Although it is widely acknowledged that the sexual assault of children is a major societal concern, it is not known how many children in the United States are victims of sexual abuse (Ceci & Friedman, 2000). There are two major reasons for this lack of data. First, current estimates of the incidence of child sexual abuse (CSA) do not reflect the number of unreported cases or the number of cases reported to agencies other than Child Protective Services (e.g., sheriff’s offices or professionals such as mental health diversion programs). Second, the diagnosis of CSA is often difficult because definitive medical or physical evidence is lacking or inconclusive in the vast majority of cases (Bays & Chadwick, 1993; Berenson, Heger, & Andrews, 1991), and because there are no unique psychological symptoms specific to sexual abuse (Kendall-Tacket, Williams, & Finkelhor, 1993; see Poole & Lindsay, 1998; J. Wood & Wright, 1995). Given these limitations of medical and psychological evidence, children’s statements typically comprise the central evidence for judging the
occurrence of CSA. In making these judgments, professionals often must address the thorny issue concerning how children disclose abuse.

According to some experts, a major problem with relying on children's statements in forensic investigations is that many sexually abused children remain silent about abuse, they deny that abuse ever occurred, or they produce a series of disclosures of abuse followed by recantations of these disclosures. This hypothesized model of incremental abuse disclosure has been put forth by a number of authors (e.g., Macfarlane & Krebs, 1986; Sgroi, Bunk, & Wabrek, 1988; Summit, 1983). The central tenet of these models is that sexually abused children are reluctant to disclose sexual abuse. When children do reveal abuse, disclosure will be incremental over time, a process that often includes outright denials and recantations of prior disclosures and then reinstatements of the abuse. Although this hypothesized pattern of incremental abuse disclosure has taken on different names, we will refer to it as Child Sexual Abuse Accommodation (CSAA).

The CSAA model has been endorsed by many clinicians and scholars and has been the basis of clinical and forensic judgments. For example, Summit's (1983) paper describing a model of incremental abuse disclosure was rated by professionals as one of the most influential papers in the field of child sexual abuse (Oates & Donnelly, 1997). The central assumptions of the CSAA model are echoed in some contemporary guidelines for assessment and diagnosis of CSA. For example, the National Children's Advocacy Center (Carnes, 2000) states in one of its publications, "Forensic evaluation is a process of extended assessment of a child when that child is too frightened or young to be able to fully disclose their experiences on an initial forensic interview" (p. 14) and "Reluctance is commonplace and difficult to overcome in suspected child sexual abuse cases" (p. 42). In fact, some professionals have gone so far as to treat behaviors such as denials and recantations of abuse as indicators that sexual abuse likely occurred (Fisher, 1995; Kovera & Borgida, 1998; Robin, 1991; Summit, 1992).

Given the widespread appeal and currency of CSAA-type models in the mental health community and their acceptance in the forensic arena, especially when used to rehabilitate the credibility of a child witness, it is important to examine the empirical basis for these theories (Summit, 1983, p. 180; Summit, 1992, p. 156; and see London, Bruck, Ceci, & Shuman, 2005, for extended discussion). In this paper, we critically review the existing empirical data to assess the scientific support for the behavioral components of CSAA-type models—secrecy/silence, denial, and recantation. We draw on two major sources of empirical data on children's disclosure patterns: (1) retrospective accounts from adults who claimed to have been sexually abused as children, and (2) examinations of children undergoing sexual abuse evaluations. Each source contributes some information to our understanding of CSA disclosure patterns although both data sources contain limitations. To foreshadow the results of this review, we conclude that although a substantial proportion of children delay reporting or altogether fail to report incidents of child sexual abuse (the secrecy stage), there is little evidence to suggest that denials, recantations, and redisclosures are typical when abused children are directly asked about abuse during forensic interviews.

2. Disclosure of Child Sexual Abuse

Disclosure Rates

We conducted a review of the literature to locate studies that yielded statistics on the proportion of adults with reported childhood histories of abuse who disclosed their abuse during childhood (London, et al., 2005). We selected studies that were published since 1990 in order to control for potential cohort effects that might be present due to the many changes in education, advocacy, increased sensitivity, and legal procedures related to sexual abuse and sexual abuse investigations. Table 2.1 lists 11 retrospective studies that fit these criteria. Studies that did not specify the rate of disclosure during childhood are not listed in the table but are cited when relevant for related topics (for example, predictors of disclosure patterns).

Before beginning this review, it is important to point out that there are several difficulties in interpreting the findings of this literature. The first issue regarding accuracy of the retrospective data lies in accuracy of the abuse reports. Specifically, it is possible that some adults in these retrospective studies had been abused but continued to deny abuse (which would work to reduce the overall CSA prevalence rates and inflate the disclosure rates; see Lyon, chapter 3, this volume). Additionally, it is possible that some adults in these retrospective studies had not been abused but claimed to have been (e.g., due to false memories encouraged by suggestive psychological therapeutic practices). Such false allegations would inflate the incidence of CSA and render the data on disclosure nonmeaningful. A second issue surrounding the accuracy of the retrospective data lies in the accuracy of adults' disclosure reports; that is, whether and when they reported the abuse to others as children. Some adults might have disclosed abuse in childhood, despite their reports to the contrary. In other words, they may in fact have told someone but failed to remember having done so. A rich cognitive psychology literature demonstrates the myriad retrospective biases, even when the events in question are highly emotional (e.g., Freyd, 1996; Read & Lindsay, 1997; Neisser, 1997; Ross, 1989). In their investigation of flashbulb memories, Schooler and colleagues (Schooler, Ambadar, & Bendiksen, 1997; Schooler, Bendiksen, & Ambadar, 1997) coined the term forgot-it-all-along-effect to describe the finding that people sometimes inaccurately recall to whom, when, and whether they reported an important life event. Adults' denial of CSA reports that were actually made during childhood would not affect prevalence rates of CSA but would lead to an underestimation of disclosure rates. Despite these many confounding
TABLE 2.1
Childhood Disclosures of Sexual Abuse: Retrospective Studies

