other or unknown sexual abuse (03.0)       | Committing or permitting sexual assault, exploitation, maltreatment, or abuse other than categories 01 and 02, above. This could include: sexual assault or exploitation where acts did not involve actual intrusion or genital contact (e.g., exposure, inappropriate kissing, hugging, fondling of breasts, buttocks, or other nongenital areas, etc.); and sexual assault or molestation where acts were of unknown or unspecified nature (i.e., no specific indication that intrusion or genital contact had occurred). Category includes all allegations involving child's voluntary sexual activities, such as allegations concerning inadequate or inappropriate supervision of child's voluntary sexual activities. Category does not include attempted, threatened, or potential sexual assault or exploitation if no actual sexual contact was indicated to have occurred. When no physical contact appears to have occurred, allegation should be coded elsewhere (see categories 06 <sup>b</sup> and 07 <sup>c</sup> ). |

<sup>a</sup>Extracted from Sedlak (2001).

<sup>b</sup>Emotional abuse, category verbal or emotional assault.

<sup>c</sup>Emotional abuse, category other or unknown abuse.

**Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interests with respect to the authorship and/or publication of this article.

**Funding**

MJBK and MHvIJ were supported by awards from the Netherlands Organization for Scientific Research (MJBK: VIDI grant no. 452-04-306; MHvIJ: SPINOZA prize).

**References**

Publications marked with an asterisk were included in the meta-analysis.

- \*Ackard, D. M., & Neumark-Sztainer, D. (2002). Date violence and date rape among adolescents: Associations with disordered eating behaviors and psychological health. *Child Abuse & Neglect, 26*, 455-473. doi:10.1016/S0145-2134(02)00322-8.
- \*Afifi, Z. E. M., Basuily, W. W., El-Lawindi, M. I., & Ahmed, S. A. (2003). Adolescent abuse in a community sample in Beni Suef, Egypt: Prevalence and risk factors. *Eastern Mediterranean Health Journal, 9*, 1003-1018.

- \*Akyuz, G., Sar, V., Kugu, N., & Dogan, O. (2005). Reported childhood trauma, attempted suicide and self-mutilative behavior among women in the general population. *European Psychiatry, 20*, 268-273. doi: 10.1016/j.eurpsy.2005.01.002.
- \*Alexander, P. C., & Lupfer, S. L. (1987). Family characteristics and long-term consequences associated with sexual abuse. *Archives of Sexual Behavior, 16*, 235-245. doi: 10.1007/BF01541611.
- \*Amodeo, M., Griffin, M. L., Fassler, I. R., Clay, C. M., & Ellis, M. A. (2006). Childhood sexual abuse among black women and white women from two-parent families. *Child Maltreatment, 11*, 237-246. doi:10.1177/1077559506289186.
- \*Anderson, J., Martin, J., Mullen, P., Romans, S., & Herbison, P. (1993). Prevalence of childhood sexual abuse experiences in a community sample of women. *Journal of the American Academy of Child and Adolescent Psychiatry, 32*, 911-919. doi: 10.1097/00004583-199309000-00004.
- \*Ansara, D., Cohen, M. M., Gallop, R., Kung, R., & Schei, B. (2005). Predictors of women's physical health problems after childbirth. *Journal of Psychosomatic Obstetrics and Gynecology, 26*, 115-125. doi:10.1080/01443610400023064.

- \*Arreola, S. G., Neilands, T. B., Pollack, L. M., Paul, J. P., & Catania, J. A. (2005). Higher prevalence of childhood sexual abuse among Latino men who have sex with men than non-Latino men who have sex with men: Data from the Urban Men's Health Study. *Child Abuse & Neglect, 29*, 285-290. doi:10.1016/j.chiabu.2004.09.003.
- \*Arroyo, J. A., Simpson, T. L., & Aragon, A. S. (1997). Childhood sexual abuse among Hispanic and non-Hispanic white college women. *Hispanic Journal of Behavioral Sciences, 19*, 57-68. doi:10.1177/07399863970191004.
- \*Aspelmeier, J. E., Elliot, A. N., & Smith, C. H. (2007). Childhood sexual abuse, attachment, and trauma symptoms in college females: The moderating role of attachment. *Child Abuse and Neglect, 31*, 549-566. doi:10.1016/j.chiabu.2006.12.002.
- \*Baccini, F., Pallota, N., Calabrese, E., Pezzotti, P., & Corazziari, E. (2003). Prevalence of sexual and physical abuse and its relationship with symptom manifestations in patients with chronic organic and functional gastrointestinal disorders. *Digestive and Liver Disease, 35*, 256-261. doi:10.1016/S1590-8658(03)00075-6.
- \*Back, S. E., Jackson, J. L., Fitzgerald, M., Shaffer, A., Salstrom, S., & Osman, M. M. (2003). Child sexual and physical abuse among college students in Singapore and the United States. *Child Abuse and Neglect, 27*, 1259-1275. doi:10.1016/j.chiabu.2003.06.001.
- \*Bagley, C., & Ramsay, R. (1986). Sexual abuse in childhood: Psychosocial outcomes and implications for social work practice. *Journal of Social Work & Human Sexuality, 4*, 33-47.
- \*Bagley, C., Wood, M., & Young, L. (1994). Victim to abuser—Mental-health and behavioral sequels of child sexual abuse in a community survey of young-adult males. *Child Abuse & Neglect, 18*, 683-697. doi:10.1016/0145-2134(94)90018-3.
- \*Baker, A. W., & Duncan, S. P. (1985). Child sexual abuse: A study of prevalence in Great Britain. *Child Abuse and Neglect, 9*, 457-467. doi:10.1016/0145-2134(85)90054-7.
- Bakermans-Kranenburg, M. J., van IJzendoorn, M. H., & Juffer, F. (2003). Less is more: Meta-analyses of sensitivity and attachment interventions in early childhood. *Psychological Bulletin, 129*, 195-215. doi:10.1037/0033-2909.129.2.195.
- \*Banyard, V. L., Arnold, S., & Smith, J. (2000). Childhood sexual abuse and dating experiences of undergraduate women. *Child Maltreatment, 5*, 39-48. doi:10.1177/107755950005001005.
- Barel, E., van IJzendoorn, M. H., Sagi-Schwartz, A., & Bakermans-Kranenburg, M. J. (2010). Surviving the holocaust: a meta-analysis of the long-term sequelae of a genocide. *Psychological Bulletin, 136*, 677-698. doi:10.1037/a0020339.
- \*Basile, K. C., Chen, J., Black, M. C., & Saltzman, L. E. (2007). Prevalence and characteristics of sexual violence victimization among U.S. adults, 2001-2003. *Violence and Victims, 22*, 437-448. doi:10.1891/088667007781553955.
- Bates, J. E., Bennett Freeland, C. A. B., & Lounsbury, M. L. (1979). Measurement of infant difficultness. *Child Development, 50*, 794-803. doi:10.1111/j.1467-8624.1979.tb02428.x.
- Beitchman, J. H., Zucker, K. J., Hood, J. E., Dacosta, G. A., & Akman, D. (1991). A review of the short-term effects of child sexual abuse. *Child Abuse & Neglect, 15*, 537-556. doi:10.1016/0145-2134(91)90038-F.
- Beitchman, J. H., Zucker, K. J., Hood, J. E., Dacosta, G. A., Akman, D., & Cassavia, E. (1992). A review of the long-term effects of child sexual abuse. *Child Abuse & Neglect, 16*, 101-118. doi:10.1016/0145-2134(92)90011-F.
- \*Ben-Arieh, A., & Haj-Yahia, M. M. (2006). The "geography" of child maltreatment in Israel: Findings from a national data set of cases reported to the social services. *Child Abuse and Neglect, 30*, 991-1003. doi:10.1016/j.chiabu.2006.02.014.
- \*Bendixen, M., Muus, K. M., & Schei, B. (1994). The impact of child sexual abuse—A study of a random sample of Norwegian students. *Child Abuse & Neglect, 18*, 837-847. doi:10.1016/0145-2134(94)90063-9.
- \*Benedict, M. I., Paine, L. L., Paine, L. A., Brandt, D., & Stallings, R. (1999). The association of childhood sexual abuse with depressive symptoms during pregnancy, and selected pregnancy outcomes. *Child Abuse & Neglect, 23*, 659-670. doi:10.1016/S0145-2134(99)00040-X.
- \*Bensley, L. S., Van Eenwyk, J., Spieker, S. J., & Schoder, J. (1999). Self-reported abuse history and adolescent problem behaviors. I. Antisocial and suicidal behaviors. *Journal of Adolescent Health, 24*, 163-172. doi: 10.1016/S1054-139X(98)00111-6.
- \*Bensley, L., Van Eenwyk, J., & Simmons, K. W. (2003). Childhood family violence history and women's risk for intimate partner violence and poor health. *American Journal of Preventive Medicine, 25*, 38-44. doi:10.1016/S0749-3797(03)00094-1.
- \*Berenson, A. B., Miguel, V. V. S., & Wilkinson, G. S. (1992). Prevalence of physical and sexual assault in pregnant adolescents. *Journal of Adolescent Health, 13*, 466-469. doi:10.1016/1054-139X(92)90008-Y.
- \*Bergdahl, J. B. (1983). Differences in demographic features and present anxiety level among college women who report type, extent and rated severity of childhood and adolescent sexual contacts with adults. *Dissertation-Abstracts-International, 44*(01), 296-B.
- \*Berliner, L., Fine, D., & Moore, D. (2001). *Sexual assault experiences and perceptions of community response to sexual assault: A survey of Washington state women*. Olympia, WA: Office of Crime Victims Advocacy.
- \*Bernat, J. A., Ronfeldt, H. M., Calhoun, K. S., & Arias, I. (1998). Prevalence of traumatic events and peritraumatic predictors of posttraumatic stress symptoms in a nonclinical sample of college students. *Journal of Traumatic Stress, 11*, 645-664. doi:10.1023/A:1024485130934.
- Borenstein, M., Hedges, L., & Rothstein, D. (2007). *Meta-analysis: Fixed effect vs. random effects*. Retrieved from [http://www.meta-analysis.com/downloads/Meta-analysis\\_fixed\\_effect\\_vs\\_random\\_effects\\_sv.pdf](http://www.meta-analysis.com/downloads/Meta-analysis_fixed_effect_vs_random_effects_sv.pdf)
- Borenstein, M., Rothstein, D., & Cohen, J. (2005). *Comprehensive meta-analysis: A computer program for research synthesis*. [Computer software]. Englewood, NJ: Biostat.
- \*Bouvier, P., Halpérin, D., Rey, H., Jaffé, P. D., Laederach, J., Mounoud, R. L., & Pawlak, C. (1999). Typology and correlates of sexual abuse in children and youth: Multivariate analyses in a prevalence study in Geneva. *Child Abuse and Neglect, 23*, 779-790. doi:10.1016/S0145-2134(99)00050-2.
- \*Boyer, D., & Fine, D. (1992). Sexual abuse as a factor in adolescent pregnancy and child maltreatment. *Family Planning Perspectives, 24*, 4-19. doi:10.2307/2135718.

