Disclosure Suspicion Bias and Abuse Disclosure: Comparisons Between Sexual and Physical Abuse Elizabeth B. Rush, Thomas D. Lyon, Elizabeth C. Ahern and Jodi A. Quas

Elizabeth B. Rush, Thomas D. Lyon, Elizabeth C. Ahern and Jodi A. Quas Child Maltreat published online 4 June 2014 DOI: 10.1177/1077559514538114

The online version of this article can be found at: http://cmx.sagepub.com/content/early/2014/06/04/1077559514538114

Published by: \$SAGE

http://www.sagepublications.com

On behalf of:

APSAC

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/early/2014/06/04/1077559514538114.refs.html

>> OnlineFirst Version of Record - Jun 4, 2014

What is This?

Disclosure Suspicion Bias and Abuse Disclosure: Comparisons Between Sexual and Physical Abuse

Child Maltreatment I-6
© The Author(s) 2014
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/1077559514538114
cmx.sagepub.com



Elizabeth B. Rush¹, Thomas D. Lyon², Elizabeth C. Ahern³, and Jodi A. Quas¹

Abstract

Prior research has found that children disclosing physical abuse appear more reticent and less consistent than children disclosing sexual abuse. Although this has been attributed to differences in reluctance, it may also be due to differences in the process by which abuse is suspected and investigated. Disclosure may play a larger role in arousing suspicions of sexual abuse, while other evidence may play a larger role in arousing suspicions of physical abuse. As a result, children who disclose physical abuse in formal investigations may be doing so for the first time, and they may be more reluctant to provide details of the abuse. We examined abuse disclosure and evidence in comparable samples of court-substantiated physical (n = 33) and sexual (n = 28) abuse. Consistent with predictions, the likelihood that the child had disclosed abuse before an investigation began was lower in physical (27%) than that in sexual (67%) abuse cases, and there was more nondisclosure evidence of abuse in physical abuse cases. These findings have implications for understanding the dynamics and meaning of disclosure in cases involving different types of abuse.

Keywords

disclosure, physical abuse, sexual abuse

Whether or not sexually abused children are reluctant to disclose abuse has been hotly debated in recent years. On one hand, some researchers argue that sexually abused children are quite forthcoming. For example, Ceci, Kulkofsky, Klemfuss, Sweeney, and Bruck (2007) challenged the "highly influential assumption" that "sexually abused children do not readily disclose abuse because of shame, guilt, and fear" (p. 322), citing research finding that most children who disclosed abuse did so in response to free-recall questions. On the other hand, Lyon (2007) argued that the high rates of disclosure among substantiated samples of sexual abuse reflect the results of selection biases, most notably disclosure suspicion bias and disclosure substantiation bias. Disclosure suspicion bias occurs if abused children are disproportionately likely to be suspected of being abused because they disclose abuse, and disclosure substantiation bias occurs if substantiation of children's allegations is dependent on disclosure.

To take an extreme example: If children are only suspected of being abused if they disclose, then one will observe a 100% disclosure rate among children suspected of being abused, even if a representative sample of abused children would deny abuse if questioned. Similarly, even if children are suspected of being abused for reasons other than disclosure, if children are only substantiated as abused if they disclose, then one will observe a 100% disclosure rate among substantiated abuse

cases. If disclosure suspicion and substantiation biases occur, samples of substantiated abuse cases are comprised of abused children who are especially willing to describe their abuse. Hence, high rates of disclosure in response to free-recall questions may say little about the willingness of sexually abused children in the population to disclose abuse and say more about the unique qualities of children substantiated as abused.

This debate is important because it affects how one assesses the evidentiary value of denials and inconsistencies in children's abuse reports. For instance, if a child never spontaneously complained of abuse, denied abuse when first questioned, and later disclosed, was the child truly abused? If abused children in general are forthcoming about abuse, then

Corresponding Authors:

Thomas D. Lyon, University of Southern California, 699 Exposition Blvd., Los Angeles, CA 90089, USA.

Email: tlyon@law.usc.edu

Jodi A. Quas, Department of Psychology and Social Behavior, 3340 SBSG, University of California, Irvine, CA 92697-7085, USA.