<table>
<thead>
<tr>
<th>Study</th>
<th>N =</th>
<th>Sample Source</th>
<th>Definition of CSA</th>
<th>Reports abuse at survey (%)</th>
<th>Childhood disclosure (%)</th>
<th>Report to authorities (%)</th>
<th>Ave. age at time of abuse (yrs)</th>
<th>Ave. age of sample (yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arata (1998)</td>
<td>860 b (f)</td>
<td>College sample</td>
<td>Unwanted contact before 14 yrs</td>
<td>24</td>
<td>31</td>
<td>10</td>
<td>8.5</td>
<td>23</td>
</tr>
<tr>
<td>Smith et al. (2000)</td>
<td>3,220 (f)</td>
<td>National probability sample</td>
<td>Rape</td>
<td>9</td>
<td>34</td>
<td>12</td>
<td>10.9</td>
<td>45</td>
</tr>
<tr>
<td>Roesler &amp; Wind (1994)</td>
<td>286 (f)</td>
<td>CSA hotline callers</td>
<td>Intra-familial before 16 yrs</td>
<td>100</td>
<td>36</td>
<td>n/a</td>
<td>6</td>
<td>41</td>
</tr>
<tr>
<td>Lamb &amp; Edgar-Smith (1994)</td>
<td>48 (f) 12 (m) d</td>
<td>Newspaper ad</td>
<td>Not specified</td>
<td>100</td>
<td>36</td>
<td>n/a</td>
<td>8.15</td>
<td>30</td>
</tr>
<tr>
<td>Roesler (1994)</td>
<td>168 (f); 20(m)</td>
<td>Abuse center</td>
<td>Genital contact before 16 yrs</td>
<td>100</td>
<td>37</td>
<td>n/a</td>
<td>&lt; 16</td>
<td>41</td>
</tr>
<tr>
<td>Tang (2002)</td>
<td>1,151 (f) 887 (m)</td>
<td>Hong Kong Chinese college students</td>
<td>Unwanted sexual experiences before age 18</td>
<td>6</td>
<td>38</td>
<td>n/a</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>Finkelhor et al. (1990)</td>
<td>1,481 (f)</td>
<td>National probability sample</td>
<td>Before 18 yrs</td>
<td>27 (f) 16 (m) 1 year of abuse</td>
<td>n/a</td>
<td>Median = 9.7</td>
<td>30-39</td>
<td></td>
</tr>
<tr>
<td>Somer &amp; Szwarberg (2001)</td>
<td>41 (f)</td>
<td>Israeli abuse center</td>
<td>CSA survivors</td>
<td>100</td>
<td>45</td>
<td>n/a</td>
<td>7.11</td>
<td>32</td>
</tr>
</tbody>
</table>

(continued)

TABLE 2.1 (Continued)

<table>
<thead>
<tr>
<th>Study</th>
<th>N =</th>
<th>Sample Source</th>
<th>Definition of CSA</th>
<th>Reports abuse at survey (%)</th>
<th>Childhood disclosure (%)</th>
<th>Report to authorities (%)</th>
<th>Ave. age at time of abuse (yrs)</th>
<th>Ave. Age of Sample (yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ussher &amp; Dewberry (1995)</td>
<td>775 (f)</td>
<td>1991 Women’s Magazine Survey</td>
<td>Unwanted sexual attention</td>
<td>100</td>
<td>54</td>
<td>18</td>
<td>8.5</td>
<td>38</td>
</tr>
<tr>
<td>Fergusson et al. (1996)</td>
<td>1,019 (mSf)</td>
<td>New Zealand longitudinal study</td>
<td>Unwanted experience before 16 yrs</td>
<td>10</td>
<td>87 (by age 18)</td>
<td>n/a</td>
<td>&lt; 16</td>
<td>18</td>
</tr>
<tr>
<td>Hanson et al. (1999)</td>
<td>4,008 (f)</td>
<td>National probability sample</td>
<td>Nonconsensual penetration assaults before age 18</td>
<td>8.5</td>
<td>n/a</td>
<td>13</td>
<td>&lt; 18</td>
<td>37.5</td>
</tr>
</tbody>
</table>

a. Unless noted, all studies were conducted in the United States.
b. Some studies sampled general populations while others specifically sampled sexually abused. We have provided in this table the percentage of abused participants endorsing abuse. Hence, data on disclosure are based on the percentage of the total samples that endorsed CSA.
c. fFemale.
d. mMale.
variables in the interpretation of the existing data, some common themes emerge across studies, as we discuss below.

As shown in Table 2.1, the modal childhood disclosure rate (in 6 out of 10 studies) is just over 33%. Three other studies (7, 8, 9) reported slightly higher, but still low, rates of disclosure. These low disclosure rates are consistent with the claims of the CSA model that nondisclosure of sexual abuse (silence) in childhood is very common. Only 1 of the 11 studies in Table 2.1 reported relatively high rates of disclosure. The study was carried out in New Zealand by Fergusson, Lynskey, and Horwood (1996) and involved a longitudinal study on 1,265 children. Sexual abuse was defined broadly in their study, ranging from noncontact activities such as indecent exposure or lewd suggestions (including experiences with same-aged peers) to rape before age 16. At 18 years old, 87% of the abused subsample reported that they had told someone about the abuse. There are several reasons why Fergusson and colleagues obtained higher disclosure rates than other researchers. Fergusson et al. noted the high disclosure rates may partially reflect the young age of the adults in their sample. Possibly some were still denying the abuse, thus producing lower rates of CSA with concomitantly inflated rates of disclosure. Another possibility is that the high disclosure rates could be driven by unknown victim, perpetrator, or abuse variables. For example, the high rates of disclosure could, in part, be an artifact of their abuse definition. Many of their subjects reported noncontact activities such as lewd suggestions, which many of the participants reportedly did not consider as incidents of CSA. This could also explain why many of Fergusson et al.'s (1996) subjects denied abuse history during a three-year follow-up interview (Fergusson, Horwood, & Woodward, 2000).

In summary, although one study yielded high disclosure rates (Fergusson et al., 1996), the other retrospective studies indicated that just over one-third of adults who suffered CSA appear to reveal the abuse to anyone during childhood. Furthermore, among children who do disclose during childhood, delay of disclosure is common (also see Kellogg & Hoffman, 1995; Kellogg & Huston, 1995). As shown in column 7 of Table 2.1, an even smaller minority reported that the abuse was disclosed to authorities during childhood. Given the differences in methodology, definitions of abuse, and sample characteristics, the general consistency of these findings across these studies is noteworthy.