- \*Brayden, R. M., Deitrich-MacLean, G., Dietrich, M. S., Sherrod, K. B., & Altemeier, W. A. (1995). Evidence for specific effects of childhood sexual abuse on mental well-being and physical self-esteem. *Child Abuse & Neglect, 19*, 1255-1262. doi:10.1016/0145-2134(95)00078-M.
- \*Brener, N. D., McMahon, P. M., Warren, C. W., & Douglas, K. A. (1999). Forced sexual intercourse and associated health-risk behaviors among female college students in the United States. *Journal of Consulting and Clinical Psychology, 67*, 252-259. doi:10.1037/0022-006X.67.2.252.
- \*Briere, J., & Elliot, D. M. (2003). Prevalence and psychological sequelae of self-reported childhood physical and sexual abuse in a general population sample of men and women. *Child Abuse and Neglect, 27*, 1205-1222. doi:10.1016/j.chiabu.2003.09.008.
- \*Briere, J., & Runtz, M. (1988). Symptomatology associated with childhood sexual victimization in a nonclinical adult sample. *Child Abuse and Neglect, 12*, 51-59. doi:10.1016/0145-2134(88)90007-5.
- \*Brooker, S., Cawson, P., Kelly, G., & Wattam, C. (2001). The prevalence of child abuse and neglect: A survey of young people. *International Journal of Market Research, 43*, 249-289.
- \*Brown, J., Berenson, K., & Cohen, P. (2005). Documented and self-reported child abuse and adult pain in a community sample. *Clinical Journal of Pain, 21*, 374-377. doi:10.1097/01.ajp.0000149797.16370.dc.
- \*Brown, J., Cohen, P., Johnson, J. G., & Salzinger, S. (1998). A longitudinal analysis of risk factors for child maltreatment: findings of a 17-year prospective study of officially recorded and self-reported child abuse and neglect. *Child Abuse and Neglect, 22*, 1065-1078. doi:10.1016/S0145-2134(98)00087-8.
- Browne, A., & Finkelhor, D. (1986). Initial and long-term effects: a review of the research. In D. Finkelhor (Ed.), *A sourcebook on child sexual abuse*, (pp. 119-142). Beverly Hills, CA: Sage.
- \*Bryant, S. L., & Range, L. M. (1997). Type and severity of child abuse and college students' lifetime suicidality. *Child Abuse and Neglect, 21*, 1169-1176. doi:10.1016/S0145-2134(97)00092-6.
- \*Calam, R. M., & Slade, P. D. (1989). Sexual experience and eating problems in female undergraduates. *International Journal of Eating Disorders, 8*, 391-397. doi:10.1002/1098-108X(198907)8:4<391::AID-EAT2260080402>3.0.CO;2-P.
- \*Caspi, A., McClay, J., Moffitt, T. E., Mill, J., Martin, J., & Craig, I. W., . . . Poulton, R. (2002). Role of genotype in the cycle of violence in maltreated children. *Science, 297*, 851-854. doi:10.1126/science.1072290.
- \*Chapman, D. P., Whitfield, C. L., Felitti, V. J., Dube, S. R., Edwards, V. J., & Anda, R. F. (2004). Adverse childhood experiences and the risk of depressive disorders in adulthood. *Journal of Affective Disorders, 82*, 217-225. doi:10.1016/j.jad.2003.12.013.
- \*Chartier, M. J., Walker, J. R., & Naimark, B. (2007). Childhood abuse, adult health, and health care utilization: Results from a representative community sample. *American Journal of Epidemiology, 165*, 1031-1038. doi:10.1093/aje/kwk113.
- \*Chen, J. Q., Dunne, M. P., & Han, P. (2004). Child sexual abuse in China: A study of adolescents in four provinces. *Child Abuse and Neglect, 28*, 1171-1186. doi:10.1016/j.chiabu.2004.07.003.
- \*Chen, J. Q., Dunne, M. P., & Han, P. (2006). Child sexual abuse in Henan province, China: Associations with sadness, suicidality, and risk behaviors among adolescent girls. *Journal of Adolescent Health, 38*, 544-549. doi:10.1016/j.jadohealth.2005.04.001.
- \*Chibnall, J. T., Wolf, A., & Duckro, P. N. (1998). A national survey of the sexual trauma experiences of Catholic nuns. *Review of Religious Research, 40*, 142-167. doi:10.2307/3512299.
- \*Choquet, M., DarvesBornoz, J. M., Ledoux, S., Manfredi, R., & Hassler, C. (1997). Self-reported health and behavioral problems among adolescent victims of rape in France: Results of a cross-sectional survey. *Child Abuse & Neglect, 21*, 823-832. doi:10.1016/S0145-2134(97)00044-6.
- \*Clemmons, J. C., DiLillo, D., Martinez, I. G., DeGue, S., & Jeffcott, M. (2003). Co-occurring forms of child maltreatment and adult adjustment reported by Latina college students. *Child Abuse and Neglect, 27*, 751-767. doi:10.1016/S0145-2134(03)00112-1.
- \*Cohen, R. A., Paul, R. H., Stroud, L., Gunstad, J., Hitsman, B. L., McCaffery, J., & . . . Gordon, E. (2006). Early life stress and adult emotional experience: An international perspective. *International Journal of Psychiatry in Medicine, 36*, 35-52. doi:10.2190/5R62-9PQY-0NEL-TLPA.
- \*Coid, J., Petruckevitch, A., Chung, W. S., Richardson, J., Moorey, S., & Feder, G. (2003). Abusive experiences and psychiatric morbidity in women primary care attenders. *British Journal of Psychiatry, 183*, 332-339. doi:10.1192/bjp.183.4.332.
- \*Collings, S. J. (1995). The long-term effects of contact and noncontact forms of child sexual abuse in a sample of university men. *Child Abuse and Neglect, 19*, 1-6. doi:10.1016/0145-2134(94)00098-F.
- \*Collings, S. J. (1997). Child sexual abuse in a sample of South African women students: Prevalence, characteristics, and long-term effects. *South African Journal of Psychology—Suid-Afrikaanse Tydskrif Vir Sielkunde, 27*, 37-42.
- \*Collishaw, S., Pickles, A., Messer, J., Rutter, M., Shearer, C., & Maughan, B. (2007). Resilience to adult psychopathology following childhood maltreatment: Evidence from a community sample. *Child Abuse and Neglect, 31*, 211-229. doi:10.1016/j.chiabu.2007.02.004.
- \*Copeland, W. E., Keeler, G., Angold, A., & Costello, E. J. (2007). Traumatic events and posttraumatic stress in childhood. *Archives of General Psychiatry, 64*, 577-584. doi:10.1001/archpsyc.64.5.577.
- \*Coxell, A., King, M., Mezey, G., & Gordon, D. (1999). Lifetime prevalence, characteristics, and associated problems of non-consensual sex in men: Cross sectional survey. *British Medical Journal, 318*, 846-850.
- Cyr, C., Euser, E. M., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (2010). Attachment security and disorganization in maltreating and high-risk families: A series of meta-analyses. *Development and Psychopathology, 22*, 87-108. doi:10.1017/S0954579409990289.
- \*Dalenberg, C. J., & Palesh, O. G. (2004). Relationships between child abuse history, trauma, and dissociation in Russian college students. *Child Abuse and Neglect, 28*, 461-474. doi:10.1016/j.chiabu.2003.11.020.
- \*De Paul, J., Milner, J. S., & Mugica, P. (1995). Childhood maltreatment, childhood social support, and child-abuse potential in a Basque sample. *Child Abuse & Neglect, 19*, 907-920. doi:10.1016/0145-2134(95)00053-B.

