



Analyzing the scientific foundation of Child Sexual Abuse Accommodation Syndrome: A reply to Lyon et al.

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Abstract

The issue before the New Jersey Supreme Court in the Frye hearing *New Jersey v. J.L.G.* (2018) was whether the scientific community agreed that Summit's (1983) Child Sexual Abuse Accommodation Syndrome rested on a firm scientific foundation. Lyon et al. (this issue) critique our approach to describing child sexual abuse disclosure, which involved extrapolating rates from children who came to the attention of authorities. Lyon et al. claim that our conclusions are marred by sampling biases resulting from what they term the *ground truth problem*, *suspicion bias* and *substantiation bias*. The points Lyon et al. claim we "fell victim to" were the very points we acknowledge are inherent difficulties in estimating the extent to which children will come forward to tell others about sexual maltreatment. Lyon et al. offer an alternative solution to the inherent difficulties in studying a difficult-to-identify population, relying in large part on 21 papers published mostly in the 1960s and 1970s. We argue that the method they propose has more flaws than the one it is intended to replace. Points of agreement and disagreement, along with suggestions for future research, are discussed. Moving forward, we argue that studies are needed that embrace both validity and generalizability in order to foster data-driven theories rather than invoking the intuitive suppositions of Summit's (1983) syndromal evidence.

1 | INTRODUCTION

That Professor Lyon, in the article he co-authored for this issue of *Behavioral Sciences & the Law*, disagrees with the holding in *New Jersey v. J.L.G.* (2018) is no surprise, as he served as an expert witness for the prosecution in the case. In contrast to Lyon, we think the holding in the case is a good one; Professor Bruck, a co-author on this article, served as an expert witness for the defense.¹ The specific topic before the court was the extent to which Summit's (1983) Child Sexual Abuse Accommodation Syndrome (CSAAS) as a whole had scientific support and agreement. The panel of judges in *New Jersey v. J.L.G.* ruled that CSAAS is inadmissible under the *Frye* standard because the testimony was "based on clinical observations" and "had not been empirically validated as a whole." The court held that scientific evidence supports Summit's notion of delayed disclosure, but that the other aspects of the hypothesized CSAAS disclosure patterns are not empirically supported. The court also ruled that contemporary fact-finders do not need an expert to explain the concept of delayed disclosure because children themselves can describe any reasons for delayed disclosure. However, it left open the possibility that experts could be allowed to explain delay on a case-by-case basis in instances where the child cannot adequately explain it.

We have long argued in the scientific literature (London, Bruck, Ceci, & Shuman, 2005; London, Bruck, Wright, & Ceci, 2008) that CSAAS is not data-driven and that, as Professor Bruck testified at the *J.L.G. Frye* hearing, there is insufficient evidence to support the proposed CSAAS. In response, Lyon et al.'s current paper and Professor Lyon's court testimony in *J.L.G.* criticized our view, based on three major concepts: substantiation bias, ground truth, and suspicion bias. Although we agree with Lyon et al. that the study of abuse disclosure presents many difficult challenges, we do not agree with his conclusions that the pattern of disclosure proposed by CSAAS rests on a firm scientific foundation (for examples, see Lyon, 2002, 2007; Lyon et al., this issue; also see Lyon testimony in *J.L.G.*, pp. 66–67, 140–142). After rehashing the main points of contention, we propose a new method for presenting to the courts the concepts and findings of children's disclosure patterns.

2 | SUMMIT'S SUPPOSITIONS

Summit (1983) claimed that "clinical studies of large numbers in *proven* cases of child sexual abuse (CSA) provided emphatic contradictions to traditional views" about how children respond to abuse and report whether it has occurred (p. 179). Summit stated that the purpose of his paper on CSAAS was to help clinicians understand why a child might be reluctant to report abuse. He outlined myriad behaviors, psychological mechanisms, and sequelae one should expect to see among CSA survivors. He posited that because of a societal disbelief in CSA, "the average child" will fail to come forward, deny and then make tentative allegations, which are likely to be recanted.

At the time that Summit wrote his paper, in 1983 [and in his subsequent expansion of that paper in Summit (1992)], the theory did not have scientific support; rather CSAAS was based on intuition. In fact, Lyon concurred with that view in his expert testimony in *J.L.G.*, stating "I wouldn't hesitate to agree that when Roland Summit created accommodation [CSAAS] he was talking about primarily his clinical experience" (p. 116). He also acknowledged that Summit overstated the frequency of recantation, stating: "Recantation rates are over-reported in Summit" (Lyon testimony in *J.L.G.*, p. 39).