Predictors of Nondisclosure/Disclosure

In addition to providing overall disclosure rates, some studies examined predictors of disclosure rates. That is, what kinds of abuse, victim, and perpetrator characteristics emerge in this literature that might help explain some of the variance in CSA disclosure during childhood? In this section we examine associations of some of these predictors from data within studies and, when possible, across studies.
We examined the existing data to assess support for the assumption that disclosure is related to the amount of fear or violence associated with the abuse. According to the assumption, children do not disclose because they fear the perpetrators who physically coerced, harmed, or threatened them. In general, the data do not support the hypothesis that disclosure rates are related to severity of abuse. Although Arata (1998) found lower disclosure rates for contact versus noncontact abuse, she found no relationship between disclosure and method of coercion (e.g., threat, gift, curiosity, appeal to authority, physical force). Most researchers, however, have either found the opposite pattern (i.e., higher disclosure rates are associated with incidents involving life threat and physical injury; Kellogg & Hoffman, 1995; Hanson et al., 1999), or they have found no significant relationship between severity or method of coercion and disclosure (Lamb & Edgar Smith, 1994; Roesler, 1994; Smith et al., 2000).

Another way to examine the relationship between severity/coercion/physical harm and disclosure is to compare the rates among studies in Table 2.1 in terms of the types of abuse that were included in the study. Some experimenters defined CSA broadly (unwanted sexual attention by anyone) and some defined it more narrowly (e.g., forcible penetration). Despite the differences in definitions, disclosure rates reported across studies were very similar, except in Fergusson et al.'s (1996) study.

Next, we searched for studies that examined the relationship between threats used to secure the child's silence ("Don't tell or else...") and disclosure. We only found a few such studies, but a common problem was that in many cases it is not possible to determine whether the measure of "threat" referred to statements or actions during the commission of the assault to engender physical compliance or to threats used to engender silence (e.g., see Arata, 1998; Hanson et al., 1999; Roesler, 1994; Smith et al., 2000). This failure to provide operational definitions of threats is problematic on methodological grounds (how did the study participant interpret the question?) and on interpretational grounds (how does the consumer of the literature interpret the statistics?). Hence, the extant retrospective data are not informative as to the nature of the association between threats to remain silent and childhood disclosure rates. Future studies are needed that clearly define the term "threaten" to participants and to readers.

Summary

The results of the retrospective studies make two important contributions to our knowledge about the patterns of children's disclosure of abuse. First, when taken at face value, these data reveal that approximately 60-70% of adults do not recall ever disclosing their abuse as children and that only a small minority of subjects (10-18%) recalled that their cases were reported to the authorities. Thus, the retrospective studies provide evidence to support the assumption that many incidents of CSA go unreported and that the silence component in CSAAS models has a strong empirical foundation.

Second, analyses of predictor variables in these retrospective studies provide few insights into the factors associated with disclosure. They do, however, suggest that commonly held assumptions, such as fewer disclosures among more severe cases of CSA or in cases of intrafamilial abuse, lack adequate empirical support. We must await further data to examine these issues more definitively. In general, the reviewed studies were not designed to examine specific predictors of disclosure, and most of the analyses were post hoc in nature. Generally, the retrospective literature is limited in detecting associations between abuse variables and disclosure due to factors such as insufficient sample size, lack of homogeneity of samples, varying definitions of the variables, and a failure to provide clear operational definitions of the variables. Given these limitations, it is not known from the retrospective data if the nondisclosers were asked about abuse or if the nondisclosers were simply not asked. In order to examine trends in abuse denials and recantations, the literature on children's patterns of CSA disclosure must be examined.

Patterns of Disclosure among Children Treated or Evaluated for Sexual Abuse

In this section, we review studies of disclosure patterns of children who were specifically assessed or treated for sexual abuse in terms of delay of disclosure, denial, and recantation. Each section also includes a discussion of the correlates of delay, denial, and recantation. As with the retrospective studies, we excluded studies published prior to 1990 because of possible cohort effects that could be due to the changes in interviewing practices and prevention programs (for children) that have occurred in the decade of the 1990s.

Most of the studies presented in this section involved "chart reviews" of children who were interviewed by CPS, mental health, or medical professionals specializing in the assessment and treatment of sexual abuse. Children presented at these clinics or centers for a variety of reasons that included a prior disclosure to an adult, a suspicion of abuse by an adult or an agency, or the
need for a second opinion or more extensive interviewing. Thus, across and within studies, there is often great variability in the methods by which children were interviewed, in the information collected (including differences and sometimes ambiguity in operational definitions of abuse-related terms such as threats), and in the procedures of diagnosing child sexual abuse. Furthermore, in some studies, as will be noted, researchers categorized the children according to the likelihood of abuse (e.g., highly probable, unclear, not abused); in other studies only children who met some prespecified criteria for abuse were included, and in still other studies, the certainty of abuse status was not specified. Of course, as with the adult retrospective reports, the diagnosis of sexual abuse, whether as substantiation or unfounded, almost always comes with some degree of uncertainty. Some children may falsely claim to have been abused after undergoing suggestive, coercive interviewing from a biased investigator or because they were pressured to do so from a parent undergoing a messy divorce; alternatively, some children may falsely deny abuse because of a variety of reasons including pressure from a parent to do so. Substantiation of abuse is a thorny issue, and we return to this issue to discuss its impact on the disclosure data in a subsequent section. As with the retrospective studies, then, the data from the child samples are not without limitations; some common themes do, nonetheless, emerge across studies.

**Delay of Disclosure (Silence)**

The results of these studies on child samples echo the adult retrospective finding regarding delay of abuse disclosure; namely, when children do disclose, it often takes them a long time to do so. For example, disclosure rates of children whose cases were referred for prosecution were examined by Goodman, Taub, Jones, England et al. (1992) and by Sas and Cunningham (1995). Although 37–42% of the children had disclosed within 48 hours of the abuse, it took between 6 to 12 months for many of the children to disclose abuse. Even higher rates of delayed disclosure were obtained in Elliott and Briere's (1994) study in which 75% of children did not disclose CSA within the first year following the abuse, and 18% waited more than five years to disclose the abuse. Similarly, Henry (1997) reported an average of two years delay between abuse and disclosure.