- \*De Von Figueroa-Moseley, C. D., Landrine, H., & Klonoff, E. A. (2004). Sexual abuse and smoking among college student women. *Addictive Behaviors, 29*, 245-251. doi:10.1016/j.addbeh.2003.07.004.
- De Sanjose, S., Diaz, M., Castellsae, X., Clifford, G., Bruni, L., Munoz, N., & Bosch, F. X. (2007). Worldwide prevalence and genotype distribution of cervical human papillomavirus DNA in women with normal cytology: A meta-analysis. *The Lancet Infectious Diseases, 7*, 453-459. doi:10.1016/S1473-3099(07)70158-5.
- De Wolff, M. S., & van IJzendoorn, M. H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. *Child Development, 68*, 571-591. doi:10.2307/1132107.
- \*DeLahunta, E. A., & Tulskey, A. A. (1996). Personal exposure of faculty and medical students to family violence. *Journal of the American Medical Association, 275*, 1903-1906. doi:10.1001/jama.275.24.1903.
- Dhaliwal, G. K., Gauzas, L., Antonowicz, D. H., & Ross, R. R. (1996). Adult male survivors of childhood sexual abuse: Prevalence, sexual abuse characteristics, and long-term effects. *Clinical Psychology Review, 16*, 619-639. doi:10.1016/S0272-7358(96)00018-9.
- \*Diaz, A., Simantov, E., & Rickert, V. I. (2002). Effect of abuse on health—Results of a national survey. *Archives of Pediatrics & Adolescent Medicine, 156*, 811-817. doi:10.1016/S1083-3188(00)00017-6.
- \*Diaz-Olavarrieta, C., Paz, F., de la Cadena, C. G., & Campbell, J. (2001). Prevalence of intimate partner abuse among nurses and nurses' aides in Mexico. *Archives of Medical Research, 32*, 79-87. doi:10.1016/S0188-4409(00)00262-9.
- \*DiLillo, D., DeGue, S., Kras, A., Di Loreto-Colgan, A. R., & Nash, C. (2006a). Participant responses to retrospective surveys of child maltreatment: Does mode of assessment matter? *Violence and Victims, 21*, 410-424. doi:10.1891/vivi.21.4.410.
- \*DiLillo, D., Fortier, M. A., Hayes, S. A., Trask, E., Perry, A. R., Messman-Moore, T., & ... Nash, C. (2006b). Retrospective assessment of childhood sexual and physical abuse: A comparison of scaled and behaviorally specific approaches. *Assessment, 13*, 297-312. doi:10.1177/1073191106288391.
- \*Ditomasso, M. J., & Routh, D. K. (1993). Recall of abuse in childhood and three measures of dissociation. *Child Abuse & Neglect, 17*, 477-485. doi:10.1016/0145-2134(93)90022-W.
- \*Divasto, P. V., Kaufman, A., Rosner, L., Jackson, R., Christy, J., Pearson, S., & Burgett, T. (1984). The Prevalence of sexually stressful events among females in the general-population. *Archives of Sexual Behavior, 13*, 59-67. doi:10.1007/BF01542978.
- \*Duncan, R. D. (2000). Childhood maltreatment and college drop-out rates—Implications for child abuse researchers. *Journal of Interpersonal Violence, 15*, 987-995. doi:10.1177/088626000015009005.
- \*Dunkle, K. L., Jewkes, R. K., Brown, H. C., Yoshihama, M., Gray, G. E., McIntyre, J. A., & Harlow, S. D. (2004). Prevalence and patterns of gender-based violence and revictimization among women attending antenatal clinics in Soweto, South Africa. *American Journal of Epidemiology, 160*, 230-239. doi:10.1093/aje/kwh194.
- \*Dunne, M. P., Purdie, D. M., Cook, M. D., Boyle, F. M., & Najman, J. M. (2003). Is child sexual abuse declining? Evidence from a population-based survey of men and women in Australia. *Child Abuse & Neglect, 27*, 141-152. doi:10.1016/S0145-2134(02)00539-2.
- \*Duran, B., Malcoe, L. H., Sanders, M., Waitzkin, H., Skipper, B., & Yager, J. (2004). Child maltreatment prevalence and mental disorders outcomes among American Indian women in primary care. *Child Abuse & Neglect, 28*, 131-145. doi:10.1016/j.chiabu.2003.06.005.
- Duval, S., & Tweedie, R. (2000a). A nonparametric “trim and fill” method of accounting for publication bias in meta-analysis. *Journal of the American Statistical Association, 95*, 89-98. doi:10.2307/2669529.
- Duval, S., & Tweedie, R. (2000b). Trim and fill: A simple funnel-plot-based method of testing and adjusting for publication bias in meta-analysis. *Biometrics, 56*, 455-463. doi:10.1111/j.0006-341X.2000.00455.x.
- \*Eaton, D. K. (2006). Youth risk behavior surveillance—United States, 2005. *Journal of school health, 76*, 353-372. doi:10.1111/j.1746-1561.2006.00127.x.
- \*Edgards, K., & Ormstad, K. (2000). Prevalence and characteristics of sexual abuse in a national sample of Swedish seventeen-year-old boys and girls. *Acta Paediatrica, 89*, 310-319. doi:10.1111/j.1651-2227.2000.tb01333.x.
- \*Elbedour, S., Abu-Bader, S., Onwuegbuzie, A. J., Abu-Rabia, A., & El-Aassam, S. (2006). Erratum to “The scope of sexual, physical, and psychological abuse in a Bedouin-Arab community of female adolescents: The interplay of racism, urbanization, polygamy, family honor, and the social marginalization of women.”. *Child Abuse and Neglect, 30*, 577. doi:10.1016/j.chiabu.2006.06.003.
- \*Elliot, D. M., & Briere, J. (1992). Sexual abuse trauma among professional women: Validating the trauma symptom checklist-40 (TSC-40). *Child Abuse and Neglect, 16*, 391-398. doi:10.1016/0145-2134(92)90048-V.
- \*Elliott, D. M. (1997). Traumatic events: Prevalence and delayed recall in the general population. *Journal of Consulting and Clinical Psychology, 65*, 811-820.
- \*Epstein, M. A., & Bottoms, B. L. (1998). Memories of childhood sexual abuse: A survey of young adults. *Child Abuse and Neglect, 22*, 1217-1238. doi:10.1037//0022-006X.65.5.811.
- \*Ernst, C., Angst, J., & Foldenyi, M. (1993). The Zurich Study XVII. Sexual abuse in childhood—Frequency and relevance for adult morbidity data of a longitudinal epidemiologic-study. *European Archives of Psychiatry and Clinical Neuroscience, 242*, 293-300.
- \*Eskin, M., Kaynak-Demir, H., & Demir, S. (2005). Same-sex sexual orientation, childhood sexual abuse, and suicidal behavior in university students in Turkey. *Archives of Sexual Behavior, 34*, 185-195. doi:10.1007/s10508-005-1796-8.
- \*Essock-Vitale, S. M., & McGuire, M. T. (1985). Women's lives viewed from an evolutionary perspective .1. Sexual histories, reproductive success, and demographic characteristics of a random sample of American women. *Ethology and Sociobiology, 6*, 137-154. doi:10.1016/0162-3095(85)90027-5.
- Euser, E. M., Van IJzendoorn, M. H., Prinzie, P., & Bakermans-Kranenburg, M. J. (2010). Prevalence of child maltreatment in the Netherlands. *Child Maltreatment, 15*, 5-17. doi:10.1177/1077559509345904.
- \*Everill, J., & Waller, G. (1995). Disclosure of sexual abuse and psychological adjustment in female undergraduates. *Child Abuse & Neglect, 19*, 93-100. doi:10.1016/0145-2134(94)00102-Z.

