

**Initial Denial of Child Sexual Abuse: Reluctance or Suggestibility**

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### **Initial Denial of Child Sexual Abuse: Reluctance or Suggestibility**

Whether and how often children who have been sexually abused deny abuse is important for understanding legal assessments of credibility in child sexual abuse cases. There is general agreement among researchers and practitioners that children typically delay disclosing abuse, if they disclose at all (McElvaney, 2015; Miller & London, 2020; Newlin et al., 2015). Similarly, it has long been understood that children will often deny abuse when directly questioned (Azzopardi, et al., 2019; Pollak, 1909), although the frequency with which this occurs has been challenged by critical reviews of the literature (London et al., 2005, 2008) and defense expert testimony (Bruck, 2017; *Ohio v. Swoboda*, 2021).

We will argue that the best available research demonstrates that a substantial percentage--typically about 50%--of sexually abused children deny abuse when initially questioned. The research supports expert testimony explaining to jurors how abused children are frequently reluctant to disclose abuse, and often deny abuse when directly questioned, rebutting defense arguments that delays and denial undermine the credibility of children's disclosures (*California v. Flores*, 2024; *New York v. Ashton*, 2024). In addition, children's reluctance to disclose abuse calls into question the external validity of suggestibility research, challenging expert claims that false allegations in lab research translate into false disclosures of sexual abuse.

There are different ways of understanding abuse denial. Initial denials could be evidence of suggestive influences creating a false report, but they could also be evidence of reluctance to disclose actual abuse. Researchers have explored ways in which non-abused children might be led to make false claims of abuse and ways in

which abused children may falsely claim that they have not been abused. Although there are other reasons why abused children may deny abuse (e.g., due to memory issues), and other reasons besides suggestibility that non-abused children may allege abuse (e.g., due to vindictiveness), we will focus in this chapter on the competing themes of reluctance and suggestibility.

In this chapter we'll provide a framework for comparing alternative explanations for disclosures and denials. In assessing disclosure and whether it constitutes evidence for or against abuse, it is important to estimate the percentage of abused children who disclose to the percentage of non-abused children who disclose. Conversely, in assessing the "probative value" (or evidentiary weight) of non-disclosure, one compares the percentage of non-abused children who do not disclose to abused children who fail to disclose. These percentages are connected in important ways that we will discuss.

Denial has been studied in a number of ways, and we'll focus on clinical samples of children questioned about sexual abuse. If substantial percentages of children who have been abused deny abuse at some point in time, then this reduces the probative value of non-disclosure in disproving abuse. Furthermore, it highlights how suggestibility research often fails to capture reasons why non-abused children would be reluctant to make false claims of abuse. To adequately interpret these studies, however, we have to confront and attempt to solve several methodological problems. First, there is the ground truth problem: How do we know whether abuse actually occurred? Second, there are selection bias problems. This includes substantiation selection bias and substantiation suspicion bias: To the extent that abuse is suspected and substantiated because of disclosure, samples of children questioned about suspected abuse will have

inflated rates of disclosure. We can reduce these problems somewhat by examining cases with corroborative evidence of abuse. But this raises the third problem. The apparent rate of disclosure among abused children will be inflated in corroborated cases if corroboration is dependent on disclosure. We'll define these problems in greater detail below and demonstrate how solving these problems leads to the conclusion that denial is extremely common among sexually abused children.

### **Different Interpretations of Non-Disclosure**

Abused children may fail to disclose abuse and may at some point deny that abuse occurred for a number of reasons. In a systematic review of motivational barriers to sexual abuse disclosure, Lemaigre and colleagues (2017) identified an anticipated lack of support from adults (parents or professionals); perceived negative consequences for the self, including parental punishment and losing familial support; negative consequences for the suspect and the child's family; and emotional barriers (e.g., guilt, shame, and self-blame; see also reviews by Alaggia et al., 2019; McElvaney, 2015). We'll refer generally to these motivational issues as reluctance.

From a suggestibility perspective, initial denial may be reasons to suspect that a non-abused child was subjected to suggestive pressures leading to a false allegation. There is a large literature identifying the ways in which parents and other adults can shape children's reports (see review by Principe & London, 2022; with responses by Brown & Lamb, 2022; Chae et al., 2022, and others; see also Wu et al., this volume). If a child was never abused, but adults suspected that they were, and suggestively questioned the child about abuse, then one might observe by initial denial (when the child was first questioned), followed by a disclosure (when the child acquiesced to

suggestiveness). Similarly, recantations, which are denials that occur subsequent to an initial disclosure, may be evidence of false allegations. The disclosure may have occurred due to suggestive questioning, and the recantation may occur when the child is questioned in a less suggestive fashion. Hence, competing views of abuse denial characterize it as evidence of reluctance or evidence of suggestibility.