Email: jquas@uci.edu

¹ University of California, Irvine, CA, USA

² University of Southern California, Los Angeles, CA, USA

³ Cambridge University, Cambridge, United Kingdom

it is unlikely that the child's initial denial and delayed report were due to reluctance to disclose true abuse. Instead, the eventual disclosure was likely due to suggestive questioning or other pressures that created a false report (London, Bruck, Ceci, & Shuman, 2005). However, if reluctance is a real problem for abused children but concealed by selection biases, then the child's delayed disclosure should be given more credence.

This novel study is a preliminary examination of how children's apparent reluctance to disclose abuse may be affected by suspicion bias: We specifically compared substantiated sexual abuse cases to substantiated physical abuse cases. This comparison is apt because researchers have interpreted differences in disclosure patterns between sexual and physical abuse cases as potentially attributable to greater reluctance to disclose among physically abused children (Ghetti, Goodman, Eisen, Qin, & Davis, 2002; Hershkowitz & Elul, 1999). We argue that children's willingness to disclose abuse is related to the way in which abuse is suspected. If disclosure of abuse is the chief means by which abuse is suspected, then children suspected of being abused will contain a disproportionate number of those who have already disclosed and are likely to be forthcoming about abuse. If evidence other than disclosure is the chief means by which abuse is suspected, then children suspected of having been abused will contain a smaller percentage of prior disclosers.

Reluctance in Sexual Abuse and Physical Abuse Cases

Several teams of researchers have noticed differences in disclosure patterns between sexual abuse and physical abuse that might suggest children are more reluctant to disclose physical abuse. Hershkowitz and Elul (1999) examined a group of physically abused children whose abuse was substantiated by perpetrator admission and found that children failed to provide more information when questioned with invitations (openended questions) than directive questions (which focus the child on specific details). These results stand in stark contrast to those obtained in studies examining sexual abuse victims, which found children provided more information to invitations than directive questions (Lamb, Hershkowitz, Orbach, & Esplin, 2008). Hershkowitz and Elul (1999) argued that the need to ask physically abused children more directive questions might reflect their greater reluctance to disclose relative to that of sexually abused children (possibly because physically abused children are virtually always abused by parents). Similarly, Ghetti, Goodman, Eisen, Qin, and Davis (2002) found that children disclosing substantiated physical abuse were more inconsistent in their reports than children disclosing substantiated sexual abuse. The authors argued this might reflect greater reluctance to disclose among physically abused children than among sexually abused children, a possibility that argues "against the notion that children are particularly inconsistent when reporting sexual abuse because of embarrassment and other social factors" (p. 991).

How Disclosure Suspicion Bias Might Explain Differences Between Sexual and Physical Abuse

Before concluding that physically abused children are in fact more reluctant to disclose abuse than sexually abused children, it is important to consider how the different studies' samples were constructed. First, recall that disclosure suspicion bias affects disclosure rates to the extent that disclosure led to the suspicion of abuse. If physical and sexual abuse are initially suspected for different reasons, then disclosure suspicion bias could explain differences in children's reluctance to disclose between the two types of abuse. Specifically, insofar as an investigation of physical abuse is less likely than an investigation of sexual abuse to be triggered by a preinvestigation disclosure and more likely to be triggered by other evidence of abuse, then disclosure suspicion bias will affect physical abuse cases less than sexual abuse cases. Hence, a sample of children suspected of being physically abused will contain a smaller proportion of children who disclosed their abuse before the investigation began. When investigators question children suspected of being physically or sexually abused, children may have different degrees of reluctance because they have different disclosure histories. If a larger proportion of the physically abused children never disclosed before investigation, their disclosures to investigative interviewers may initially be more reluctant and more inconsistent.

Unfortunately, few studies have compared what sort of suspicions initiate investigation into sexual and physical abuse allegations. In substantiated cases of sexual abuse, prior disclosures are common. For example, in Bradley and Wood's (1996) sample of children substantiated as sexually abused by social services, 72% had disclosed abuse prior to questioning by a social worker. It is unknown as to how often, in cases of physical abuse, children's disclosures preceded and prompted the formal investigations. It seems likely, though, that evidence other than disclosure may be particularly common in physical abuse cases. Bruising, for instance, is potentially easily visible and likely to cause suspicions of physical abuse (English, Graham, Brummel, & Coghlan, 2002), whereas medical evidence in cases of sexual abuse is more subtle and difficult to identify (Heger, Ticson, Velasquez, & Bernier, 2002). Furthermore, physical abuse often occurs in the context of discipline (Kolko, 2002), whereas sexual abuse is conducted in secret (Leclerc, Proulx, & Beauregard, 2009). Therefore, physical abuse perpetrators might be more likely to admit the abusive acts, and one might be more likely to find eyewitnesses to physical abuse.