- Fallon, B., Trocme, N., Fluke, J., MacLaurin, B., Tonmyr, L., & Yuan, Y. Y. (2010). Methodological challenges in measuring child maltreatment. *Child Abuse & Neglect, 34*, 70-79. doi:10.1016/j.chiabu.2009.08.008.
- \*Fanslow, J. L., Robinson, E. M., Crengle, S., & Perese, L. (2007). Prevalence of child sexual abuse reported by a cross-sectional sample of New Zealand women. *Child Abuse & Neglect, 31*, 935-945. doi:10.1016/j.chiabu.2007.02.009.
- Fergusson, D. M., & Mullen, P. E. (1999). *Childhood sexual abuse: An evidence-based perspective*. Thousand Oaks, CA: Sage.
- \*Fergusson, D. M., & Horwood, L. J. (1998). Exposure to interparental violence in childhood and psychosocial adjustment in young adulthood. *Child Abuse and Neglect, 22*, 339-357. doi:10.1016/S0145-2134(98)00004-0.
- \*Figueiredo, B., Bifulco, A., Paiva, C., Maia, A., Fernandes, E., & Matos, R. (2004). History of childhood abuse in Portuguese parents. *Child Abuse and Neglect, 28*, 669-682. doi:10.1016/j.chiabu.2003.11.021.
- \*Fillingim, R. B., & Edwards, R. R. (2005). Is self-reported childhood abuse history associated with pain perception among healthy young women and men? *Clinical Journal of Pain, 21*, 387-397. doi:10.1097/01.ajp.0000149801.46864.39.
- Finkelhor, D., & Baron, L. (1986). High-risk children. In D. Finkelhor (Ed.), *A sourcebook on child sexual abuse*, (pp. 60-88). Beverly Hills, CA: Sage.
- Finkelhor, D. (1994). The international epidemiology of child sexual abuse. *Child Abuse & Neglect, 18*, 409-417. doi:10.1016/0145-2134(94)90026-4.
- \*Finkelhor, D., & Dziuba-Leatherman, J. (1994). Children as victims of violence: A national survey. *Pediatrics, 94*, 413-420.
- \*Finkelhor, D., Moore, D., Hamby, S. L., & Straus, M. A. (1997). Sexually abused children in a national survey of parents: Methodological issues. *Child Abuse and Neglect, 21*, 1-9. doi:10.1016/S0145-2134(96)00127-5.
- \*Finkelhor, D., Ormrod, R., Turner, H., & Hamby, S. L. (2005). The victimization of children and youth: A comprehensive, national survey. *Child Maltreatment, 10*, 5-25. doi:10.1177/1077559504271287.
- \*Flanagan, A. S., & Furman, W. C. (2000). Sexual victimization and perceptions of close relationships in adolescence. *Child Maltreatment, 5*, 350-359. doi:10.1177/107755950005004006.
- \*Fleming, J. M. (1997). Prevalence of childhood sexual abuse in a community sample of Australian women. *Medical Journal of Australia, 166*, 65-68.
- \*Fox, K. M., & Gilbert, B. O. (1994). The interpersonal and psychological functioning of women who experienced childhood physical abuse, incest, and parental alcoholism. *Child Abuse & Neglect, 18*, 849-858. doi:10.1016/0145-2134(94)90064-7.
- \*Fricker, A. E., Smith, D. W., Davis, J. L., & Hanson, R. F. (2003). Effects of context and question type on endorsement of childhood sexual abuse. *Journal of Traumatic Stress, 16*, 265-268. doi:10.1023/A:1023748124626.
- \*Fritz, G. S., Stoll, K., & Wagner, N. N. (1981). A comparison of males and females who were sexually molested as children. *Journal of Sex & Marital Therapy, 7*, 54-59.
- \*Fromuth, M. E. (1983). The long term psychological impact of childhood sexual abuse. *Dissertation-Abstracts-International, 44*, 2242.
- \*Fromuth, M. E. (1986). The Relationship of childhood sexual abuse with later psychological and sexual adjustment in a sample of college-women. *Child Abuse & Neglect, 10*, 5-15. doi:10.1016/0145-2134(86)90026-8.
- \*Gagné, M. H., Lavoie, F., & Hébert, M. (2005). Victimization during childhood and revictimization in dating relationships in adolescent girls. *Child Abuse and Neglect, 29*, 1155-1172. doi:10.1016/j.chiabu.2004.11.009.
- \*Gibson, R. L., & Hartshorne, T. S. (1996). Childhood sexual abuse and adult loneliness and network orientation. *Child Abuse & Neglect, 20*, 1087-1093. doi:10.1016/0145-2134(96)00097-X.
- Gilbody, S. M., Song, F. J., Eastwood, A. J., & Sutton, A. (2000). The causes, consequences and detection of publication bias in psychiatry. *Acta Psychiatrica Scandinavica, 102*, 241-249. doi:10.1034/j.1600-0447.2000.102004241.x.
- Goldman, J. D. G., & Padayachi, U. K. (2000). Some methodological problems in estimating incidence and prevalence in child sexual abuse research. *The Journal of Sex Research, 37*, 305-314. doi:10.1080/00224490009552052.
- \*Goldman, J. D. G., & Padayachi, U. K. (1997). The prevalence and nature of child sexual abuse in Queensland, Australia. *Child Abuse and Neglect, 21*, 489-498. doi:10.1016/S0145-2134(97)00008-2.
- \*Goldman, R. J., & Goldman, J. D. G. (1988). The prevalence and nature of child sexual abuse in Australia. *Australian Journal of Sex, Marriage & Family, 9*, 94-106.
- \*Grayson, C. E., & Nolen-Hoeksema, S. (2005). Motives to drink as mediators between childhood sexual assault and alcohol problems in adult women. *Journal of Traumatic Stress, 18*, 137-145. doi:10.1002/jts.20021.
- \*Grimstad, H., Schei, B., Backe, B., & Jacobsen, G. (1997). Physical abuse and low birthweight: A case-control study. *British Journal of Obstetrics and Gynaecology, 104*, 1281-1287. doi:10.1111/j.1471-0528.1997.tb10975.x.
- \*Hall, E., & Flannery, P. J. (1984). Prevalence and correlates of sexual assault experiences in adolescents. *Victimology, 9*, 398-406.
- \*Halperin, D. S., Bouvier, P., Jaffe, P. D., Mounoud, R. L., Pawlak, C. H., Laederach, J., & ... Astié, F. (1996). Prevalence of child sexual abuse among adolescents in Geneva: Results of a cross sectional survey. *British Medical Journal, 312*, 1326-1329.
- \*Hatfield, S. A. (1987). Symptomatology associated with male adult survivors of childhood sexual abuse. *Dissertation-Abstracts-International, 48*, 2771-2772.
- \*Haugaard, J. J., & Emery, R. E. (1989). Methodological issues in child sexual abuse research. *Child Abuse & Neglect, 13*, 89-100. doi:10.1016/0145-2134(89)90032-X.
- Hedges, L. V., & Olkin, I. (1985). *Statistical methods for meta-analysis*. Orlando, FL: Academic Press.
- \*Helweg-Larsen, K., & Larsen, H. B. (2006). The prevalence of unwanted and unlawful sexual experiences reported by Danish adolescents: Results from a national youth survey in 2002. *Acta Paediatrica, 95*, 1270-1276. doi:10.1080/08035250600589033.
- \*Hetzel, M. D., & McCanne, T. R. (2005). The roles of peritraumatic dissociation, child physical abuse, and child sexual abuse in the development of posttraumatic stress disorder and adult victimization. *Child Abuse & Neglect, 29*, 915-930. doi:10.1016/j.chiabu.2004.11.008.