Questions about whether an abuse allegation is true or false will come up in several contexts. During investigation, awareness of the likelihood of denial will help investigators weigh the significance of a child's prior silence. When interviewing the child, investigators should avoid techniques that have been proven to reduce accuracy, both false allegations and false denials. During decision-making, which can include the decision whether to substantiate an allegation, or the verdict in civil and criminal cases, awareness of the likelihood of denial will help factfinders decide whether the allegations are more likely true or false. In policymaking, the courts and legislators may make special provisions for expert testimony and jury instructions regarding how factfinders should evaluate denial. Researchers in developmental psychology can assist by seeking to identify means by which true disclosures can be increased without increasing false disclosures, keeping in mind the dynamics that are likely to influence abused children's disclosures.

### **How to Think about Percentages in Understanding Denial of Abuse**

To assess research in which percentages of children make true and false allegations, or utter true and false denials, one must always keep in mind both abused and non-abused children. If a behavior is more common among abused children than non-abused children, then it is evidence that the child was abused. Conversely, if a

behavior is more common among non-abused children, then it is evidence of non-abuse. If the behavior is equally common among abused and non-abused children, then it is non-diagnostic of abuse or non-abuse (Ceci & Friedman, 2000; Lyon, 2023; Wood, 1996). Disclosures of sexual abuse increase the likelihood that abuse occurred to the extent that abused children are more likely to disclose than non-abused children.

Conversely, denials of sexual abuse decrease the likelihood that abuse occurred to the extent that non-abused children are more likely to deny than abused children.

The strength of the evidence depends on the ratio of percentages, also known as the likelihood ratio. For example, if one wishes to assess the evidentiary strength (often referred to as the “probative value”) of a disclosure in proving that abuse occurred, the likelihood ratio is the ratio of the percentage of abused children who disclose to the percentage of non-abused children who disclose; the true positive rate divided by the false positive rate (Lyon & Koehler, 1996; Wood, 1996).

Recognizing that the ratio is important enables one to avoid fallacies in reasoning. For example, the fact that a behavior is common among abused children does not automatically mean that the behavior increases the likelihood that abuse occurred. Some types of sexualized behavior are common among abused children but are also almost as common among non-abused children, and as such are only very weak evidence of abuse (Lyon & Koehler, 1996). Conversely, the fact that a behavior is uncommon among abused children does not mean that it decreases the likelihood that abuse occurred. To decrease the likelihood of abuse, the behavior must be more common among non-abused children than abused children. Indeed, behaviors that are uncommon among abused children are often strong evidence of abuse. For example, it

would be absurd to point to the rarity of pregnancy in sexual abuse cases and argue that it has little probative value in proving abuse (Lyon & Koehler, 1996).

A particularly dangerous fallacy is the inverse error. In the context of sexual abuse, this includes confusing the likelihood that a child denies abuse, given they were abused, with the likelihood that a child was abused, given that they deny abuse. The inverse error has led some courts astray. For example, the Pennsylvania Supreme Court held that behaviors are irrelevant in proving abuse unless they occur in more than half of abused children, reasoning that behaviors that occur less than 50% of the time cannot make abuse more likely than not (*Pennsylvania v. Dunkle*, 1992). The court was confusing the likelihood of a behavior, given abuse, with the likelihood of abuse given a behavior. In *New Jersey v. J.L.G.* (2018), a New Jersey Supreme Court case in which the court concluded that experts should not be allowed to explain to jurors why abused children often deny abuse, the prosecutor had referenced a study in which 23% of children in a dependency court sample had recanted abuse (Malloy et al., 2007). At oral argument, one of the justices asked the prosecutor if this didn't mean that abuse allegations were true in only 23% of recantations (Oral argument in *New Jersey v. J.L.G.*, 2018). The justice was confusing the likelihood of recantation given abuse with the likelihood of abuse given recantation.

### ***False Positives and Suggestibility***

Suggestibility experts acknowledge that children's disclosures can be highly probative, but only when they were elicited in a non-suggestive way (Bruck & Ceci, 2013). Suggestibility research demonstrates that many children make false claims if suggestively questioned, and suggestibility experts argue that by extension, there is a

substantial likelihood that a non-abused child would allege abuse if suggestively questioned about abuse. Suggestion thus potentially *reduces* the probative value of abuse disclosures. Suggestibility researchers do not claim that in the face of suggestion, non-abused children are *more* likely than abused children to disclose. Rather, they argue that under suggestive conditions, a high enough percentage of non-abused children are likely to disclose abuse to render children's reports "unreliable" (London et al., 2020). How high is high enough has not been defined. However, it is easy to define the extreme case: If non-abused children are as likely to make a false claim as abused children are to make a true claim, then a disclosure has no probative value.