The Current Study

In this study, we compared substantiated sexual and physical abuse cases. We specifically identified whether children had disclosed abuse prior to the start of the formal investigation, that is, whether children disclosed during some preinvestigation conversation, and whether evidence other than disclosure suggested that abuse had occurred. To reduce the likelihood

Rush et al. 3

that cases in our sample were false, we limited our sample to court-substantiated cases. As a result, we did not explore the issue of disclosure substantiation bias, a point to which we return in the discussion section. By including both sexual and physical abuse cases, and by examining preinvestigation disclosure, formal disclosure, and other evidence, we were able to test two related hypotheses regarding disclosure suspicion bias. Because physical abuse may be less likely than sexual abuse to be suspected as a result of a prior disclosure and more likely to be suspected because of nondisclosure evidence, we predicted (1) that physically abused children would be less likely than sexually abused children to have disclosed prior to the onset of a formal investigation and (2) that a greater amount of evidence of abuse other than disclosure would be available in cases of physical abuse than in cases of sexual abuse.

Method

The sample consisted of dependency cases in Los Angeles County in which 4- to 9-year-old children had been removed from their parents' or guardians' custody due to physical or sexual abuse substantiated by social services investigation and dependency court review. Permission to review the case files was granted by the Presiding Judge of the Los Angeles County Juvenile Court and the Children's Law Center, the agency that represents children in dependency court. The children were participants in research conducted between September 2006 and April 2009. There were a total of 61 abuse allegations: 33 child physical abuse (CPA) and 28 child sexual abuse (CSA).

In order to be adjudicated as physically abused, it was necessary for a court to find that "the child has suffered, or there is a substantial risk that the child will suffer, serious physical harm inflicted nonaccidentally upon the child by the child's parent or guardian," and specifically excludes "age-appropriate spanking to the buttocks where there is no evidence of serious physical injury" (California Welfare and Institutions Code Section 300(a)). In order to be adjudicated as sexually abused, the court had to find that "the child has been sexually abused... by his or her parent or guardian or a member of his or her household, or the parent or guardian has failed to adequately protect the child from sexual abuse when the parent or guardian knew or reasonably should have known that the child was in danger of sexual abuse" (California Welfare and Institutions Code Section 300(d)). We reviewed all reports in the children's dependency court files, which included reports by county social workers (detention report and jurisdiction report), police reports, and medical personnel, and extracted information in three categories: (1) case characteristics (abuse type, age of child, gender of child, perpetrator relationship to child), (2) disclosure information, and (3) evidence that abuse occurred. The reports provided the basis for the dependency courts' judgments of whether to authorize continued placement of the child outside the parent or guardian's home prior to trial at the initial detention hearing (California Welfare and Institutions Code Section 319) and whether the alleged abuse had in fact occurred (California Welfare and Institutions Code Section 355). The social worker is required to interview all children aged 4 or older regarding the allegations (California Welfare and Institutions Code Section 328), and because of a special hearsay exception, the reports are admissible evidence at trial (California Welfare and Institutions Code Section 355). Hence, the reports provide a comprehensive summary of the evidence supporting abuse.

Because some children endured both types of abuse, and some children were abused by multiple perpetrators, data were organized at the level of the allegation. Eleven children were represented more than once in the data file. Due to the potential for a violation of independence, all analyses were reconducted without these 11 children included. Significant effects remained.