- \*Hibbard, R. A., Ingersoll, G. M., & Orr, D. P. (1990). Behavioral risk, emotional risk, and child-abuse among adolescents in a nonclinical setting. *Pediatrics*, *86*, 896-901.
- \*Hill, J., Davis, R., Byatt, M., Burnside, E., Rollinson, L., & Fear, S. (2000). Childhood sexual abuse and affective symptoms in women: A general population study. *Psychological Medicine*, *30*, 1283-1291. doi:10.1017/S0033291799003037.
- \*Himelein, M. J., Vogel, R. E., & Wachowiak, D. G. (1994). Non-consensual sexual experiences in precollege women—Prevalence and risk-factors. *Journal of Counseling and Development*, *72*, 411-415.
- Hofstede, G. (2001). *Culture's consequences. Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage.
- \*Hooper, P. D. (1990). Psychological sequelae of sexual abuse in childhood. *British Journal of General Practice*, *40*, 29-31.
- \*Howard, D. E., & Wang, M. Q. (2005). Psychosocial correlates of US adolescents who report a history of forced sexual intercourse. *Journal of Adolescent Health*, *36*, 372-379. doi:10.1016/j.jadohealth.2004.07.007.
- \*Hussey, J. M., Chang, J. J., & Kotch, J. B. (2006). Child maltreatment in the United States: Prevalence, risk factors, and adolescent health consequences. *Pediatrics*, *118*, 933-942. doi:10.1542/peds.2005-2452.
- International Monetary Fund. (2010). *World economic outlook: Spillovers and cycles in the global economy*. Washington, DC: Author.
- \*Jewkes, R., Levin, J., Mbananga, N., & Bradshaw, D. (2002). Rape of girls in South Africa. *Lancet*, *359*, 319-320. doi:10.1016/S0140-6736(02)07530-X.
- \*Jirapramukpitak, T., Prince, M., & Harpham, T. (2005). The experience of abuse and mental health in the young Thai population—A preliminary survey. *Social Psychiatry and Psychiatric Epidemiology*, *40*, 955-963. doi: 10.1007/s00127-005-0983-1.
- \*Johnson, R. J., Ross, M. W., Taylor, W. C., Williams, M. L., Carvajal, R. I., & Peters, R. J. (2006). Prevalence of childhood sexual abuse among incarcerated males in county jail. *Child Abuse and Neglect*, *30*, 75-86. doi:10.1016/j.chiabu.2005.08.013.
- Juffer, F., & van IJzendoorn, M. H. (2005). Behavior problems and mental health referrals of international adoptees—A meta-analysis. *Journal of the American Medical Association*, *293*, 2501-2515. doi:10.1001/jama.293.20.2501.
- \*Jumaian, A. (2001). Prevalence and long-term impact of child sexual abuse among a sample of male college students in Jordan. *Eastern Mediterranean Health Journal*, *7*, 435-440.
- Jumper, S. A. (1995). A meta-analysis of the relationship of child sexual abuse to adult psychological adjustment. *Child Abuse & Neglect*, *19*, 715-728. doi:10.1016/0145-2134(95)00029-8.
- Kendall Tackett, K. A., Williams, L. M., & Finkelhor, D. (1993). Impact of sexual abuse on children—A review and synthesis of recent empirical studies. *Psychological Bulletin*, *113*, 164-180. doi:10.1037/0033-2909.113.1.164.
- \*Kendler, K. S., Bulik, C. M., Silberg, J., Hettema, J. M., Myers, J., & Prescott, C. A. (2000). Childhood sexual abuse and adult psychiatric and substance use disorders in women—An epidemiological and Cotwin control analysis. *Archives of General Psychiatry*, *57*, 953-959. doi:10.1001/archpsyc.57.10.953.
- \*Kenny, M., & McEachern, A. G. (2000a). Prevalence and characteristics of childhood sexual abuse in multiethnic female college students. *Journal of child sexual abuse*, *9*, 57-70. doi:10.1300/J070v09n02\_04.
- Kenny, M. C., & McEachern, A. G. (2000b). Racial, ethnic, and cultural factors of childhood sexual abuse: A selected review of the literature. *Clinical Psychology Review*, *20*, 905-922. doi:10.1016/S0272-7358(99)00022-7.
- \*Kercher, G. A., & McShane, M. (1984). The prevalence of child sexual abuse victimization in an adult sample of Texas residents. *Child Abuse and Neglect*, *8*, 495-501. doi:10.1016/0145-2134(84)90031-0.
- \*Khamis, V. (2000). Child psychological maltreatment in Palestinian families. *Child Abuse and Neglect*, *24*, 1047-1059. doi:10.1016/S0145-2134(00)00157-5.
- \*Kilpatrick, D. G., Acierno, R., Saunders, B., Resnick, H. S., & Best, C. L. (2000). Risk factors for adolescent substance abuse and dependence: Data from a national sample. *Journal of Consulting and Clinical Psychology*, *68*, 19-30. doi:10.1037//0022-006X.68.1.19.
- \*Kim, H. S., & Kim, H. S. (2005). Incestuous experience among Korean adolescents: Prevalence, family problems, perceived family dynamics, and psychological characteristics. *Public Health Nursing*, *22*, 472-482. doi:10.1111/j.0737-1209.2005.220604.x.
- \*King, G., Flisher, A. J., Noubary, F., Reece, R., Marais, A., & Lombard, C. (2004). Substance abuse and behavioral correlates of sexual assault among South African adolescents. *Child Abuse & Neglect*, *28*, 683-696. doi:10.1016/j.chiabu.2003.12.003.
- \*King, G., Guilbert, P., Ward, D. G., Arwidson, P., & Noubary, F. (2006). Correlates of sexual abuse and smoking among French adults. *Child Abuse & Neglect*, *30*, 709-723. doi:10.1016/j.chiabu.2006.02.011.
- \*Kinzl, J. F., Traweger, C., & Biebl, W. (1995). Sexual dysfunctions—Relationship to childhood sexual abuse and early family experiences in a nonclinical sample. *Child Abuse & Neglect*, *19*, 785-792. doi:10.1016/0145-2134(95)00048-D.
- Koss, M. P. (1993). Detecting the scope of rape: A review of prevalence research methods. *Journal of Interpersonal Violence*, *8*, 198-222. doi:10.1177/088626093008002004.
- \*Krahé, B., Scheinberger-Olwig, R., Waizenhöfer, E., & Kolpin, S. (1999). Childhood sexual abuse and revictimization in adolescence. *Child Abuse and Neglect*, *23*, 383-394. doi:10.1016/S0145-2134(99)00002-2.
- \*Krugman, S., Mata, L., & Krugman, R. (1992). Sexual abuse and corporal punishment during childhood—A pilot retrospective survey of university-students in Costa-Rica. *Pediatrics*, *90*, 157-161.
- \*Kvam, M. H. (2004). Sexual abuse of deaf children. A retrospective analysis of the prevalence and characteristics of childhood sexual abuse among deaf adults in Norway. *Child Abuse and Neglect*, *28*, 241-251. doi:10.1016/j.chiabu.2003.09.017.
- Lalor, K. (2008). Child sexual abuse and HIV transmission in sub-Saharan Africa. *Child Abuse Review*, *17*, 94-107. doi:10.1002/car.1020.
- \*Lam, J. (1994). Resiliency and adult adaptation in females with and without histories of childhood sexual abuse. *Dissertation-Abstracts-International*, *55*, 1187.

- \*Leeners, B., Neumaier-Wagner, P., Quarg, A. F., & Rath, W. (2006). Childhood sexual abuse (CSA) experiences: An underestimated factor in perinatal care. *Acta Obstetrica et Gynecologica Scandinavica*, *85*, 971-976. doi:10.1080/00016340600626917.
- \*Leitenberg, H., Greenwald, E., & Cado, S. (1992). A retrospective study of long-term methods of coping with having been sexually abused during childhood. *Child Abuse & Neglect*, *16*, 399-407. doi:10.1016/0145-2134(92)90049-W.
- Leventhal, J. M. (1998). Epidemiology of sexual abuse of children: Old problems, new directions. *Child Abuse & Neglect*, *22*, 481-491. doi:10.1016/S0145-2134(98)00014-3.
- \*Linton, S. J. (1997). A population-based study of the relationship between sexual abuse and back pain: Establishing a link. *Pain*, *73*, 47-53. doi:10.1016/S0304-3959(97)00071-7.
- Lipsey, M. W., & Wilson, D. B. (2001). *Practical meta-analysis*. Thousand Oaks, CA: Sage.
- \*Lodico, M. A., Gruber, E., & DiClemente, R. J. (1996). Childhood sexual abuse and coercive sex among school-based adolescents in a midwestern state. *Journal of Adolescent Health*, *18*, 211-217. doi:10.1016/1054-139X(95)00167-Q.
- \*López, F., Carpintero, E., Hernández, A., Martín, M. J., & Fuertes, A. (1995). Prevalencia y Consecuencias del Abuso Sexual al Menor en Espana [Prevalence and consequences of child sexual abuse in Spain]. *Child Abuse and Neglect*, *19*, 1039-1050. doi:10.1016/0145-2134(95)00066-H.
- \*Lopez, M. A., & Heffer, R. W. (1998). Self-concept and social competence of university student victims of childhood physical abuse. *Child Abuse and Neglect*, *22*, 183-195. doi:10.1016/S0145-2134(97)00136-1.
- \*Mackenzie, G., Blaney, R., Chivers, A., & Vincent, O. E. (1993). The incidence of child sexual abuse in Northern-Ireland. *International Journal of Epidemiology*, *22*, 299-305. doi:10.1093/ije/22.2.299.
- Madu, S. N., & Peltzer, K. (2000). Risk factors and child sexual abuse among secondary school students in the Northern Province (South Africa). *Child Abuse & Neglect*, *24*, 259-268. doi:10.1016/S0145-2134(99)00128-3.
- \*Madu, S. N. (2001). The prevalence and patterns of childhood sexual abuse and victim-perpetrator relationship among a sample of university students. *South African Journal of Psychology*, *31*, 32-37.
- \*Madu, S. N. (2003). The relationship between parental physical availability and child sexual, physical and emotional abuse: A study among a sample of university students in South Africa. *Scandinavian Journal of Psychology*, *44*, 311-318. doi:10.1111/1467-9450.00350.
- \*Madu, S. N., & Peltzer, K. (2001). Prevalence and patterns of child sexual abuse and victim-perpetrator relationship among secondary school students in the Northern Province (South Africa). *Archives of Sexual Behavior*, *30*, 311-321. doi: 10.1023/A:1002704331364.
- \*Mamun, A., Alati, R., O'Callaghan, M., Hayatbakhsh, M. R., O'Callaghan, F. V., Najman, J. M., & ... Bor, W. (2007). Does childhood sexual abuse have an effect on young adults' nicotine disorder (dependence or withdrawal)? Evidence from a birth cohort study. *Addiction*, *102*, 647-654. doi:10.1111/j.1360-0443.2006.01732.x.
- \*Mandell, D. S., Walrath, C. M., Manteuffel, B., Sgro, G., & Pinto-Martin, J. A. (2005). The prevalence and correlates of abuse among children with autism served in comprehensive community-based mental health settings. *Child Abuse and Neglect*, *29*, 1359-1372. doi:10.1016/j.chiabu.2005.06.006.
- \*Masho, S. W., & Ahmed, G. (2007). Age at sexual assault and post-traumatic stress disorder among women: Prevalence, correlates, and implications for prevention. *Journal of Womens Health*, *16*, 262-271. doi:10.1089/jwh.2006.M076.
- \*May-Chahal, C., & Cawson, P. (2005). Measuring child maltreatment in the United Kingdom: A study of the prevalence of child abuse and neglect. *Child Abuse and Neglect*, *29*, 969-984. doi:10.1016/j.chiabu.2004.05.009.
- \*Mazza, D., Dennerstein, L., & Ryan, V. (1996). Physical, sexual and emotional violence against women: A general practice-based prevalence study. *Medical Journal of Australia*, *164*, 14-17.
- \*Mazza, D., Dennerstein, L., Garamszegi, C. V., & Dudley, E. C. (2001). The physical, sexual and emotional violence history of middle-aged women: A community-based prevalence study. *Medical Journal of Australia*, *175*, 199-201.
- Mbagaya, C. V. (2010). *Child maltreatment in Kenya, Zambia and the Netherlands. A cross-cultural comparison of prevalence, psychopathological sequelae, and mediation by PTSS*. Leiden: Drukkerij Mostert.
- \*McCran, D., & Lalor, K. J. K. (2006). Childhood sexual abuse among university students in Tanzania. *Child Abuse and Neglect*, *30*, 1343-1351. doi:10.1016/j.chiabu.2006.05.009.
- \*McNutt, L. A., Carlson, B. E., Persaud, M., & Postmus, J. (2002). Cumulative abuse experiences, physical health and health behaviors. *Annals of Epidemiology*, *12*, 123-130. doi:10.1016/S1047-2797(01)00243-5.
- \*Menard, C., Bandeen-Roche, K. J., & Chilcoat, H. D. (2004). Epidemiology of multiple childhood traumatic events: child abuse, parental psychopathology, and other family-level stressors. *Social Psychiatry and Psychiatric Epidemiology*, *39*, 857-865. doi:10.1007/s00127-004-0868-8.
- \*Merrill, L. L., Newell, C. E., Thomsen, C. J., Gold, S. R., Milner, J. S., Koss, M. P., & Rosswork, S. G. (1999). Childhood abuse and sexual revictimization in a female navy recruit sample. *Journal of Traumatic Stress*, *12*, 211-225. doi:10.1023/A:1024789723779.
- \*Messman-Moore, T. L. (2000). Child sexual abuse and revictimization in the form of adult sexual abuse, adult physical abuse, and adult psychological maltreatment. *Journal of Interpersonal Violence*, *15*, 489-502. doi:10.1177/088626000015005003.
- \*Meston, C. M., Heiman, J. R., Trapnell, P. D., & Carlin, A. S. (1999). Ethnicity, desirable responding, and self-reports of abuse: A comparison of European- and Asian-ancestry undergraduates. *Journal of Consulting and Clinical Psychology*, *67*, 139-144. doi:10.1037/0022-006X.67.1.139.
- \*Miller, P. M., & Lisak, D. (1999). Associations between childhood abuse and personality disorder symptoms in college males. *Journal of Interpersonal Violence*, *14*, 642-656. doi:10.1177/088626099014006005.
- \*Milner, J. S. (1990). Childhood history of abuse and adult child abuse potential. *Journal of Family Violence*, *5*, 15-34. doi:10.1007/BF00979136.
- \*Mulder, R. T., Beautrais, A. L., Joyce, P. R., & Fergusson, D. M. (1998). Relationship between dissociation, childhood sexual