Some of the variability in the length of delay in the child studies may reflect the settings in which the data were collected. Shorter periods of delay may show up in surveys of children in criminal trials simply because cases that do not show this pattern are excluded from consideration because of the inherent difficulty in obtaining convictions. Therefore, it may be that cases in the prosecutor's office are unrepresentative of those that never reach the courtroom.

Few of the studies on delay of disclosure examine associations between abuse-related variables and latency to disclosure. There are some data on gender differences, suggesting that males may be more reluctant to disclose than females (e.g., DeVoe & Faller, 1999; Goodman-Brown, Edelstein, Goodman, Jones, & Gordon, 2003; Gries, Goh, & Cavanaugh, 1996; Sas and Cunningham, 1995; Stroud, Martens, & Barker, 2000; but see DiPietro, Runyan, & Fredrickson, 1997; Keary & Fitzpatrick, 1994, who report no gender differences). However, as Goodman-Brown et al. (2003) discuss, gender differences in disclosure rates may be suppressed by other variables associated with gender (e.g., prior disclosure, relationship to perpetrator). For example, males may be more frequently abused by nonfamily members than females. Hence, potential differences in abuse dynamics between boys and girls should be kept in mind when considering any potential gender differences in disclosure patterns. Additionally, there are reasons to suspect that members of certain ethnic groups might face additional and culture-specific barriers to CSA disclosure (see Futa, Hsu, & Hansen, 2001; Rao, DiClemente, & Ponton, 1992; Shaw, Lewis, Loeb, Rosado, & Rodriguez, 2001; Toukmanian & Brouwers, 1998; Wong, 1987). However, to date there is no coherent account of the effects of demographic variables on abuse disclosure in childhood.

Some researchers have examined the association between different abuse characteristics and disclosure. As was the case with the adult studies, the data on "threats" are difficult to interpret because most studies fail to provide operational definitions of threats (i.e., were threats used during abuse or after abuse? Were threats used to obtain compliance or silence?). When clearly defined data on abuse characteristics do exist, they are sparse and not very consistent. For example, Sas and Cunningham (1995) found that children waited longer to disclose abuse when the perpetrator "groomed" them and established a close relationship than if the perpetrator used force. Some researchers have found that children who are victims of familial abuse tend to delay disclosure longer than those experiencing extra familial abuse (DiPietro et al., 1997; Goodman-Brown et al., 2003; Sjöberg & Lindblad, 2002). However, the majority of studies we examined either failed to find such an association or failed to report an association. Note that none of the studies covered in this section address issues concerning denial. These are addressed in the next section.

**Rates of Sexual Abuse Disclosure (or Denials) in Interviews With Child Samples**

In this section we review 17 papers published since 1990 that contained statistics on the frequency of denial and/or recantations for children who were questioned about abuse. Table 2.2 lists the 17 studies that provided childhood disclosure rates, in ascending order of denials. Additionally, table 2.2 provides data on some of the central characteristics of the studies. When relevant, we cite other studies in this section that did not provide data on the rate of childhood disclosure in their sample but that do throw light on the correlates of disclosure.

The pooled mean of disclosures for the studies listed in table 2.2 is 64% (range 24–96%), or, put another way, the mean of denials is 36%. For reasons discussed below, however, these figures should not be viewed as the best...
DISCLOSURE OF CHILD SEXUAL ABUSE

2. DISCLOSURE OF CHILD SEXUAL ABUSE

We focus on four factors that may account for the enormous between-study variability in order to highlight methodological and design factors that need to be considered in evaluating the generalizability, validity, and reliability of the findings in Table 2.2. These factors are age of the child, previous disclosure of abuse, substantiation of abuse, and representative nature of the selected sample. We conclude that when such factors are considered, mean disclosure rates are quite high when children are explicitly asked about sexual abuse.

Developmental Differences. The wide variation in the ages of the children both within and between studies (see Table 2.2, column 3) could partially account for differences in the rates of disclosure across studies. In order to examine this hypothesis, age-denial associations were examined within studies. Although no significant relationships between age and denial were found in two studies (Bradley & Wood, 1996; DeVoe & Faller, 1999), the more common finding was that school-aged children were more likely than preschoolers to disclose abuse during formal evaluation. For example, B. Wood, Orsak, Murphy, and Cross (1996) found that older children made more credible disclosures of abuse than younger children (also see Goodman-Brown et al., 2003; Mordock, 1996). Similarly, DiPietro et al. (1997) found that older children were more likely to disclose than younger children and that children generally became more likely to disclose abuse after age four (also see Cantlon, Payne, & Erbaugh, 1996; Gries, Goh, & Cavanaugh, 1996; Keary and Fitzpatrick, 1994; Sas & Cunningham, 1995). There are several possible explanations for these developmental differences in children's abuse disclosures. They could reflect the single influence or combined influences of linguistic, cognitive, and social/emotional factors. Thus, younger children may not have the same linguistic skills to convey their abuse experience; or, younger children may not understand the meaning of abusive acts and thus fail to make explicit disclosures. In support of these positions, it has been found that younger children are more likely to make accidental disclosures whereas older children are more likely to make purposeful disclosures (Campis, Hebden-Curtis, & DeMaso, 1993; Fontanella, Harrington, & Zuravin 2000; Nagel, Putnam, Noll, & Trickett, 1997). That is, younger children are more likely to make spontaneous statements about abuse that are not consistent with the topic of conversation or of the ongoing activity (e.g., stating, while watching TV, "Uncle Bob hurt my bottom"). In contrast, older children are more likely to report the abuse to an adult when asked.

1 B. Wood et al. (1996) defined a credible disclosure as one that "was adequate for use as evidence in a future legal and/or child protection proceedings" (p. 84). The not credible category included cases "where the child did not disclose, denied sexual abuse, refused to cooperate, provided insufficient in detail or was not believable" (p. 84). The authors did not cite the number of children falling into each of the not credible subcategories.
Although the conclusions are consistent across studies, it is important to point out that the ages of the "younger" and "older" children are not the same across studies. Thus, in one study the "younger group" might be of the same age as the "older group" in another study. Therefore, it is not clear at what age children become more likely to disclose abuse.