Our coding system was developed to score detailed information about the children's abuse experiences, disclosure, and corroborative evidence. Two coders independently scored between 21% and 24% of the cases. Discrepancies were discussed, and one coder scored the remaining data. We coded for type of abuse (physical or sexual, 100\% agreement) and child's relationship to the perpetrator (biological parent, step or foster parent, parents' significant other, grandparent, aunt, uncle, sibling, other family relative, or family friend, 93\% agreement). We also coded for two disclosure variables: a dichotomous disclosure variable (whether child clearly disclosed abuse, 86% agreement) and a dichotomous disclosure phase variable (whether child disclosed preinvestigation or in a formal interview, 90% agreement). Preinvestigation conversations were those that took place before the formal investigation began and were most often with a parent/guardian or an adult or child relative/friend. Formal interviews included those conducted by law enforcement, Department of Child and Family Services/social workers, or medical or mental health professionals. Finally, the number and type of other evidence in the case files were documented. Types of evidence included other victims, eyewitnesses to the abuse, perpetrator admissions, medical evidence (including any physical injury), and physical evidence (e.g., an implement used in abuse). The mean percentage agreement for the number of pieces of evidence in each case was 86%.

Results

Case Characteristics

Case characteristics comparing physical abuse cases to sexual abuse cases are shown in Table 1. Because the cases from which the sample was drawn were 4–9 years of age, the ages were comparable across the two types of abuse. Children's age was unrelated to the number of formal interviews, whether the child disclosed prior to the first formal interview, in the first formal interview, or ever, and the number of different types of evidence in the case. Age is therefore not considered further.

Girls were slightly, though nonsignificantly, overrepresented in the CSA relative to the CPA cases. With regard to the identity of the perpetrator, as expected, the CPA cases were more likely to involve parent-figure perpetrators than CSA cases, $\chi^2(1) = 8.43$, n = 61, p < .01 (Table 1). Other perpetrator

Table 1. Descriptive Information for Study Variables of Interest.

	Physical abuse cases ($n = 33$)	Sexual abuse cases ($n = 28$)	Total cases ($N = 61$)
Child and abuse characteristics			
Child mean age in years (SD)	6.00 (1.35)	5.75 (1.43)	5.89 (1.38)
% Female	55	68	6Ì ´
% Parent-Perpetrator**	94	64	80
Investigation and disclosure characteristics			
% Who disclosed prior to formal interviews**	27	67	45
% Who disclosed in first formal interview	97	82	90
% Who ever disclosed	100	96	98
Mean number of formal interviews (SD)	2.48 (1.28)	2.64 (1.37)	2.56 (1.31)
Evidence	,	,	, ,
Mean number of types of evidence (SD)**	2.12 (1.02)	1.21 (.96)	1.70 (1.09)
% of Cases with other victims*	76	46 ´	62
% of Cases with eyewitnesses	55	39	48
% of Cases with perpetrator admission**	55	18	38
% of Cases with medical evidence	27	18	23

Note. SD = standard deviation. Asterisks indicate variables that significantly differed between the physical abuse cases and sexual abuse cases. *p < .05. **p < .01.

types included foster parents, grandparents, aunts/uncles, siblings, and acquaintances. The number of formal interviews did not differ depending on the type of case.

Abuse Type Differences in Preinvestigation Disclosures

Our first prediction was that, compared to sexually abused children, physically abused children would be less likely to have disclosed prior to the onset of a formal investigation. Overall, a little over half of victims disclosed for the first time to authorities in a formal interview. The remaining children had disclosed prior to the formal investigation to another adult (e.g., parent, teacher; Table 1). Consistent with our prediction, CPA victims were considerably less likely to have disclosed during the preinvestigation phase than were CSA victims, $\chi^2(1) = 9.31$, n = 60 (one child never disclosed and is not included), p < .01 (Table 1).

Because researchers have posited that differences in reluctance between CPA and CSA may be driven by the fact that physical abuse perpetrators are overwhelmingly likely to be parents (Hershkowitz, Horowitz, & Lamb, 2005), we followed up our initial analyses and compared whether children disclosed in a preinvestigation conversation between CPA and CSA among *only* victims who had experienced abuse at the hand of a parent or parent figure. The significant association between abuse type and preinvestigation disclosure remained, $\chi^2(1) = 5.11$, n = 48, p < .05. Thus, even when only examining cases with parent perpetrators, physical abuse victims were less likely than sexual abuse victims to have disclosed informally prior to the formal investigation (for physical abuse, 26%, 8 of the 31, had disclosed; for sexual abuse, 59%, 10 of the 17, had disclosed).