- abuse, childhood physical abuse, and mental illness in a general population sample. *American Journal of Psychiatry*, 155, 806-811.
- \*Mullen, P. E., Romans-Clarkson, S. E., Walton, V. A., & Herbison, G. P. (1988). Impact of sexual and physical abuse on women's mental health. *Lancet*, 1, 841-845. doi:10.1016/S0140-6736(88)91600-5.
- \*Muram, D., Dorko, B., Brown, J. G., & Tolley, E. A. (1991). Child sexual abuse in Shelby County, Tennessee—A new epidemic. *Child Abuse & Neglect*, 15(91), 523-529. doi:10.1016/0145-2134(95)90036-D.
- \*Nelson, D. E., Higginson, G. K., & Grant-Worley, J. A. (1994). Using the youth risk behavior survey to estimate prevalence of sexual abuse among Oregon high school students. *The Journal of School Health*, 64, 413-416. doi:10.1111/j.1746-1561.1994.tb03264.x.
- \*Nelson, E. C., Heath, A. C., Lynskey, M. T., Bucholz, K. K., Madden, P. A. F., Statham, D. J., & Martin, N. G. (2006). Childhood sexual abuse and risks for licit and illicit drug-related outcomes: A twin study. *Psychological Medicine*, 36, 1473-1483. doi:10.1017/S0033291706008397.
- \*Niederberger, J. M. (2002). The perpetrator's strategy as a crucial variable: A representative study of sexual abuse of girls and its sequelae in Switzerland. *Child Abuse & Neglect*, 26, 55-71. doi:10.1016/S0145-2134(01)00303-9.
- \*Nuttall, R., & Jackson, H. (1994). Personal history of childhood abuse among clinician. *Child Abuse & Neglect*, 18, 455-472. doi:10.1016/0145-2134(94)90030-2.
- \*Oaksford, K., & Frude, N. (2001). The prevalence and nature of child sexual abuse: Evidence from a female university sample in the UK. *Child Abuse Review*, 10, 49-59. doi:10.1002/car.663.
- O'Leary, P. J., & Barber, J. (2008). Gender differences in silencing following childhood sexual abuse. *Journal of child sexual abuse*, 17, 133-143. doi:10.1080/10538710801916416.
- \*Olsson, A., Ellsberg, M., Berglund, S., Herrera, A., Zelaya, E., Peña, R., & ... Persson, L. A. (2000). Sexual abuse during childhood and adolescence among Nicaraguan men and women: A population-based anonymous survey. *Child Abuse and Neglect*, 24, 1579-1589. doi:10.1016/S0145-2134(00)00215-5.
- Paolucci, E. O., Genuis, M. L., & Violato, C. (2001). A meta-analysis of the published research on the effects of child sexual abuse. *Journal of Psychology*, 135, 17-36. doi:10.1080/00223980109603677.
- \*Parker, S., & Parker, H. (1991). Female victims of child sexual abuse: Adult adjustment. *Journal of Family Violence*, 6, 183-197. doi:10.1007/BF00978718.
- Pereda, N., Guilera, G., Forns, M., & Gomez-Benito, J. (2009a). The international epidemiology of child sexual abuse: A continuation of Finkelhor (1994). *Child Abuse & Neglect*, 33, 331-342. doi:10.1016/j.chiabu.2008.07.007.
- Pereda, N., Guilera, G., Forns, M., & Gomez-Benito, J. (2009b). The prevalence of child sexual abuse in community and student samples: A meta-analysis. *Clinical Psychology Review*, 29, 328-338. doi:10.1016/j.cpr.2009.02.007.
- \*Peschers, U. M., Du Mont, J., Jundt, K., Pfürtner, M., Dugan, E., & Kindermann, G. (2003). Prevalence of sexual abuse among women seeking gynecologic care in Germany. *The American College of Obstetricians and Gynecologists*, 101, 103-108. doi:10.1016/S0029-7844(02)02248-2.
- \*Peters, D. K., & Range, L. M. (1995). Childhood sexual abuse and current suicidality in college women and men. *Child Abuse and Neglect*, 19, 335-341. doi:10.1016/S0145-2134(94)00133-2.
- Peters, S. D., Wyatt, G. E., & Finkelhor, D. (1986). Prevalence. In D. Finkelhor (Ed.), *A sourcebook on child sexual abuse*, (pp. 15-59). Beverly Hills, CA: Sage.
- \*Pizzolo, C. P. (1989). *The Relationship between childhood sexual abuse and symptoms of eating disorders among college women*. Stony Brook, NY: State University of New York.
- Posada, G., Gao, Y., Wu, F., Posada, R., Tascon, M., Schoëlmerich, A., & ... Synnevaag, B. (2008). The secure-base phenomenon across cultures: Children's behavior, mothers' preferences, and experts' concepts. *Monographs of the Society for Research in Child Development*, 60, 27-48. doi:10.2307/1166169.
- \*Priest, R. (1992). Child sexual abuse histories among African-American college-students—A preliminary study. *American Journal of Orthopsychiatry*, 62, 475-476. doi:10.1037/h0079353.
- Putnam, F. W. (2003). Ten-year research update review: Child sexual abuse. *Journal of the American Academy of Child & Adolescent Psychiatry*, 42, 269-278. doi:10.1097/00004583-200303000-00006.
- \*Raiha, N. K., & Soma, D. J. (1997). Victims of child abuse and neglect in the U.S. Army. *Child Abuse and Neglect*, 21, 759-768. doi:10.1016/S0145-2134(97)00037-9.
- \*Ramisetty-Mikler, S., Caetano, R., Goebert, D., & Nishimura, S. (2006). Dating violence victimization: Associated drinking and sexual risk behaviors of Asian, native Hawaiian, and Caucasian high school students in Hawaii. *Journal of School Health*, 76, 423-429. doi:10.1111/j.1746-1561.2006.00136.x.
- \*Rapkin, A. J., Kames, L. D., Darke, L. L., Stamper, F. M., & Naliboff, B. D. (1990). History of physical and sexual abuse in women with chronic pelvic pain. *Obstetrics and Gynecology*, 76, 92-96. doi:10.1016/0020-7292(91)90368-F.
- \*Rew, L., Esparza, D., & Sands, D. (1991). A comparative study among college students of sexual abuse in childhood. *Archives of Psychiatric Nursing*, 5, 331-340. doi:10.1016/0883-9417(91)90034-3.
- \*Riggs, S., Alario, A. J., & Mchorney, C. (1990). Health risk behaviors and attempted-suicide in adolescents who report prior maltreatment. *Journal of Pediatrics*, 116, 815-821. doi:10.1016/S0022-3476(05)82679-4.
- Rind, B., Tromovitch, P., & Bauserman, R. (1998). A meta-analytic examination of assumed properties of child sexual abuse using college samples. *Psychological Bulletin*, 124, 22-53. doi:10.1037//0033-2909.124.1.22.
- \*Risberg, G., Lundgren, E., & Westman, G. (1999). Prevalence of sexualized violence among women: A population-based study in a primary healthcare district. *Scandinavian Journal of Public Health*, 27, 247-253. doi:10.1080/140349499444979.
- \*Risn, L. I., & Koss, M. P. (1987). The sexual abuse of boys. *Journal of Interpersonal Violence*, 2, 309-323. doi:10.1177/088626087002003006.
- \*Robin, R. W., Chester, B., Rasmussen, J. K., Jaranson, J. M., & Goldman, D. (1997). Prevalence, characteristics, and impact of childhood sexual abuse in a southwestern American Indian tribe. *Child Abuse & Neglect*, 21, 769-787. doi:10.1016/S0145-2134(97)00038-0.