A second possible explanation for developmental differences in rates of denial is that there may be higher rates of true denials among younger than older children. This hypothesis is based on several interrelated findings. Younger children may be more likely than older children to be brought for assessment due to caregivers' concerns about behaviors (rather than an abuse disclosure) that often are ambiguous and do not necessarily reflect CSA (see Campis et al., 1992; Fontanella et al., 2000; Levy, Markovic, Kalinowski, Ahart, & Torres, 1995; Nagel et al., 1997). Thus, in any sample there may be a greater proportion of younger nonabused children than of older nonabused children, and the higher denial rates by younger children would then reflect a higher rate of denials that are true negatives. For example, Keary and Fitzpatrick (1994) were less likely to categorize younger children as sexually abused compared to older children; in addition, the younger children were less likely to disclose abuse. Unfortunately, these researchers did not present data on age differences in denial rates among children who were classified as "founded" by the assessment team.

Although most of the data indicate that younger children may be less likely to disclose than older children, upon closer investigation, there may also be patterns specific to adolescents. At least among cases that reach authorities, "founded" by the assessment team.

The third and perhaps most important methodological factor that accounts for variation in disclosure patterns across studies concerns the validity of the diagnosis of child sexual abuse. In conducting studies of CSA disclosure patterns, it is of utmost importance to ensure that the group under study had in fact experienced childhood sexual abuse; otherwise, counts of frequency of delay to disclosure, denials, recantations, and restatements are uninterpretable. That is, children may deny because they in fact never were abused; children may take a long time to disclose because it is only with repeated suggestive interviewing that they will make disclosures which are false; and children may recant in order to correct their prior false disclosures.

In order to address problems of substantiation of abuse, some researchers have classified children in their sample in terms of the likelihood of abuse. Children meeting one or more of the following criteria (depending on the

Prior Disclosure of Abuse Predicts Disclosure During Formal Assessment.
The studies included in table 2.2 focus on children's reports during forensic interviews and psychotherapy. That is, the children in these studies were specifically brought to a clinic, mental health professional, or law enforcement agency either because they had previously made a claim of abuse or because there was a suspicion of abuse that required further investigation. Thus, most of the children in each study had been questioned by someone (e.g., teacher, parent) about abuse prior to the formal interviews or therapy sessions. This factor is important because, as shown in table 2.3, the most significant predictor of disclosure in the formal interview is whether the child had disclosed before (e.g., to a parent, a teacher, a CPS worker). For example, Keary and Fitzpatrick (1994) reported that of the 123 children who had made a prior disclosure, 86% disclosed again during the formal interview; in contrast only 14% of the 128 children with no prior disclosures disclosed at interview. Similar patterns of results were found by Gries et al., (1996), DiPietro et al. (1997), and DeVoe and Faller (1999).

This pattern of consistency of disclosure is most common in older children. Among children who had disclosed prior to formal assessment, younger children were less likely than older children to disclose again during formal assessment (Keary & Fitzpatrick, 1994; also see Ghetti, Goodman, Eisen, Qin, & Davis, 2002).

In sum, several studies suggest that once children have made an abuse disclosure, they are likely to maintain their allegations during formal assessments. This finding suggests that if children have already told a professional or a caretaker about an abusive event, then they are more likely to disclose in a formal investigation. Discrepant cases (where a child discloses before the formal interview but denies at the time of the formal interview) represent a minority and appear to occur most commonly among very young children.

Abuse Substantiation. The third and perhaps most important methodological factor that accounts for variation in disclosure patterns across studies concerns the validity of the diagnosis of child sexual abuse. In conducting studies of CSA disclosure patterns, it is of utmost importance to ensure that the group under study had in fact experienced childhood sexual abuse; otherwise, counts of frequency of delay to disclosure, denials, recantations, and restatements are uninterpretable. That is, children may deny because they in fact never were abused; children may take a long time to disclose because it is only with repeated suggestive interviewing that they will make disclosures which are false; and children may recant in order to correct their prior false disclosures.

In order to address problems of substantiation of abuse, some researchers have classified children in their sample in terms of the likelihood of abuse. Children meeting one or more of the following criteria (depending on the
Keeping these reservations in mind, we now review those studies that have examined disclosure patterns as a function of the certainty of abuse diagnosis. We will argue that with a few exceptions, high rates of disclosure rates are obtained in studies where the abuse status of the child is well defined, and low disclosure rates are associated with samples where the diagnoses of abuse are either unknown or questionable.

Referring to Table 2.2, the eight studies with the highest disclosure rates (96% to 76%) contain the statements of children with high certainty diagnoses of abuse (sometimes these cases are labeled "substantiated," and, in general, the researchers or clinicians considered it highly likely that the children had been abused). The rates of disclosure are greatly lowered in these same studies when the data from the unsubstantiated or unclear cases are averaged with the high-certainty cases (see data in parentheses in column 4). Thus, although only 62% of DeVoe and Faller's (1999) sample of 5- to 10-year-olds disclosed abuse, when only substantiated cases are included, the disclosure rate rises to 87%. The overall rate of disclosure in the Keary and Fitzpatrick study (1994) is 50%; however, when only the substantiated cases are included, the rate is 95%. DiPietro et al. (1997) classified each of the children in their sample who were assessed because of suspicions of CSA as unfounded, possible, probable, or definitive abuse. Rates of disclosure during the first visit increased as a function of abuse certainty with 7%, 8%, 59%, and 76%, of cases classified as unfounded, possible, probable, or definitive abuse, respectively, disclosing abuse. The overall disclosure rate in Dubowitz, Black, and Harrington (1992) was 58%; however, among their cases rated by an interdisciplinary team as holding low to possible likelihood, the disclosure rate was only 19%, compared to disclosure rates of 83% for the moderate to high likelihood cases and 75% of cases with abnormal medical findings seen as indicative of abuse (e.g., abnormal anal or genital findings). Elliott and Briere (1994) examined the case records of 399 8- to 15-year-olds who were seen at a child sexual assault assessment center. Overall, 57% of the 399 cases disclosed abuse, with 20 of these children later recanting. When only children who were in the "abused" category were included in the calculation, the rate of disclosure increased to 84%. It is interesting to compare the profiles of these children to the 20% of the sample who were categorized as "unclear". The latter sample all made noncredible disclosures or noncredible denials of abuse. These children classified as unclear were more likely to be referred by a mandated reporter because of a suspicion of abuse, more likely to be male, and more likely to exhibit more sexual acting out behavior.