3 | LONDON et al. (2005, 2008) REVIEWS

Given that experts, both then and now, frequently provide expert testimony on CSAAS, in 2005, we published a comprehensive literature review in order to evaluate the scientific foundation of Summit's suppositions *vis-à-vis established and proven reaction patterns*. We selected three salient features of abuse disclosure (delay, denial and recantation). We limited our analysis to studies published after 1990, as many of those published before that year

would not meet common standards of acceptable science. For example, many of the pre-1990 publications contained no data and were not in peer-reviewed journals. The studies that did contain data tended to consist of qualitative reports from a very small sample of participants that were of limited generalizability. Even the studies we included often had serious methodological limitations. We then ranked the selected papers for their scientific integrity, and relied on those possessing the highest scientific integrity in reaching our conclusions. Briefly, superior studies contained samples that were representative of the population, and they also attempted to separate valid from invalid suspicions of abuse. However, we could not address Lyon's criticism that the child sample studies exclude abused children who never come to the attention of authorities. No such studies of children existed due to the methodological challenges of sampling such an elusive population.

We concluded that CSAAS lacked clear scientific support for two of three key features it associated with abuse, i.e., *denial* and *recantation* (the third being delayed disclosure). In 2008, we added newer studies to the database. We did not change our conclusions. Furthermore, a team of researchers (Azzopardi, Eirich, Rash, & MacDonald, 2019) echoed our conclusions in a 2019 meta-analysis, stating, "Much of this body of literature is flawed in its application of ambiguous and inconsistent operational definitions of what constitutes sexual abuse and disclosure of sexual abuse, reliance on small or selective samples, biased data collection methods, and weak control of extraneous variables, therefore precluding generalizable findings" (p. 292).

4 | LYON'S CRITIQUES

Lyon et al. (this issue) disagree with our conclusions. They argue that three sources of bias distort estimates of abuse in the studies on which we rely. *Suspicion bias* occurs when a child makes an allegation prior to a formal interview. Because prior allegations predict forensic allegations, they must be accounted for or controlled in determining actual rates of disclosure, denial and recantation. We agree that if prior disclosure is the main variable that brings children to authorities for CSA assessment, then children who have yet to make a disclosure are automatically under-sampled. In fact, we have stated that lower rates of disclosure probably characterize studies of children who did not make a disclosure prior to coming to the authorities (London et al., 2005, 2008). However, if the point of the exercise is to determine the likelihood of disclosure for all children coming before the authorities, then all children regardless of their prior disclosure history must be included in the estimate. Estimates based on children who have not made previous disclosures make up a small cut of the pie, one that can be addressed using a different methodology, as described in the following.

According to Lyon et al., the second type of bias is *substantiation bias*. This occurs when analyzing both founded and unfounded cases, because substantiation is reliant on disclosure. Lyon's basic premise is that, if we categorize maltreatment cases into high and low probability cases, then valid abuse cases will be excluded from the substantiated group simply because the children did not disclose. We acknowledged this methodological constraint in our 2005 and 2008 reviews. In our reviews, we did not include studies using prosecuted cases, which had nearly 100% disclosure rates. We agree with Lyon et al. that abuse substantiation is often highly reliant upon disclosure. However, as most children coming before authorities for sexual abuse suspicions are disclosing, estimations of abuse disclosure must somehow take these children into account. At the same time, efforts need to be made to classify abuse probability, or else disclosure estimates will simply pertain to all children who come before investigators. Surely some unknown percentage of non-disclosing children are denying abuse because they truly were not abused.

Finally, Lyon points out that ground truth is difficult to establish. We agree, given the typical lack of corroborative evidence in CSA cases. There are rare cases where electronic evidence vouches for or discredits a child's statements (e.g., photographic evidence found on a computer), but such evidence is quite rare and should not be used to vouch for the disclosure patterns of all or even most children suspected of CSA. Two different proposals are set out to clarify this situation, one suggested by Lyon and one which we propose.

5 | LYON et al.'S PROPOSALS

Lyon (2007) proposed that determining rates of denial of CSA among children who are diagnosed with sexually transmitted infections (STI) at medical centers would avoid problems of bias and ground truth. Based on his review of 21 articles, he concluded that significant numbers of children deny abuse despite physical evidence of an STI.

We disagree with the reliability of his conclusions and the generalization that this proves sexually abused children will deny abuse. The majority of the studies cited by Lyon et al. were medical chart reviews published in the 1960s and 1970s, so the applicability of the findings many decades later is questionable. Furthermore, questions of the reliability of some of the tests used in that era have been challenged, resulting in misdiagnoses of STI (Whittington, Rice, Biddle, & Knapp, 1988).