- Romano, E., & De Luca, R. V. (2001). Male sexual abuse: A review of effects, abuse characteristics, and links with later psychological functioning. *Aggression and Violent Behaviour, 6*, 55-78. doi:10.1016/S1359-1789(99)00011-7.
- \*Romero, G., Wyatt, G. E., Loeb, T. B., Vargas Carmona, J., & Solis, B. M. (1999). The prevalence and circumstances of child sexual abuse among Latina women. *Hispanic Journal of Behavioral Sciences, 21*, 351-365. doi:10.1177/0739986399213009.
- \*Roosa, M. W., Tein, J. Y., Reinholtz, C., & Angelini, P. J. (1997). The relationship of childhood sexual abuse to teenage pregnancy. *Journal of Marriage and the Family, 59*, 119-130. doi:10.2307/353666.
- \*Rosen, L. N., & Martin, L. (1996). Impact of childhood abuse history on psychological symptoms among male and female soldiers in the US army. *Child Abuse & Neglect, 20*, 1149-1160. doi:10.1016/S0145-2134(96)00112-3.
- \*Rosenberg, H. J., Jankowski, M. K., Sengupta, A., Wolfe, R. S., Wolford, G. L., & Rosenberg, S. D. (2005). Single and multiple suicide attempts and associated health risk factors in New Hampshire adolescents. *Suicide and Life-Threatening Behavior, 35*, 547-557. doi:10.1521/suli.2005.35.5.547.
- \*Rosenman, S., & Rodgers, B. (2004). Childhood adversity in an Australian population. *Social Psychiatry and Psychiatric Epidemiology, 39*, 695-702. doi:10.1007/s00127-004-0802-0.
- Rosenthal, R. (1991). *Meta-analytic procedures for social research*. Newbury Park, CA: Sage.
- \*Ross, C. A., Keyes, B. B., Xiao, Z., Yan, H., Wang, Z., Zou, Z., & ... Zhang, H. (2005). Childhood physical and sexual abuse in China. *Journal of Child Sexual Abuse, 14*, 115-126. doi:10.1300/J070v14n04\_06.
- Rothbart, M. K. (1981). Measurement of temperament in infancy. *Child Development, 52*, 569-578. doi:10.1111/j.1467-8624.1981.tb03082.x.
- \*Runtz, M. (2002). Health concerns of university women with a history of child physical and sexual maltreatment. *Child Maltreatment, 7*, 241-253. doi:10.1177/1077559502007003006.
- Runyan, D. K. (1998). Prevalence, risk, sensitivity, and specificity: A commentary on the epidemiology of child sexual abuse and the development of a research agenda. *Child Abuse & Neglect, 22*, 493-498. doi:10.1016/S0145-2134(98)00015-5.
- \*Russell, D. E. H. (1983). The incidence and prevalence of intrafamilial and extrafamilial sexual abuse of female children. *Child Abuse & Neglect, 7*, 133-146. doi:10.1016/0145-2134(83)90065-0.
- \*Sachs-Ericsson, N., Blazer, D., Plant, E. A., & Arnow, B. (2005). Childhood sexual and physical abuse and the 1-year prevalence of medical problems in the National Comorbidity Survey. *Health Psychology, 24*, 32-40. doi:10.1037/0278-6133.24.1.32.
- \*Sandberg, D. A., & Lynn, S. J. (1992). Dissociative experiences, psychopathology and adjustment, and child and adolescent maltreatment in female college-students. *Journal of Abnormal Psychology, 101*, 717-723. doi:10.1037//0021-843X.101.4.717.
- \*Sariola, H., & Uutela, A. (1994). The prevalence of child sexual abuse in Finland. *Child Abuse & Neglect, 18*, 827-835. doi:10.1016/0145-2134(94)90062-0.
- \*Saunders, B. E., Villepontoux, L. A., Lipovsky, J. A., Kilpatrick, D. G., & Veronen, L. J. (1992). Child sexual assault as a risk factor for mental-disorders among women—A community survey. *Journal of Interpersonal Violence, 7*, 189-204. doi:10.1177/088626092007002005.
- \*Schei, B. (1990). Prevalence of sexual abuse history in a random sample of Norwegian women. *Scandinavian Journal of Social Medicine, 18*, 63-68. doi:10.1177/140349489001800110.
- \*Schein, M., Biderman, A., Baras, M., Bennett, L., Bisharat, B., Borkan, J., & ... Kitai, E. (2000). The prevalence of a history of child sexual abuse among adults visiting family practitioners in Israel. *Child Abuse & Neglect, 24*, 667-675. doi:10.1016/S0145-2134(00)00128-9.
- \*Scher, C. D., Forde, D. R., McQuaid, J. R., & Stein, M. B. (2004). Prevalence and demographic correlates of childhood maltreatment in an adult community sample. *Child Abuse and Neglect, 28*, 167-180. doi:10.1016/j.chiabu.2003.09.012.
- \*Schultz, J. R., Bell, K. M., Naugle, A. E., & Polusny, M. A. (2006). Child sexual abuse and adulthood sexual assault among military veteran and civilian women. *Military Medicine, 171*, 723-728.
- Sedlak, A. J. (2001). *A history of the National Incidence study of child abuse and neglect*. Washington, DC: U.S. Department of Health and Human Services.
- \*Sedney, M. A., & Brooks, B. (1984). Factors associated with a history of childhood sexual experience in a nonclinical female population. *Journal of the American Academy of Child and Adolescent Psychiatry, 23*, 215-218. doi:10.1097/00004583-198403000-00015.
- \*Sidebotham, P., & Golding, J. (2001). Child maltreatment in the "children of the nineties": A longitudinal study of parental risk factors. *Child Abuse and Neglect, 25*, 1177-1200. doi:10.1016/S0145-2134(01)00261-7.
- \*Siegel, J. M., Sorenson, S. B., Golding, J. M., Burnam, M. A., & Stein, J. A. (1987). The prevalence of childhood sexual assault—The Los Angeles epidemiologic catchment area project. *American Journal of Epidemiology, 126*, 1141-1153.
- \*Silverman, A. B., Reinherz, H. Z., & Giaconia, R. M. (1996). The long-term sequelae of child and adolescent abuse: A longitudinal community study. *Child Abuse & Neglect, 20*, 709-723. doi:10.1016/0145-2134(96)00059-2.
- \*Silvern, L., Waelde, L. C., McClintic Baughan, B., & Kaersvang, L. L. (2000). Two formats for eliciting retrospective reports of child sexual and physical abuse: Effects on apparent prevalence and relationships to adjustment. *Child Maltreatment, 5*, 236-250. doi:10.1177/1077559500005003004.
- \*Singh, H. S. S. A., Yiing, W. W., & Nurani, H. N. K. (1996). Prevalence of childhood sexual abuse among Malaysian paramedical students. *Child Abuse & Neglect, 20*, 487-492. doi:10.1016/0145-2134(96)00030-0.
- \*Slonim-Nevo, V., & Mukuka, L. (2007). Child abuse and AIDS-related knowledge, attitudes and behavior among adolescents in Zambia. *Child Abuse & Neglect, 31*, 143-159. doi:10.1016/j.chiabu.2006.08.006.
- \*Spak, L., Spak, F., & Allebeck, P. (1998). Sexual abuse and alcoholism in a female population. *Addiction, 93*, 1365-1373. doi:10.1046/j.1360-0443.1998.93913657.x.
- Spatz Widom, C., Czaja, S., & Dutton, M. (2008). Childhood victimization and lifetime revictimization. *Child Abuse & Neglect, 32*, 785-796. doi:10.1016/j.chiabu.2007.12.006.