Returning to Table 2.2, studies that include cases without providing information on their diagnostic certainty (in ascending order Gordon & Jaudes, 1996; Stroud et al., 2000; Gries et al., 1996) yield disclosure rates (61%–74%) that are lower than those of the studies just discussed. In these studies, there is no other evidence to confirm the abuse status of these children, and hence the disclosure rates of corroborated abuse cases are not ascertainable from the data.

Table 2.2 shows that the lowest rates of disclosure are provided by Sorenson and Snow (1991) and Gonzalez, Waterman, Kelly, McCord, and Oliveri (1993). Based on our analysis of the cases included in these studies, we conclude that these low rates reflect the unreliable diagnoses of sexual abuse in these two studies. Because the Sorenson and Snow study is most frequently cited as supporting the notion that sexually abused children deny and recant (see Table 2.2 column 6), it is important to carefully review this study and the characteristics of the sample.
Sorenson and Snow (1991) selected 116 cases of “confirmed” CSA from a larger sample of 633 children who were involved in child sexual abuse allegations from 1985 to 1989. Sorenson and Snow reported that 72% of children denied abuse when first questioned by either a parent or an investigative interviewer; 78% moved into a “tentative disclosure” stage with partial, vague, or vacillating disclosures of sexual abuse. Eventually, 96% of children made an active disclosure that involved detailed, coherent, first-person descriptions of the abuse.

Although Sorenson and Snow’s data often are cited as supporting the notion that children commonly deny and recant abuse allegations, there is serious reason to suspect that their findings are an artifact of their therapeutic practices. Sorenson and Snow’s declared beliefs and practices that took place in the late 1980’s parallel those that we now know run a high risk of producing erroneous, suggestive reports from children (see London et al., 2005, for further discussion of Sorenson & Snow’s data). Perhaps the major concern about this study is the fact that Sorenson and Snow assessed and treated a significant number of children for ritualistic childhood abuse which involved allegations of repetitive, bizarre, sexual, physical, and psychological abuse of children that includes supernatural and/or religious activities (Snow & Sorenson, 1990). It appears that a number of such children were subjects in Sorenson & Snow’s 1991 study (see London et al., 2005 for further discussion). The problem with the inclusion of these types of cases into studies of disclosure patterns is that there is no evidence to support the once popular belief that ritualistic sexual abuse is common and further that the large proportion of reported cases of ritualistic abuse can be accounted for by the practices of a small minority of clinicians (see Bottoms, Shaver & Goodman, 1996; Goodman, Qin, Bottoms, & Shaver, 1995; Lanning, 1991; Nathan & Snedekor, 1995). Because Sorenson and Snow diagnosed so many “ritually abused” children in their practice, this, by inference, leads to the possibility that these children’s allegations were a product of the practices and beliefs of these clinicians.

Given the nature of the “validated” cases in the Sorenson and Snow sample, as well as their use of apparently biased and suggestive interviewing/therapeutic techniques, the results of the study are uninterpretable. The patterns of disclosure may merely be characteristic of children who come to make false allegations as a result of suggestion. This would explain why these children originally denied having been abused (because they were telling the truth), why they eventually disclosed (because they were pressured into making allegations), and why they recanted (they wanted to restate the truth).

The Gonzalez et al. (1993) study suffers from many of the same problems. These authors examined the disclosure and recantation patterns of 63 children in therapy for sexual and ritualistic abuse in daycare. Gonzalez et al.’s source of data was the therapists’ retrospective accounts of the reports made by their patients. They found that within the first 4 weeks of therapy, 76% of the children had made vague disclosures (“bad things had happened”); by 8 weeks, 45% of the children had disclosed highly specific terrorizing acts (killing of adults, children, and animals); and by 20 weeks, 43% of the children had reported aspects of ritualistic abuse (organized cults). However, for the same reasons that apply to the Snow and Sorenson article, the findings of this study are scientifically problematic. First, the children in this study were from the McMartin Preschool case and other cases that arose in the community at the same time. The allegations in this case, which involved claims of ritualistic abuse, arose after multiple highly suggestive interviews with evaluators and therapists (see Nathan & Snedekor, 1995). At the time of their study, children had been in therapy on average for over one year. There was no physical or corroborative evidence of abuse and the charges in these cases were eventually all dropped. The interviewing methods used by children’s therapists and evaluators have been documented elsewhere (e.g., Garven, Wood, Malpass, & Shaw, 1998), and the scientific evidence now shows that these methods can produce erroneous reports when used in interviews with children.

Finally, the results of the Bybee and Mowbray study (1993) may be open to the same criticism as detailed above. The subjects in this study were all involved in a Michigan daycare case that involved multiple perpetrators. The case eventually resulted in only one conviction, which was overturned on appeal. Compared to the other studies in table 2.2, disclosure rates were quite low: 58% of the 106 children disclosed abuse.

In sum, the three studies with the lowest disclosure rates (Bybee & Mowbray, 1993; Gonzalez et al., 1993; Sorenson & Snow, 1991) suffer some serious methodological difficulties. There is reason to be concerned that the patterns of disclosures made by children in the Gonzalez et al. and Sorenson and Snow studies may represent those of children who make false disclosures as a result of suggestive interviewing practices.

Representativeness of Selected Sample. Some studies reported data on samples specifically selected because the children had not previously disclosed sexual abuse. Such studies that focus on children who had not disclosed abuse during an initial interview do not provide a representative view of the disclosure patterns during forensic interviews; rather, these studies merely reveal the disclosure rates of children who have previously denied abuse. Thus the studies with this type of design provide information on the degree to which deniers disclose sexual abuse with repeated interviewing. Three studies in table 2.2 (Carnes, Nelson-Gardell, Wilson, & Orgassa, 2001; B. Wood et al., 1996; and Lawson & Chaffin, 1992) involved such sampling procedures.