Abuse Type Differences in Nondisclosure Evidence

Our second hypothesis focused on anticipated differences between physical and sexual abuse in the amount of nondisclosure evidence, that is, any evidence that the abuse occurred in the case other than disclosure. The most common types of evidence were other victims, eyewitnesses, perpetrator admission, and medical evidence (see Table 1). Physical evidence (e.g., an object used during abuse) was exceedingly rare and was excluded from further analyses. Each case received a total evidence score (range 0–4) by summing the number of different types of evidence in the case. As predicted, the CPA cases had more types of evidence than the CSA cases, F(1, 59) = 12.62, p < .01 (Table 1). When the types of evidence were directly examined, the CPA cases were more likely to involve other victims, $\chi^2(1) = 5.57$, n = 61, p < .05, and more likely to include an admission by the perpetrator, $\chi^2(1) = 8.68$, n = 61, p < .01 (Table 1).

If other evidence of abuse makes it possible to suspect abuse without a disclosure, then one should see more evidence of abuse in cases in which the child had not made a preinvestigation disclosure than in cases in which the child had made a preinvestigation disclosure. As expected, cases with victims whose first disclosure was to formal authorities had, on average, more types of evidence (M = 2.06, standard deviation [SD] = .93) than cases in which victims had disclosed before the investigation began (M = 1.30, SD = 1.14), F(1, 58) = 8.18, p < .01.In terms of particular evidence types, cases that contained no preinvestigation disclosures (n = 33) were more likely to have a perpetrator admission (51%, n = 17) than cases (n = 27) that contained preinvestigation disclosures (22%, n = 6), $\chi^2(1) =$ 5.39, n = 60 (the child who never disclosed was not included), p < .05. The former were also more likely to have eyewitness evidence (61\%, n = 20) than cases with preinvestigation disclosures $(31\%, n = 9), \chi^2(1) = 4.23, n = 60, p < .05.$

Disclosure During the Investigation

As noted, we limited our sample to cases substantiated by the juvenile court to minimize the likelihood of false allegations.

Rush et al. 5

If substantiation is dependent on a disclosure from the child, then one ought to see very high rates of disclosure during investigation. As is evident in Table 1, virtually all children disclosed abuse at some point, most in their first formal interview with authorities. A higher percentage of physically abused (32/33) than sexually abused (23/28) disclosed in their first formal interview, $\chi^2(1) = 3.76$, n = 61, p = .05. When we limited the sample to cases in which the parent was the perpetrator, a similar pattern emerged: 100% of physically abused children disclosed in their formal first interview, compared to 88% of the sexually abused children abused by a parent, $\chi^2(1) = 3.59$, n = 49, p = .058.

Discussion

Research has found that when disclosing abuse, physically abused children are less forthcoming about their abuse than sexually abused children (Ghetti et al., 2002; Hershkowitz & Elul, 1999). A number of explanations for this difference have been put forward, including the possibility that physically abused children are more reluctant to discuss their abuse. We suggested that physically abused children's apparently greater reluctance might be attributable to disclosure suspicion bias. If physical abuse, compared to sexual abuse, is less often suspected because of a disclosure from the child, and more often suspected because of other evidence, then physically abused children disclosing abuse in formal interviews are more likely disclosing abuse for the first time, which could explain their reticence.

Consistent with our hypotheses, physical abuse victims were less likely to have disclosed abuse prior to formal questioning than sexual abuse victims. Also, physical abuse cases had, on average, more types of evidence outside of disclosure than sexual abuse cases and were more likely to contain two important types of corroborative evidence, namely other victims and perpetrator admissions. Similarly, cases with more types of evidence, cases with perpetrator confessions, and cases with eyewitness evidence were less likely than other cases to contain a disclosure prior to the formal investigation. When we compared physical abuse cases involving parents to sexual abuse cases involving parents, the same results emerged: Disclosures before the formal investigation were more common in sexual than physical abuse cases. Therefore, reluctance to disclose abuse against a parent does not explain the differences we observed between preinvestigation disclosures in physical and sexual abuse cases.

Our results have important implications for interpreting findings from clinical samples in which children are questioned about suspected sexual abuse as a means of assessing their willingness to disclose the abuse. A high disclosure rate does not mean that most sexually abused children will disclose abuse when questioned. Rather, a high disclosure rate is consistent with disclosure suspicion bias: Clinical samples questioned about sexual abuse largely comprise a self-selected sample of children who are particularly forthcoming about their abuse, reflected by the fact that they have disclosed before. Lyon (2007) reviewed studies in which sexually abused children who had never been suspected of being sexually abused were

questioned for the first time about abuse but for whom nondisclosure evidence was diagnostic (e.g., gonorrhea, videotapes of the abuse). Children initially disclosed abuse in less than 50% of cases. Hence, when disclosure suspicion bias is avoided, disclosure rates are considerably lower.