Rather than solving the problem of ground truth, Lyon et al.'s proposal adds another ambiguity because STI is not always caused by abuse. In 10 of the 21 articles, the authors concluded that peer relations, sexual interplay and fomite (inanimate objects such as towels or clothing) transmission were the probable causes of infection.² To compound the problem of ground truth, in nine of the 21 articles, *it cannot be determined if the children themselves were even questioned about abuse.*³ A careful reading of these referenced studies shows that some of the children were too young for questioning, sexual contact was not always verified, sometimes it was the suspected perpetrator rather than the child who denied the abuse, and often there is no information about how the children were questioned, if at all. Since the 21 studies were published before any evidence-based child forensic protocols existed, children in these studies were not interviewed according to contemporary interview guidelines.

The findings from the 21 STI studies are limited in their empirical value because the issue of ground truth of abuse is compounded by not knowing whether and how the children were questioned about abuse. Surely some unknown percentage of the children from the 21 STI studies contracted the infections from abuse. Even so, these children represent a very unique subpopulation of sexually abused children: those who suffered severe penetrative abuse and contracted gonorrhea. Little is known about the generality of the findings. Most of the studies did not provide basic demographic information of the samples. Among those that did, we learn the children came from low socioeconomic status (SES) urban settings with high rates of family member suspects. The family situations were unstable and housing was overcrowded. Low SES is associated with lower language skills, which would present difficulties when attempting to question the children about potential sexual abuse in terms of their comprehension and expressive abilities. The STI studies sampled a unique population of children who experienced a specific form of sexual abuse. A fundamental principle in research methods is that samples only generalize to the population from which they are sampled. When researchers use unique subpopulations to derive estimates, caution must be used in generalizing the findings (Simons, Shoda, & Lindsay, 2017).

Thus, Lyon's approach, by design, excludes very large segments of the population that readily disclose. For example, Lawson and Chaffin (1992) examined 23 children presenting for medical assessment with an STI and no prior disclosure. They reported that only 43% disclosed at the initial medical appointment. However, the 23 children were derived from a larger population of over 800 case files of children reporting to the child medical center with an STI because they disclosed upon admittance rather than later, at the initial medical appointment. If we seek estimates of disclosure and denial, excluding hundreds of disclosing children would skew the results.

In conclusion, samples of children with STI diagnoses with no prior disclosures are not representative of the population of cases that come before authorities. Given the limitations of these 21 studies, we argue they do not add useful or reliable information to our understanding of disclosure in the population where CSAAS is being applied to forensic investigations and courtroom testimony.

6 | AN EMPIRICAL INVESTIGATIVE SOLUTION

There is no doubt that patterns of disclosure, denial and recantation are not easily and accurately captured by extant data. There remains, however, a major question about the degree to which these results shed light on particular cases in court. In our view, they do not permit experts to proclaim that abused children “always” delay disclosure or “never” report immediately. The fact is that children may not disclose abuse until a forensic interview, or they may deny previous disclosures, or they may recant all previous disclosures. Resorting to the literature on whether these patterns are frequent is not sufficient and may be misleading. Rather, the details of the case need to be presented within an established scientific framework. For instance, if there is explicit evidence that a child was pushed to disclose (either explicitly or implicitly through a variety of other suggestive techniques), then the disclosure is simply “unreliable.” Likewise, when a child recants, it is important to determine how the disclosure came about in the first place. If the child “spontaneously” claimed abuse and then recanted it, one must determine if there were any extraneous circumstances that led to either the original disclosure or the subsequent recantation. Relying on questionable statistics from difficult-to-conduct surveys will not solve the problem.

At the same time, there is a significant scientific database on factors that promote true and false disclosures that allows the expert to propose scientifically based hypotheses for why children may remain silent or change their testimony, and then to rule these hypotheses in or out based on the facts of the case. It is clear that although there are a number of improvements in design, definitions and inference to be implemented in issues of patterns of disclosure, the literature on external factors that silence children or that provoke statements is blooming. This is where we should be concentrating when we draw conclusions about children's abuse status.

ENDNOTES

- ¹ There were two experts for the defense (Bruck and Brainerd) and two experts for the prosecution (Lyon and D'Urso).
- ² Using the numbering from the complete list of the 21 studies from Lyon (2007, tab. 3.1), transmission for reasons other than abuse are noted in studies 2, 3, 5, 8, 10, 12, 14, 15, 17, and 18. In additional studies, the authors note no known sexual contact.
- ³ Using the numbering of the studies from Lyon (2007, tab. 3.1), no information is given about whether the children were questioned in the following studies: 4, 5, 6, 7, 8, 9, 11, 16, and 17.

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