- Spatz Widom, C., DuMont, K., & Czaja, S. (2007). A prospective investigation of major depressive disorder and comorbidity in abused and neglected children grown up. *Archives of General Psychiatry*, *64*, 49-56. doi:10.1001/archpsyc.64.1.49.
- \*Spencer, N., Devereux, E., Wallace, A., Sundrum, R., Shenoy, M., Bacchus, C., & ... Logan, S. (2005). Disabling conditions and registration for child abuse and neglect: A population-based study. *Pediatrics*, *116*, 609-613. doi:10.1542/peds.2004-1882.
- \*Steel, J. L., & Herlitz, C. A. (2005). The association between childhood and adolescent sexual abuse and proxies for sexual risk behavior: A random sample of the general population of Sweden. *Child Abuse & Neglect*, *29*, 1141-1153. doi:10.1016/j.chiabu.2004.10.015.
- \*Stein, M. B., Walker, J. R., Anderson, G., Hazen, A. L., Ross, C. A., Eldridge, G., & Forde, D. R. (1996). Childhood physical and sexual abuse in patients with anxiety disorders and in a community sample. *American Journal of Psychiatry*, *153*, 275-277.
- \*Stenson, K., Heimer, G., Lundh, C., Nordström, M. L., Saarinen, H., & Wenker, A. (2003). Lifetime prevalence of sexual abuse in a Swedish pregnant population. *Acta Obstetrica et Gynecologica Scandinavica*, *82*, 529-536. doi:10.1034/j.1600-0412.2003.00111.x.
- Sutton, A. J., Duval, S. J., Tweedie, R. L., Abrams, K. R., & Jones, D. R. (2000). Empirical assessment of effect of publication bias on meta-analyses. *British Medical Journal*, *320*, 1574-1577. doi:10.1136/bmj.320.7249.1574.
- \*Tang, C. S. K. (2002). Childhood experience of sexual abuse among Hong Kong Chinese college students. *Child Abuse and Neglect*, *26*, 23-37. doi:10.1016/S0145-2134(01)00306-4.
- \*Thakkar, R. R., Gutierrez, P. M., Kuczen, C. L., & McCanne, T. R. (2000). History of physical and/or sexual abuse and current suicidality in college women. *Child Abuse and Neglect*, *24*, 1345-1354. doi:10.1016/S0145-2134(00)00187-3.
- \*Theodore, A., Chang, J. J., Runyan, D. K., Hunter, W. M., Bangdiwala, S. I., & Agans, R. (2005). Epidemiologic features of the physical and sexual maltreatment of children in the Carolinas. *Pediatrics*, *115*, 331-337. doi:10.1542/peds.2004-1033.
- \*Thompson, M. P., Arias, I., Basil, C., & Desai, S. (2002). The association between childhood physical and sexual victimization and health problems in adulthood in a nationally representative sample of women. *Journal of Interpersonal Violence*, *17*, 1115-1128. doi:10.1177/088626002236663.
- \*Thompson, M. P., Kaslow, N. J., Lane, D. B., & Kingree, J. B. (2000). Childhood maltreatment, PTSD and suicidal behavior among African American females. *Journal of Interpersonal Violence*, *15*, 3-15. doi:10.1177/088626000015001001.
- \*Tomeo, M. E., Templar, D. I., Anderson, S., & Kotler, D. (2001). Comparative data of childhood and adolescence molestation in heterosexual and homosexual persons. *Archives of Sexual Behavior*, *30*, 535-541. doi: 10.1023/A:1010243318426.
- \*Trocmé, N. M., Tourigny, M., MacLaurin, B., & Fallon, B. (2003). Major findings from the Canadian incidence study of reported child abuse and neglect. *Child Abuse and Neglect*, *27*, 1427-1439. doi:10.1016/j.chiabu.2003.07.003.
- \*Tschumper, A., Narring, F., Meier, C., & Michaud, P. A. (1998). Sexual victimization in adolescent girls (age 15-20 years) enrolled in post-mandatory schools or professional training programmes in Switzerland. *Acta Paediatrica*, *87*, 212-217. doi:10.1080/08035259850157697.
- United Nations (1989). *Convention on the rights of the child*. Retrieved from <http://www2.ohchr.org/english/law/pdf/crc.pdf>
- Valentine, J. C., Pigott, T. D., & Rothstein, H. R. (2010). How many studies do you need? A primer on statistical power for meta-analysis. *Journal of Educational and Behavioral Statistics*, *35*, 215-247. doi: 10.3102/1076998609346961.
- Van IJzendoorn, M. H. (2007). De vragenlijst voorbij: schets van onderzoek naar kindermishandeling. *Pedagogiek*, *27*, 236-243.
- Van IJzendoorn, M. H., Prinzie, P., Euser, E. M., Groeneveld, M. G., Brilleslijper-Kater, S. N., van Noort-van der Linden, A. M. T., & ... San Martin Beuk, M. (2007). *De Nationale Prevalentiestudie Mishandeling van Kinderen en Jeugdigen (NPM-2005)*. [National prevalence study of child maltreatment]. Leiden: Casimir.
- Van Os, J., Linscott, R. J., Myin-Germeys, I., Delespaul, P., & Krabbendam, L. (2009). A systematic review and meta-analysis of the psychosis continuum: Evidence for a psychosis proneness-persistence-impairment model of psychotic disorder. *Psychological Medicine*, *39*, 179-195. doi:10.1017/S0033291708003814.
- \*Vogeltanz, N. D., Wilsnack, S. C., Harris, T. R., Wilsnack, R. W., Wonderlich, S. A., & Kristjanson, A. F. (1999). Prevalence and risk factors for childhood sexual abuse in women: national survey findings. *Child Abuse and Neglect*, *23*, 579-592. doi:10.1016/S0145-2134(99)00026-5.
- \*Wellman, M. M. (1993). Child sexual abuse and gender differences: Attitudes and prevalence. *Child Abuse and Neglect*, *17*, 539-547. doi:10.1016/0145-2134(93)90028-4.
- \*Wind, T. W., & Silvern, L. (1992). Type and extent of child-abuse as predictors of adult functioning. *Journal of Family Violence*, *7*, 261-281. doi:10.1007/BF00994618.
- \*Wingood, G. M., & DiClemente, R. J. (1997). Child sexual abuse, HIV sexual risk, and gender relations of African-American women. *American Journal of Preventive Medicine*, *13*, 380-384.
- \*Wonderlich, S. A., Wilsnack, R. W., Wilsnack, S. C., & Harris, T. R. (1996). Childhood sexual abuse and bulimic behavior in a nationally representative sample. *American Journal of Public Health*, *86*, 1082-1086. doi:10.2105/AJPH.86.8\_Pt\_1.1082.
- \*Worku, D., Gebremariam, A., & Jayalakshmi, S. (2006). Child sexual abuse and its outcomes among high school students in south-west Ethiopia. *Tropical Doctor*, *36*, 137-140. doi:10.1258/004947506777978325.
- World Health Organization. (1999). *Report of the Consultation on Child Abuse Prevention, 29-31 March 1999, WHO, Geneva*. Geneva: Author.
- Wyatt, G. E. & Peters, S. D. (1986). Methodological considerations in research on the prevalence of child sexual abuse. *Child Abuse & Neglect*, *10*, 241-251. doi:10.1016/0145-2134(86)90085-2.
- \*Wyatt, G. E. (1985). The sexual abuse of Afro-American and White-American women in childhood. *Child Abuse and Neglect*, *9*, 507-519. doi:10.1016/0145-2134(85)90060-2.
- \*Wyatt, G. E., Loeb, T. B., Solis, B., Vargas Carmona, J., & Romero, G. (1999). The prevalence and circumstances of child sexual abuse: Changes across a decade. *Child Abuse and Neglect*, *23*, 45-60. doi:10.1016/S0145-2134(98)00110-0.

- \*Young, S. Y. N., Hansen, C. J., Gibson, R. L., & Ryan, M. A. K. (2006). Risky alcohol use, age at onset of drinking, and adverse childhood experiences in young men entering the US Marine Corps. *Archives of Pediatrics & Adolescent Medicine*, *160*, 1207-1214. doi:10.1001/archpedi.160.12.1207.
- \*Zetzer, H. A. (1990). The impact of unwanted childhood sexual experiences and the quality of family life on the psychosexuality of college women. *Dissertation-Abstracts-International*, *12*, 6122-51.