Limitations and Future Directions

The current findings provide a novel but preliminary assessment of the potential for disclosure suspicion bias to affect abuse victim's apparent reluctance to disclose. One limitation is that the study sample was small, of uncertain representativeness, and somewhat restricted in age. It is heartening to note, nonetheless, that the percentages of disclosure and the presence of other evidence found among CSA cases in this sample are similar to those found in a larger representative sample of CSA cases in dependency court in the same county (Malloy, Lyon, & Quas, 2007). We can thus at least say that the sexual abuse cases appear to be representative of the population from which they were drawn. Also in regard to representativeness, the fact that injuries were reported in only 27% of the physical abuse cases may seem unusually low, given the importance of injuries in substantiating physical abuse (English et al., 2002). However, this percentage is comparable if not slightly higher than the frequency of injuries in Hershkowitz and Elul's (1999) sample of children questioned about physical abuse (14%). It is likely that injuries are a more important aspect of substantiation for children who are too young to be interviewed (Trocmé, MacMillan, Fallon, & De Marco, 2003). Future research, though, should test the generalizability of findings across various samples, particularly those containing a wider age range of children.

A second limitation is that we only tested for—and uncovered evidence of—disclosure suspicion bias. As we noted in the introduction, disclosure rates in substantiated cases of sexual abuse are likely to be inflated by both disclosure suspicion bias and substantiation bias. Disclosure substantiation bias occurs when substantiation is highly dependent on disclosure. Abused children who do not disclose abuse when formally questioned are less likely to be substantiated, thus inflating the disclosure rate among "true" or substantiated cases. In order to minimize the likelihood that some of our allegations were false, we limited the sample to court-substantiated cases. Therefore, we could not test for disclosure substantiation bias. Notably, we found near-100% rates of disclosure during formal interviews among both physically and sexually abused children.

Despite the difficulty of interpreting the formal interview disclosure rates we observed, it may nevertheless seem inconsistent with suspicion bias that we found a higher rate of disclosure among physically abused than sexually abused children in the first formal interview. If physically abused children are disproportionately those who never disclosed before, shouldn't they show lower rates of disclosure when formally interviewed than sexually abused children? A similarly puzzling finding can be found in Hershkowitz, Horowitz, and Lamb's (2005) analysis of rates of disclosure in a large sample of suspected cases of

sexual and physical abuse. Overall, the rate of disclosure in physical abuse was lower than that in sexual abuse, which the authors attributed to greater reluctance of children to report abuse against parent figures (who are more often the perpetrators in physical abuse cases than in sexual abuse cases). However, when the alleged abuser was a parent, children suspected of being physically abused disclosed at a much *higher* rate (61%) than children suspected of being sexually abused (21%).

Putting the results together, one could conclude that, compared to children suspected of being sexually abused, a higher percentage of children suspected of being physically abused acknowledge abuse when first questioned by investigators (Hershkowitz et al., 2005), but children who disclose physical abuse are more reticent and inconsistent (Ghetti et al., 2002; Hershkowitz & Elul, 1999). The explanation for this finding might lie in the fact that interviewers can use nondisclosure evidence of abuse to elicit disclosures of abuse, and, as our data show, such evidence is more common in physical abuse cases than in sexual abuse cases. Moreover, interviewers may be able to use nondisclosure evidence to substantiate physical abuse cases even when children's disclosures are less convincing. If this occurs, then samples of children alleging physical abuse will contain large percentages of children who disclose reluctantly and unconvincingly. Of course, because we did not have transcripts of the interviews, these speculations about interviewers are hypotheses to be tested in future research. What is needed is a study that examines transcripts of interviews with physically and sexually abused children and considers the extent to which the children had previously disclosed and the presence or absence of other evidence corroborating abuse.