The Lawson and Chaffin (1992) study will be used to illustrate the point because this sample included children with medical substantiations of sexual abuse; thus, the degree of abuse certainty is high in this study. From a sample of over 800 children who tested positive for a sexually transmitted disease (STD) at a large pediatric hospital, cases that met the following criteria were selected: the presenting complaint was solely physical, there was no prior dis-
which children were brought in either because of a suspicion or disclosure of abuse. Rather, in the Lawson and Chaffin study, children were selected because the larger sample had already disclosed abuse, this subgroup of 28 children is based upon a very different population than sampled in other studies, in which children were brought in either because of a suspicion or disclosure of abuse. Because it is not known how many of the 800 children in the larger sample had already disclosed abuse, this subgroup of 28 children with no prior disclosure might comprise an unusual sample; that is, they may represent the small hard core of children who do not disclose abuse when directly asked. If they are a small minority, then these results are not generalizable to the entire population of children with STDs. In addition, it should be remembered that very few children who have been sexually abused have any physical symptoms or STDs and thus this sample again is not representative of the CSA population. There is a second factor that is important to consider. In this study, when the children were called back to the hospital, their mothers were first informed of the STD diagnosis of their children. Children whose mothers accepted the possibility of abuse (the parents were labeled as supportive) were more likely to disclose (63% of this group disclosed) than children whose parents were not supportive and did not believe their child had been abused (only 17% of these children disclosed). Thus, differences among studies might reflect the role of parental support, which might be quite low when parents are first confronted with the fact that their children were abused, as was the case in the Lawson and Chaffin study (also see Elliott & Briere, 1994).4

Two studies reported disclosure rates for children who had undergone forensic interviews but had not disclosed. B. Wood et al. (1996) examined 55 videotaped interviews of children referred by CPS to a multidisciplinary assessment center. All 55 children had been interviewed previously by CPS or law enforcement officials but had not disclosed. Hence, the disclosure rate of

3 In a follow up study, Chaffin, Lawson, Selby, and Wherry (1997) located 5 of these 28 subjects. Though not specifically asked about their children's disclosure, four out of five mothers spontaneously mentioned that the child disclosed CSA subsequent to this initial evaluation.

4 Although many mothers do not support their children's disclosures of abuse, many are supportive, especially if the defendant is an estranged husband or partner rather than a current one. In many studies, the support rate is between 50% and 85% (see Lyons, 1999, notes 238-39 for details).

2. DISCLOSURE OF CHILD SEXUAL ABUSE

49% in table 2.2 is based on the percentage of children disclosing out of these 55 children who had not previously disclosed. The study does not report on the number of children seen (and disclosing) from the general population of children presenting for CSA concerns. Finally, Carnes et al. (2001) reported that their sample of children undergoing extended CSA assessment because of failure to initially disclose represented approximately 10-15% of the total population presenting for assessment to the clinics in their study. Thus, the results of this study merely indicate the response patterns of children who had previously failed to disclose abuse. Furthermore, although this is not the case for the Lawson and Chaffin study, there are no data on the number of children in both the B. Wood and the Carnes et al. study who met acceptable criteria for diagnosis of sexual abuse. Thus, children who did or did not disclose with extra assessment may or may not have been abused.

Recantations. Eight studies have examined the frequency of recantations of abuse reports (see table 2.2 column 5). All but one of these studies also included information on disclosure rates. For the one exception, Faller and Henry (2000) examined the recantation rates of children who testified at trial about their sexual abuse. Thus, all these children had made prior disclosures that were considered credible by the prosecutors' office.

Before reviewing the findings reported in the studies, it is important to point out that there could be two different interpretations of recantation. The first is that the child is withdrawing a true statement of abuse. The second is that the child is withdrawing a false allegation of abuse. The relevant evidence is not available in most studies to determine the child's underlying motivation for recantation.

The recantation rates of the studies listed in table 2.2 range from 4% to 27%. Our analysis of the variability is very similar to that just carried out with respect to the denial rates; namely, the highest rates of recantation are obtained for studies that have the least certain diagnoses of sexual abuse. The two studies with the highest recantation rates were those of Gonzalez et al. (1993) and Sorenson and Snow (1991) in which the recantation rates were 27% and 22%, respectively. Because of concerns about the actual abuse status of the children in these studies, one might argue that recantation rates reflect the number of children who attempt to discredit their own previous false allegations by setting the record straight.5 (If this is indeed the case, then the Gonzalez et al. (1993) and Sorenson and Snow (1991) data suggest that these attempts appeared to have failed, however, as most of the children reinstated their earlier accusations.)

5 There were also issues concerning the validity of the sexually abused sample in Bybee and Mowbray (1993) who reported a much lower recantation rate of 11%. Thus, recantation rates do not necessarily have to be high for doubtful cases.
The lowest rates of recantation are obtained for samples that have the most certain diagnoses of sexual abuse [4% (Bradley & Wood, 1996); 6.5% (Faller & Henry, 2000; 9% of cases classified as abused, Elliott & Briere, 1994)]. The slightly higher rate of 15% reported by Gries et al. (1996) is difficult to interpret because there is no information on the number of children who were diagnosed as clear or unclear cases of abuse.

Although our analysis shows that some children recant sexual abuse, the results of this analysis show that recantation is uncommon among high probability sexually abused children. In fact, it shows just the opposite: When considering cases for which there is a high probability of abuse, a small percentage of children in these studies recant.

CONCLUSIONS

We began this paper by describing the widespread belief that sexually abused children do not readily disclose their abuse and that even when they disclose, they commonly recant such disclosures. Given the frequency with which these claims are made in the literature (as well as in proffered expert testimony), we sought to examine their scientific basis. A review of retrospective studies showed that most adults with histories of CSA recall that they never told anyone about the abuse during childhood. This pattern confirms the view that failure to disclose is common among sexually abused children. However, these findings do not address the issue of whether children will deny abuse or recant their disclosures once they have come to the attention of forensic interviewers. In order to examine these issues, it is necessary to study how sexually abused children disclose abuse when asked directly. Because it is difficult if not impossible to obtain accurate information if the first disclosure is made outside a formal setting (e.g., to a parent, friend, or teacher), we have to rely on studies in which children are questioned in formal investigative interviews. We identified 17 studies that contained relevant data and found, when focusing on children with high probabilities of abuse history, most children do disclose abuse within the first or second interview and that only a small minority of children recant their abuse. Even if analyses were broadened to include children with less certain CSA diagnoses, in all but two studies the majority of children disclosed abuse when directly asked, and only a small fraction of them recanted their previous disclosures.