### ***False Negatives and Reluctance***

There is a parallel between suggestibility research and research into abused children's reluctance to disclose abuse. Suggestibility experts argue that the probative value of *disclosure* in *proving* abuse decreases in the face of suggestibility. Reluctance experts argue that the probative value of *denial* in *disproving* abuse decreases in the face of reluctance. In both cases, the argument is that the evidence at issue has less probative value than one would expect. Suggestibility experts argue that a surprising percentage of non-abused children allege abuse if suggestively questioned, so much so that disclosures have little probative value. Reluctance experts testify that a surprising percentage of abused children deny abuse at some point in time, so much that denial has little probative value.

In both situations, the experts do not estimate the numerator of the likelihood ratio, only the denominator. The suggestibility experts argue that because



suggestiveness leads a large number of non-abused children to allege abuse (the denominator), it doesn't matter what percentage of abused children allege abuse (the numerator). Even if the percentage of abused children who allege abuse is very high, the likelihood ratio is small because of the size of the denominator. Disclosures in the face of suggestibility have limited probative value in proving abuse. The reluctance experts argue that because reluctance leads a large number of abused children to deny abuse (the denominator), it doesn't matter what percentage of non-abused children deny abuse (the numerator). Even if the percentage is very high, the likelihood ratio is small because of the size of the denominator. Denials in the face of reluctance have limited probative value in disproving abuse.

Of course, if a child persistently denies abuse, and there is no other evidence of abuse, investigators must conclude that the evidence does not support an abuse finding. But what is true of persistent denial may not be true of occasional denial. For example, consider a case in which the child initially denies abuse, but ultimately discloses. That ultimate disclosure may convince investigators and other factfinders that abuse occurred. Suggestibility experts see this pattern and suspect it is a non-abused child succumbing to suggestion. However, to the extent that this pattern is common among abused children, this challenges the suggestibility researcher's argument that the child's report has so little probative value that it should be rejected as evidence of abuse.

### **The Implications of Reluctance for Assessing the Relative Likelihood of False Allegations and False Denials**

If a child fails to disclose abuse, then they either deny abuse, or fail to disclose. Disclosure and non-disclosure are complementary, and non-disclosures are denials if the child was directly asked about abuse and answered “no.” There is thus a direct relation between the probative value of disclosure in proving abuse and the probative value of denial in disproving abuse. As the denial rate among abused children goes up, reducing the probative value of denial in disproving abuse, the disclosure rate among abused children goes down. Hence, all else being equal, reluctance to disclose among sexually abused children *reduces* the probative value of disclosure in proving abuse that occurred (Ceci & Friedman, 2000).

Does this mean that abused children’s reluctance suggests less confidence in disclosures of abuse? Not necessarily, because this argument assumes that reluctance only reduces the likelihood that *abused* children disclose touch. In other words, all else is not equal. The reasons that abused children are reluctant to disclose are also reasons why non-abused children would be reluctant to make false claims. For example, if abused children are particularly likely to deny abuse by a parent (Malloy et al., 2007), then this suggests similar (if not greater) reluctance among non-abused children to falsely claim abuse by a parent. If love for a parent deters a child from making a true allegation, it is likely to deter them from making a false allegation.

Children’s reluctance to allege abuse thus has implications for applying suggestibility research in the lab to sexual abuse allegations in the field. It provides empirical support for doubts about the external validity of suggestibility research. Acknowledging that children’s susceptibility to making false allegations about innocuous events may not translate into willingness to make false claims about abuse,

suggestibility experts often point to studies examining true and false reports of genital touch as providing the external validity needed to apply suggestibility research to abuse cases (Bruck & Ceci, 2015). It is true that this captures some of the difficulty children having in disclosing abuse: Children are less likely to disclose genital touching than other types of touch in medical exams (Saywitz et al., 1991). However, the touching occurs in contexts in which genital touch by a professional is sanctioned and supervised by a parent or guardian, so that many of the factors abused children mention for concealing abuse are absent.

Hence, a lot rides on whether abused children freely disclose abuse when questioned. Their reluctance not only speaks to understanding denial when it occurs in abuse cases, but also challenges the external validity of suggestibility research, because what makes abused children reluctant to make true disclosures is likely to make non-abused children reluctant to make false disclosures.

### **Do Abused Children Freely Disclose Abuse When Questioned?**

One way to assess reluctance is to examine rates of denial in clinical studies of children assessed for suspected sexual abuse. However, one immediately runs into the ground truth problem: One doesn't know for sure whether children in the samples have been abused or not. For example, assume the disclosure rate in a study is 70%, and the denial rate is 30%. Should one conclude that 70% of abused children disclose abuse? No, because children who disclose abuse may not have been abused, and children who deny abuse may have been abused. Because of the ground truth problem, researchers have proposed different solutions.

### ***Addressing the Ground Truth Problem by Identifying the Subset of Substantiated Cases***

One might try to solve the ground truth problem by limiting one's analysis to substantiated cases. This is the solution offered by London and colleagues (2005, 2008). The researchers identified six child interview studies that they viewed as methodologically superior because the researchers classified cases on the basis of certainty that abuse had occurred. Those studies, in chronological order, were Dubowitz et al. (1992), Elliott and Briere (1994), Keary and Fitzpatrick (1994), Gordon and Jaudes (1996), DiPietro et al. (1997), and Devoe and Faller (1999).