Despite these limitations, the results provide clear support for the proposition that disclosure research is easily plagued by disclosure suspicion biases. In the future, studies attempting to determine children's willingness to disclose abuse should consider how the abuse was suspected in the first place, whether there was corroborative evidence, and how the corroborative evidence may have influenced the interview and the child's report. Assertions that most abused children disclose abuse when questioned must be tempered in light of the fact that the most reluctant victims may be those least likely to be questioned about abuse and least likely to be substantiated as abused.

Authors' Note

We are grateful for the support of the Presiding Judge of the Los Angeles County Juvenile Court, the Los Angeles County Department of Children's and Family Services, Los Angeles County Children's Law Center, the Children's Services Division of Los Angeles County Counsel, and the Los Angeles County Child Advocate's Office. We also thank Brooke Holmes, Anna Hovasapian, Janki Merai, and MacKenzie Smith for their assistance with the project.

Declaration of Conflicting Interests

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

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Preparation of this article was supported in part by National Institute of Child Health and Human Development Grant HD047290-01A2 and a Doctoral Dissertation Fellowship from the National Science Foundation (SES-1155816).

References

- Bradley, A. R., & Wood, J. M. (1996). How do children tell? The disclosure process in child sexual abuse. *Child Abuse & Neglect*, 20, 881–891.
- Ceci, S. J., Kulkofsky, S., Klemfuss, J. Z., Sweeney, C. D., & Bruck, M. (2007). Unwarranted assumptions about children's testimonial accuracy. *Annual Review of Clinical Psychology*, 3, 311–328.
- English, D. J., Graham, J. C., Brummel, S. C., & Coghlan, L. K. (2002). Factors that influence the decision not to substantiate a CPS referral phase I: Narrative and empirical analysis (Final Report Grant No. 90-CA-1590). Retrieved from http://dshs.wa. gov/pdf/ca/CPSFctrs1.pdf
- Ghetti, S., Goodman, G. S., Eisen, M. L., Qin, J., & Davis, S. L. (2002). Consistency in children's reports of sexual and physical abuse. *Child Abuse & Neglect*, 26, 977–995.
- Heger, A., Ticson, L., Velasquez, O., & Bernier, R. (2002). Children referred for possible sexual abuse: Medical findings in 2384 children. Child Abuse & Neglect, 26, 645–659.
- Hershkowitz, I., & Elul, A. (1999). The effects of investigative utterances on Israeli children's reports of physical abuse. *Applied Developmental Science*, *3*, 28–33.
- Hershkowitz, I., Horowitz, D., & Lamb, M. E. (2005). Trends in children's disclosure of abuse in Israel: A national study. *Child Abuse & Neglect*, 29, 1203–1214.
- Kolko, D. J. (2002). Child physical abuse. In J. E. B. Myers, L. Berliner, J. Briere, C. T. Hendrix, T. Reid, & C. Jenny (Eds.), *The APSAC handbook on child maltreatment* (2nd ed., pp. 21–54). Newbury Park, CA: Sage.
- Lamb, M. E., Hershkowitz, I., Orbach, Y., & Esplin, P. W. (2008). Tell me what happened: Structured investigative interviews of child victims and witnesses. Hoboken, NJ: John Wiley.
- Leclerc, B., Proulx, J., & Beauregard, E. (2009). Examining the modus operandi of sexual offenders against children and its practical implications. Aggression and Violent Behavior, 14, 5–12.
- London, K., Bruck, M., Ceci, S. J., & Shuman, D. W. (2005). Disclosure of child sexual abuse: What does the research tell us about the ways that children tell? *Psychology, Public Policy, & Law, 11*, 194–226.
- Lyon, T. D. (2007). False denials: Overcoming methodological biases in abuse disclosure research. In M. E. Pipe, M. E. Lamb, Y. Orbach, & A. C. Cederborg (Eds.), *Disclosing abuse: Delays, denials, retractions and incomplete accounts* (pp. 41–62). Mahwah, NJ: Lawrence Erlbaum.
- Malloy, L. C., Lyon, T. D., & Quas, J. A. (2007). Filial dependency and recantation of child sexual abuse allegations. *Journal of the American Academy of Child & Adolescent Psychiatry*, 46, 162–170.
- Trocmé, N., MacMillan, H., Fallon, B., & De Marco, R. (2003).
 Nature and severity of physical harm caused by child abuse and neglect: Results from the Canadian Incidence Study. *Canadian Medical Association Journal*, 169, 911–915.