One of the basic problems in interpreting the literature on children's disclosure of sexual abuse involves the issue of the validity of the diagnosis of sexual abuse. As we stated above, in many of the cited studies, classification of abuse was often based in part upon children's disclosures; consequently, the conclusion that abused children do disclose abuse during formal interviews may be circular. However, there is some evidence that when children are classified as abused based on medical evidence or on nonchild factors (confession, material evidence) that most of these children do disclose abuse. In the Elliot and Briere (1994) study, for example, 118 of the 399 children had positive physical findings: 84% of these children at one point disclosed abuse (although 20, or 17%, of these 118 children later recanted their abuse reports). In Dubowitz et al. (1992), 28 of the 132 children had medical examination findings considered indicative of abuse; 75% of this subsample disclosed abuse. Finally, in the Gordon and Jaudes (1996) study, 78% of the children with medical evidence disclosed abuse. Before leaving this topic, it is important to point out that the disclosure rates for the medical subsamples of these studies were very close to the overall disclosure rates for the entire sample. Nonetheless, it must be noted that medical evidence itself is not always a reliable benchmark (e.g., genital redness may be due to causes other than abuse), which raises the possibility that an unknown number of children with medical findings considered indicative of abuse actually were not abused.

The chapter by Lyon in this volume explicitly deals with methodological problems of calculating reliable denial and recantation rates. His solution is to select samples of children with confirmed sexual abuse history (children with medical evidence) where there has been no prior suspicion of sexual abuse; according to this argument, disclosure rates will be untainted by "suspicion biases" that tend to inflate disclosure rates. This solution, however, must be considered in terms of the generalizability obtained from such findings and the degree to which they can be applied to real world issues. We argue that the results of studies of disclosure patterns of children with medical histories of sexual abuse where there has been no prior suspicion or disclosure do not bear on the most important issue that faces professionals in the forensic arena. Specifically, if a child is brought for CSA assessment because of concern (and probable prior questioning), how likely will it be that this child provides a credible disclosure or a credible denial? In other words, the behavior of the highly selected samples proposed by Lyon does not pertain to the types of cases that require expert testimony or clinical assessment; namely, what are the disclosure patterns among children who come to the attention of forensic interviewers? We hope that our discussion makes clear some of the very difficult methodological and conceptual problems that are inherent to the study of disclosure patterns of sexually abused children.

In most of the studies cited in this paper, there was little if any detailed information about how the children were interviewed and the degree to which standardized and validated protocols were used. One is unable to glean from the literature whether, for example, disclosure rates might be related to the type of interviewing or whether the individual underwent psychological therapy. In future studies it would be important to compare the disclosure patterns of children interviewed with contemporary standardized interviews (e.g., Sternberg, Lamb, Esplin, Orbach, & Hershkowitz, 2002). If these protocols do in fact optimize the elicitation of reliable statements from children, then the disclosure patterns produced by these instruments would provide the most reliable data to test various hypotheses about the disclosure patterns of sexually
abused children and to explore the factors that distinguish disclosers from nondisclosers.

Although there are a number of studies to address issues of patterns of disclosure, several overriding issues remain to be addressed. Specifically, although the data clearly demonstrate that children involved in high probability abuse cases do disclose and do not later recant when interviewed, there do exist a minority of children who fit the behavioral pattern of denials and recantations that is put forth in CSAA models. The outstanding issues thus focus on the characteristics of these children and whether these children fit the psychological profiles of the CSAA model (e.g., factors related to the characteristics of the abuse, the perpetrator, and the victim). In terms of abuse and perpetrator characteristics, further data are needed to examine whether factors such as use of threats or relationship to perpetrator are associated with abuse disclosure. In terms of victim characteristics, there needs to be a greater focus on developmental differences in disclosure patterns. In many of the studies we reviewed, children ranged in age from early preschool to late adolescence. Clearly, it is not very informative to provide group means when age ranges are so great. Studies are needed to examine potential developmental trends in loyalty to family and peers, reactions to fear, need for privacy, choice of confidants, and then to relate these factors to disclosure patterns in children of various ages. Another important area concerns the potential role of threats. In this future research venture, it is crucial to distinguish threats that were used to coerce the child into molestation from threats that were used to secure the child’s silence.

The status of the scientific findings of disclosure patterns is of importance not only for diagnostic and assessment purposes but also for issues regarding interviewing of children. As mentioned above, the CSAA model has provided a basis for experts to advocate that when children deny abuse when directly asked, they should be questioned further and even should be questioned suggestively (e.g., Carnes, 2000; Faller & Toth, 1995; Macfarlane & Krebs, 1986). In order for such practices to be empirically ground, it is important to demonstrate first that children will commonly deny abuse when questioned (thus calling forth the need for special strategies), and second that the use of special strategies will lead to accurate reports of abuse. The findings presented in this paper address the first issue only. The second issue has been addressed by a multitude of researchers in the past decade (e.g., Ceci & Bruck, 1995; Ghetti & Goodman, 2001; Poole & Lindsay, 2002; J. Wood & Garven, 2000). Professionals need to be aware that although suggestive techniques might produce true abuse reports from otherwise silent children, these same techniques, especially when used by biased interviewers, entail a risk of producing false allegations (e.g., Bruck, Ceci, & Hembrooke, 2002; Poole & Lamb, 1998). Part of the bias may include the notion that when children deny abuse they must be pursued until they disclose their abuse; however, as we demonstrated in this chapter, the need for suggestive interviewing is probably overestimated because denial of sexual abuse to professionals is not as rampant as previously suspected. At least among the subsample of sexually abused children to undergo forensic evaluation, our analysis indicates that when children who have been abused are questioned in formal settings, they will usually tell, obviating the need for suggestive questioning strategies. We believe that child abuse professionals should be aware of this information and incorporate it into their clinical practice as well as into their expert courtroom testimony. If the field is to be guided by scientifically validated concepts, then it must be predicated on the literature that comes closest to the standards of science.

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REFERENCES