London and colleagues identified the subsamples for which researchers were confident that abuse had occurred, and they calculated an average denial rate of 14% (corresponding to an 86% disclosure rate; London et al., 2008). These rates of denial were much lower than the denial rates of the original samples, which suggested that the original samples contained a large number of cases in which abuse was falsely suspected. These numbers, along with the claim that the "methodologically superior" studies generate lower estimates of denial, have been reiterated in subsequent reviews of the sexual abuse literature (e.g., Ceci & Bruck, 2013), in critiques of expert testimony about the dynamics of abuse disclosure (Zajac et al., 2013), and in expert testimony for the defense in child sexual abuse cases (*Ohio v. Swoboda*, 2021). The argument was accepted by the New Jersey Supreme Court in rejecting the scientific validity of expert testimony that explains why abused children deny abuse (*New Jersey v. J.L.G.*, 2018).

The problem with this approach is that disclosure is most often the means by which abuse is substantiated (Lyon et al., 2020), a point emphasized by the authors of

the original studies (e.g., Elliott & Briere, 1994 [the “evaluation relies heavily on the minor's statements”], p. 261). Focusing on substantiated cases in estimating disclosure rates leads to a selection problem, which can be called “substantiation selection bias.” If disclosure is the primary means by which cases are substantiated, then substantiated cases will have an inflated rate of disclosure. Abused children who fail to disclose are excluded from the substantiated sample, unless there is other evidence sufficient to support a finding of abuse without disclosure. To the extent that corroborative evidence is uncommon, the disclosure rate among substantiated cases approaches 100%, no matter how frequently truly abused children deny abuse. If there is no corroborative evidence, and the abused child fails to disclose, then they are presumed to be non-abused.

A word about terminology: In earlier work, substantiation selection bias was simply called “substantiation bias” (Azzopardi et al., 2019; Lyon, 2007). We’ve added “selection” to emphasize that the bias describes a bias in the sample selection process and does not reflect an interpretive bias on the part of the evaluators. Unfortunately, “substantiation bias” has been conflated with confirmation bias (Brainerd, 2017). Confirmation bias would reflect evaluators’ biased interpretation of children’s statements as disclosures to confirm their assumptions that the child had been abused. This is an important but separate concern: It has been addressed in research accessing the interviews upon which the evaluation was based, enabling the researchers to objectively determine whether a disclosure occurred (Eisen et al., 2021; Hershkowitz et al. 2014).

***Addressing the Ground Truth and Substantiation Selection Bias Problem by Identifying the Subset of Corroborated Cases***

Ironically, to the extent that suggestive questioning leads to substantial numbers of false disclosures of abuse, examining substantiated cases has an additional flaw: It fails to solve the ground truth problem. Substantiating cases on the basis of disclosures is wrongheaded if many disclosures are false. In their 2005 review, London and colleagues acknowledged the ground truth problem. They noted that there was often uncertainty about the “validity of [the] sexual abuse diagnosis”: “[I]n many of the cited studies, classification of abuse was often based in part on children’s disclosures; consequently the conclusion that abused children do disclose abuse during formal interviews may be circular” (p. 217). The authors also proposed a solution: one could examine the cases in which “children are classified as abused on the basis of medical evidence or nonchild factors (confession, material evidence)” (id.). This is a promising approach which we endorse. One reduces the ground truth problem at the same time that one reduces the substantiation selection bias problem. One caveat: The corroborative evidence should be independent of disclosure, an issue we discuss below.

If one takes this approach with the “methodologically superior” studies one consistently finds *lower* rates of disclosure. London and colleagues (2005) calculated a 83% disclosure rate in Dubowitz and colleagues (1992), and argued that “the finding that 83% of children disclosed abuse was based on the calculation of the number of children with medical findings” (p. 217) Unfortunately, they confused substantiated cases with corroborated cases. In fact, the actual rate of disclosure among children with medical evidence “indicative” of abuse was 46%, as we explain below.

Neither the 83% number nor the 46% number is reported in the original study. To calculate these numbers, one has to take a closer look at the categories of disclosure and medical evidence. First, one should be careful to calculate disclosure rather than non-verbal behaviors once believed to be evidence of abuse. Dubowitz and colleagues (1992) drew a distinction between full disclosure and partial disclosure, defining partial disclosure as “suggestive doll play or an inconclusive account of alleged abuse” (p. 690). Although there is some debate over whether children can clarify verbal disclosures with dolls or drawings to identify where touching occurred, there is general agreement that doll play (as opposed to disclosure with dolls) is not corroborative of abuse (Poole & Bruck, 2012). Hence, one should exclude “partial” disclosures. Indeed, London and colleagues (2008) themselves argued that disclosure rates will be exaggerated if children are included in the “substantiated” group “because they demonstrate ambiguous behaviors that are [wrongly] considered diagnostic of abuse (e.g., suggestive doll play, i.e., not diagnostic)” (p. 42). Nevertheless, they included “partial” disclosures in their calculation of the disclosure rate in Dubowitz and colleagues (1992).

Second, one should look for the strongest corroborative evidence. This addresses both the ground truth problem and the substantiation selection bias problem. Of course, if the corroborative evidence is stronger, this increases the likelihood that the child was in fact abused. Furthermore, if the corroborative evidence is stronger, this decreases the likelihood that substantiation was dependent on the disclosure; one could conclude that the child had been abused regardless of disclosure. The authors classified “hymenal scarring” as “indicative” of abuse, and hymenal abnormalities as

“compatible” with sexual abuse. Because of variability in the appearance of a normal hymen at birth (Berenson et al., 1991), it is best to focus on the “indicative” subsample. London and colleagues themselves warned (2008) that one should not classify children as “substantiated” if they “display ‘soft’ medical findings that are also present in non-abused children” (p. 42). If one examines the “indicative” subset of children, the disclosure rate is 46% (Lyon et al., 2020).

In the Gordon and Jaudes study (1996), London and colleagues calculated a “substantiated” disclosure rate of 77% (London et al., 2005). In their 2005 review paper, they indirectly acknowledged that the study failed to find a high rate of disclosure in medically corroborated cases, citing Gordon and Jaudes (1996) with a “but see” (London et al., 2005, p. 217), but then repeated the 77% “substantiated” rate in their subsequent review (London et al., 2008). Examination of the original paper (Gordon & Jaudes, 1996, Table 2, p. 319; Lyon et al., 2020, Table 4, p. 639) reveals that the disclosure rate among children with a sexually transmitted illness was 43%. In sum, if one identifies the subsamples of the “methodologically superior” studies with strong corroborative evidence of abuse, one finds that only 43-46% of children disclosed sexual contact.

### ***The Importance of Independent Corroboration for Solving the Substantiation Selection Bias Problem***

Although examining cases with corroborative evidence may help overcome the substantiation selection bias problem, it is important to identify corroborative evidence that is *independent* of disclosure. If the corroborative evidence is dependent on disclosure, then the bias will continue to inflate disclosure rates. So, for example, if we



used criminal convictions as corroboration, disclosure rates would approach 100%, because prosecutors rarely prosecute cases without a disclosure (London et al., 2020).

We can see these problems in London and colleagues' (2008) discussion of one of the "methodologically superior" subsamples. London and colleagues' (2008) calculated an 87% disclosure rate among 47 "corroborated cases" in Devoe and Faller (1999), which they stated was corroborated by "medical findings, material evidence, offender confession, and offender conviction" (p. 42). However, examination of the original study reveals that corroboration for these 47 cases constituted "corroborative evidence from previous reports" (DeVoe & Faller, 1999, p. 224), specifically "reports of child statements in other contexts" (p. 221). Prior disclosures are not independent of current disclosures to the extent that children who previously disclosed are more likely to disclose again. The corroboration reported by London and colleagues (2008) only applied to a smaller subsample of 25 cases for which disclosure rates were not reported (Devoe & Faller, 1999, Table 2, p. 222). The other "methodologically superior" studies either failed to report corroboration (DiPietro et al., 1997; Keary & Fitzpatrick, 1994) or included external evidence that was dependent upon a disclosure (e.g., children's description of the defendant's room when the suspect had denied contact; Elliott & Briere, 1994).

Disclosure rates can be inflated by a dependence between corroborative evidence and disclosure in two other ways as well. First, disclosures can increase the likelihood of corroboration. This occurs when disclosures spur the search for corroborative evidence. To take an extreme example, if children are medically examined for physical evidence of sexual abuse only if they have disclosed, then the disclosure

rate among medically corroborated cases will be 100%. In Heger and colleagues' (2002) examination of medical findings of abuse, 82% of children with diagnostic findings were referred for medical evaluation only after disclosing abuse. Hence, it is important to assess when the corroborative evidence was discovered. Ideally, it should have been discovered before the child was questioned about abuse.

Second, corroborative evidence can increase the likelihood of disclosure. When there is corroboration, interviewers may use the corroborative evidence as a tool for overcoming the child's reluctance. If the initial allegation questions fail to elicit a disclosure, the NICHD structured protocol recommends referring to external evidence (Lamb et al., 2018, e.g., "I [saw, heard] that you have/had [documented injuries, bruises] on your [body part]. Tell me everything about [those, that]"). Experimental work has shown that presenting maltreated children with evidence of their joint transgressions with adults increases disclosure (Evans & Lyon, 2019). Hence, when the corroborative evidence was discovered before questioning, it is important to know whether the interviewers used the corroborative evidence in their questioning of children.

Internet-based abuse (also known as technology-facilitated abuse) is often discovered by concerned adults coming across digital evidence, which both corroborates the abuse and exists independently of disclosure. However, the interviewers routinely present the evidence to children as a means of overcoming reluctance (Gemara & Katz, 2023; Katz, 2013; Vale et al., 2024). Katz (2013) examined 20 cases of 11- to 14-year-olds who had been abused by strangers they met online and were questioned with the NICHD protocol. The interviews included the presentation of digital evidence when necessary: nevertheless "[o]f the twenty children who underwent

investigative interviews, eight children did not disclose any allegation even though there was strong evidence that they had been abused” (p. 1540). Even in the face of digital evidence and use of research-based interviewing methods, the disclosure rate was only 60%.

Because most cases of sexual abuse are not accompanied by physical evidence, examining cases in which evidence was presented to children inflates the likelihood of disclosure. When interviewers question children without presenting evidence, disclosure rates are lower (Evans & Lyon, 2019). To solve the two problems discussed here with respect to corroborative evidence (that disclosure leads to corroborative evidence and corroborative evidence encourages disclosure), we would ideally examine cases in which corroborative evidence was discovered prior to any disclosure, and in which corroborative evidence was not presented to the child as such. These concerns mirror a related problem--suspicion selection bias--which we discuss next.

***Suspicion Selection Bias: Disclosure Rates Are Inflated When Disclosure Is the Reason That Abuse Is Suspected***

Recall that substantiation selection bias means that disclosure rates are inflated when one focuses on the disclosure rates among substantiated cases, because substantiation is dependent on disclosure. In order to reduce substantiation selection bias, one needs to identify cases that can be corroborated by evidence that is independent of disclosure. In cases for which there is medical evidence of abuse, the disclosure rates drop from over 80% to under 50% (Dubowitz et al., 1992; Gordon & Jaudes, 1996). Even these rates could be inflated, however, if children’s disclosure led them to be tested for a sexually transmitted illness. To understand the problem,

imagine that children were only tested for sexually transmitted illness if they disclosed; in that case, the disclosure rates would be 100% among children with sexually transmitted illness.

This is an example of a broader problem that we can call suspicion selection bias. In order to show how suspicion selection bias is independent of substantiation selection bias, consider a medical analogy. Imagine that medical professionals want to estimate the likelihood that patients with a particular disease are symptomatic. Assume there is a test for the disease that is 100% accurate regardless of symptoms, which means that there is no ground truth problem or substantiation selection bias problem. The professionals survey medical clinics and find that virtually 100% of patients diagnosed with the disease are symptomatic. Should they conclude that 100% of individuals in the population with the disease are symptomatic? No, to the extent that symptoms lead patients and their caretakers to seek out medical care, and symptoms lead doctors to test for the disease. Asymptomatic carriers of the disease will be systematically overlooked, because they won't visit the doctor, and even if they do, won't be tested for the disease.

Now apply this logic to sexual abuse, in which one imagines that sexual abuse is the disease, and disclosure is the symptom. If disclosure leads adults to suspect abuse and investigators to question children about abuse, then samples of children questioned about sexual abuse will have inflated rates of disclosure. This will occur even if the initial suspicions are aroused by facts other than disclosure (such as sexualized behavior), as long as disclosures affect adults' decisions to pursue further investigation.

Suspicion selection bias is evinced by high rates of prior disclosure in clinical samples of children questioned about suspected sexual abuse. This shows that the reason the interviewers suspected the child had been abused was because the child had disclosed abuse. In Azzopardi and colleagues' (2019) meta-analysis of clinical samples, prior disclosure was noted in 24 of the 45 studies, and the average rate of prior disclosure was 69%.

### **Solving the Methodological Problems: Examine Cases for Which Abuse Is Suspected Only After Corroborative Evidence Is Identified**

Since 1983, pediatric experts have consistently advised practicing pediatricians that childhood gonorrhea past infancy is sexually transmitted, because non-sexual transmission of gonorrhea has never been convincingly documented and is at most extremely rare (Committee on Early Childhood, Adoption and Dependent Care, 1983; Committee on Child Abuse & Neglect, 1988; Kellogg & Committee on Child Abuse & Neglect, 2005; Jenny et al., 2013; Kellogg et al., 2023). A diagnosis of childhood gonorrhea thus minimizes the ground truth problem, because one can be confident that the illness was due to sexual contact, and substantiation selection bias, because abuse can be substantiated without relying on a disclosure. Moreover, gonorrhea in children is often detected prior to any suspicion of sexual abuse, thus reducing suspicion selection bias (Kelly, 2002).

Lyon (2007) reviewed several decades of research examining disclosure rates of children with gonorrhea. He identified 21 studies (from 1965 to 1993). In addition to reviewing those studies, we have identified two more recent studies from New Zealand, which witnessed an increase in gonorrhea starting in the late 1990s and began to report

on its appearance in children (Kelly, 2002; Whitiri & Kelly, 2011). In most of the studies cases were selected on the basis that the child appeared at the hospital with symptoms of gonorrhoea, with few of the cases seen for the evaluation of sexual abuse. (See, e.g., Farrell et al., 1981 [2/46 seen for suspicion of abuse]; Shapiro et al., 1993 [1/22 seen for suspicion]; Kelly, 2002 [1/14 seen for suspicion].) In 21 of the 23 studies the authors clearly mentioned that the diagnosis was confirmed by culture, minimizing concerns that the diagnoses were false positives (London et al., 2020), and in all of the studies the authors refer to whether there was a “history” of abuse, a medical term that includes disclosure, or explicitly note that the child was questioned, minimizing concerns that children were never questioned about the source of their illness (London et al., 2020).

Based on these 23 studies, we calculated an average rate of disclosure of 43% (258/601). Whenever possible we removed children younger than 3 years of age, because they may have been too young to disclose sexual contact. If one excludes the five studies in which it was impossible to separately analyze children 3 years and older, the rate of disclosure across the remaining 16 studies was 42% (193/459). If in addition to removing the studies that included disclosure rates for children under 3 years, one excludes the studies that included teenagers (who may have become infected through consensual contact), the rate of disclosure among the remaining studies was 51% (134/261). Lyon (2007) also discussed two other studies that minimized suspicion substantiation bias by examining the disclosure rates of children for whom corroborative evidence was discovered prior to any suspicions of abuse, and disclosure rates were only about 50% in both studies (Lawson & Chaffin, 1982 [sexually transmitted illness; 43%]; Muram et al., 1992 [hymenal tears; 51%]).

These numbers are generous estimates of disclosure. First, researchers often interviewed children more than once, so that the reported disclosure rates reflected whether the child *ultimately* disclosed. For example, Sgroi (1979) reported that “[s]everal interviews may be necessary to enlist the confidence of the child to a degree that will permit the child to share the ‘secret’ of his/her sexual behavior with someone else” (p. 82). When initial disclosure rates were reported they were always substantially lower than the ultimate disclosure rates. Farrell and colleagues (1981) ultimately obtained a 52% disclosure rate, but they noted that a history of sexual contact was only obtained in 15% of the children in the emergency room. Ingram (1994), describing his 1982 study, emphasized that “If no history of sexual contact is obtained, multiple interviews over time are necessary. In our series of cases of gonococcal disease in children, only 18% of the children who gave a history of sexual contact did so on the first interview. Two girls told us about their sexual contact eight years later when they were no longer afraid of the sexual abuser” (p. 344). Shapiro (1993) reported that only 1 child out of the 22 (5%) evaluated disclosed to the doctor during the emergency room visit.

Second, in some cases, high rates of disclosure could be attributable to interviewers presenting children with the diagnosis as proof of abuse. The reader will recall that this inflates disclosure rates, because corroboration is no longer independent of disclosure. For example, one of the highest disclosure rates was reported by Branch and Paxton (1965: 100%), in which the interviewer “explain[ed] the mechanism” by which the child became infected during the interview (p. 349). However, because of the erroneous belief among many researchers prior to the late 1970s and early 1980s that

non-sexual transmission was a common cause of infection, such as through toilet seats, bed sheets, towels and other “fomites” (Sacco, 2002; Shore & Winkelstein, 1971), it is likely that interviewers usually treated sexual contact as a possibility rather than a foregone conclusion. As such, the studies provide an estimate of the likelihood that children will disclose or deny abuse when it is first suspected (but not presumed).

### **Implications of the Research for Assessing Denial and for Interviewing Protocols**

In any case in which a child denied abuse early in the investigation, but eventually disclosed abuse, investigators and legal decisionmakers must assess the likelihood that the child’s behavior is likely due to reluctance or to suggestibility. The fact that denials are rare in cases of suspected and substantiated abuse in child clinical studies doesn’t enable us to assess the likelihood that abused children are reluctant to disclose. Nor do the overall denial rates in those studies, in part because we don’t know if the deniers were abused. In order to sensibly estimate the likelihood that abused children will deny abuse we need to identify children for whom there is clear independent corroborative evidence of abuse and assess their early disclosure histories. Doing so reveals that only a small percentage of abused children are likely to disclose abuse when it is first suspected.

The apparent ease with which interviewers obtain disclosures from children suspected of being sexually abused in clinical studies of children questioned about abuse simply reflects the fact that disclosure is the primary basis for suspicion and substantiation of abuse. In other words, professionals are encountering children who are disproportionately likely to be forthcoming. Because of this fact, and because heavy-handed techniques may elicit false reports from non-abused children, interviewers’ use



of non-leading methods encouraging free recall of abuse is obviously warranted. But it bears repeating that when children deny abuse at some point during investigation, identification of abuse in cases free of suspicion and substantiation selection bias reveals that these are common behaviors of the abused child. As such, they constitute only weak evidence against abuse.

London and colleagues (2005, 2008) take a very different approach in reviewing research on children's disclosure. In addition to focusing on substantiated subsamples of children questioned about abuse, the problems with which we've discussed above, they argued that the most relevant data comes from studies questioning children using modern interviewing protocols. They limited their reviews to studies published since 1990, largely because of "major reforms in best practice guidelines for forensic interviewers" (London et al., 2005; p. 204; London et al., 2008, p. 30). Accordingly, they criticized the gonorrhea studies on the grounds that most "were published before any evidence-based child forensic protocols existed, children in these studies were not interviewed according to contemporary interview guidelines" (p.4).

The argument that one should only study denial of sexual abuse in response to research-based protocols misconceives the purpose of reviewing the literature on denial. The cases that lead to suggestibility concerns aren't those in which children deny abuse in response to state-of-the-art protocol interviews conducted by highly trained interviewers. Rather, they are cases in which non-professionals (such as worried parents) or poorly trained professionals question children, and children's initial denials eventually lead to a disclosure. Confronted with a case in which a child initially denied abuse, but ultimately disclosed, one needs to estimate the likelihood that an abused

child questioned for the first time about abuse would deny abuse. If the likelihood is great, then this counters the assumption that such a child is a non-abused child coerced by false suspicions and suggestions of abuse.

Second, the argument assumes that modern-day protocols have solved the problem of reluctance and denial. This is a misinterpretation of what research has and has not accomplished in identifying the most productive means of questioning children about abuse. Discussing the “unwarranted assumption” that “children’s disclosures of traumatic events are delayed, denied, and often recanted,” Ceci and colleagues (2007) cited the fact that among 4- to 8-year-old children interviewed with the NICHD protocol, 83% of disclosures were elicited through free recall questions (Lamb et al., 2003), concluding that “children can provide detailed information through open-ended prompts, and if a child denies abuse when asked directly, there is no scientifically compelling evidence that the child is in denial” (p. 323). Similarly, citing Lamb and colleagues (2003), London and colleagues (2008) asserted that the NICHD protocol “uses techniques that produce high rates of true disclosures even from young children” (p. 43).

The assertion confuses the likelihood that recall questions are productive, given abuse disclosure, with the likelihood of abuse disclosure, given recall questions. Lamb and colleagues (2003) never asserted that most abused children are forthcoming about their abuse. Rather, the authors simply excluded the 60 children who failed to disclose sexual abuse when questioned with the NICHD protocol (out of 190, or 32%), and focused on disclosers, demonstrating that they were responsive to free recall questions. Recall questions are effective because modern interviewing protocols take advantage of

the fact that most children questioned about abuse have previously disclosed. For example, in Lamb and colleagues (2003), the first allegation question was “Tell me the reason you came to talk with me today.” Subsequent allegation questions refer to prior disclosures, such as “I heard that you talked to a [...professional] at [time, location.] Please tell me what you talked about.” (Lamb et al., 2018; see also American Professional Society on the Abuse of Children, 2023).

Of course, how many of the 60 children were abused is unknown, reminding us of the importance of assessing disclosure rates in corroborated cases. Hershkowitz and colleagues (2014) examined over 400 children referred to investigative social workers for suspicions of intrafamilial physical or sexual abuse. The study reduced ground truth and substantiation selection bias problems by limiting the sample to cases with corroborative evidence such as “suspects' admissions, disinterested eyewitness testimony, medical evidence (including observable physical injuries), and material evidence” (p. 339). Material evidence was not defined, but probably included photographs. (The authors do not discuss the extent to which corroborative evidence was independent of disclosure.) The study utilized the NICHD structured protocol (Lamb et al., 2018); with most of the children receiving a revised version of the protocol with added supportive statements designed to reduce reluctance. Most of the sample was physical abuse cases, possibly because corroborative evidence is more likely in those cases, and the overall disclosure rate for those cases was 57%, which means that 43% either denied or failed to disclose. Among the smaller sample of 18 sexually abused children, the overall disclosure rate was 44%, which means that over half either denied or failed to disclose.

Clearly, the research on interview protocols has great value in informing practitioners how to conduct their interviews. The fact that open-ended questions elicit disclosures from a large percentage of children interviewed for suspected sexual abuse means that practitioners need not start their interviews with suggestive questions. But the efficacy of open-ended questions with children who disclose says nothing about the abuse status of children who do not disclose.

Because denial allays suspicions and prevents the substantiation of abuse, its frequency goes unnoticed. It is only by solving the methodological problems in identifying abuse among children who are reluctant to disclose that one uncovers the sad truth that most abused children will deny abuse when initially questioned. Using abused children's initial denials in court as a means of attacking their credibility compounds the injuries inflicted by the abuse and makes it more difficult to protect them from continuing harm. We still have a long way to go in reassuring reluctant children that it is safe to disclose.

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