

May 20, 2014

35. Lyon, T. D. (2014). Interviewing children. *Annual Review of Law and Social Science*, 10, 73-89.

Thomas D. Lyon, *University of Southern California*



# Interviewing Children

Thomas D. Lyon

Gould School of Law and Department of Psychology, University of Southern California, University Park, Los Angeles, California 90089-0071; email: tlyon@law.usc.edu

Annu. Rev. Law Soc. Sci. 2014. 10:73–89

First published online as a Review in Advance on September 3, 2014

The *Annual Review of Law and Social Science* is online at [lawsocsci.annualreviews.org](http://lawsocsci.annualreviews.org)

This article's doi:  
10.1146/annurev-lawsocsci-110413-030913

Copyright © 2014 by Annual Reviews.  
All rights reserved

## Keywords

child witnesses, developmental psychology, suggestibility

## Abstract

This article reviews best practice for interviewing child witnesses. In most officially recognized abuse cases, the child previously disclosed abuse, making it possible to elicit disclosures without asking closed-ended questions. Interviewers nevertheless overuse closed-ended questions, which lead to short unelaborated responses, privilege the limited perspective of the interviewer, maximize the potential for linguistic difficulties, increase children's tendency to guess, and risk response biases. Interviewers can avoid closed-ended questions through narrative practice, in which interviewers ask children to narrate a recent innocuous event before introducing the abuse topic; cued invitations, in which interviewers repeat details reported by children and ask for elaboration; open-ended wh- questions; and interview instructions, including asking children to promise to tell the truth. A remaining challenge is how to elicit disclosures from reluctant children. Better understanding of the dynamics of abuse disclosure and optimal interviewing strategies can assist the legal system in assessing the veracity of children's reports.

## INTRODUCTION

Psychological research examining children's abilities as witnesses has undergone a revolution over the past 25 years. Researchers were originally inspired by extensive media coverage in the 1980s and 1990s of a series of criminal court cases in which preschool children accused day care providers and teachers of bizarre acts of sexual abuse (Ceci & Bruck 1995). Examination of the investigative interviews in these cases typically revealed highly suggestive questioning. Researchers mimicked the coercive techniques with preschool children and demonstrated high rates of false responding and, in the extreme cases, the formation of false memories (Bruck & Ceci 2009).

Interviewers attempted to justify their suggestive methods by arguing that children were afraid to reveal or that they needed support because of their cognitive immaturity. The difficulty with the interviewers' reasoning was that their success in eliciting disclosures did not enable them to determine if they were uncovering true abuse or creating false reports. Also of concern was the fact that children were informally questioned by parents who had been led to believe that abuse had occurred and that children were exposed to information through other sources as well, such as other children and the media (Ceci & Bruck 1995).

For many years, research was dominated by demonstrations of the dangers of suggestibility. Researchers identified a number of sources of suggestibility: repeated interviews in which children were told that the false events in fact occurred (Bruck et al. 1995, 2002); encouragement that children visualize the false events (Ceci et al. 1994); false disparagement of the alleged perpetrator, so that children would form negative stereotypes of the accused (Leichtman & Ceci 1995, Lepore & SESCO 1994); positive and negative reinforcement of false responses (Garven et al. 2000); and exposure to adults recalling false events (Principe et al. 2006). Much of the research focused on preschoolers, the most vulnerable group and the age of the children in the high-profile day care cases.

The problem with the suggestibility research was that it provided worst-case scenarios for children's abilities as witnesses. There are large age differences in suggestibility, even within the preschool years (Goodman & Aman 1990, Leichtman & Ceci 1995). Children are less vulnerable to suggestions that negative events occurred (Ceci et al. 1994), particularly events that they find embarrassing (Saywitz et al. 1991) or incriminating (Billings et al. 2007). Moreover, children are protective of adults with whom they are close (Tye et al. 1999).

Research examining typical investigative interviews found that many of the most suggestive techniques are uncommon in forensic interviews (Schreiber 2000, Schreiber et al. 2006, Warren et al. 1996). Rather, the primary problem with most interviews is that they contain predominantly closed-ended questions, which are not highly leading but elicit less-complete and less-accurate reports (Lamb et al. 2008). As a result, the research informed interviewers about highly suggestive techniques that they should avoid, but little constructive advice regarding techniques that they should pursue.

More recently, however, another line of research has emerged that provides positive advice for maximizing children's productivity. Researchers have shown that if interviewers adequately build rapport with children and provide children guidance regarding the purpose and method of an interview, interviews can be enormously productive without suggestion. Interviewers can now find guidance in the National Institute of Child Health and Human Development (NICHD) protocol, which has been the subject of dozens of studies examining well over 30,000 children (Lamb et al. 2008). The key elements of the protocol have been endorsed by several recent practice guides (APSAC 2012, Walker 2013), and I have created a simplified version of the protocol to facilitate its use in the field (Lyon 2005; see also Lamb 2014) (see Sidebar, Ten-Step Investigative Interview).

## TEN-STEP INVESTIGATIVE INTERVIEW

### 1–5. Interview instructions

- “It’s OK to say I don’t know, but tell me if you do know” (with feedback).
- “It’s OK to say you don’t know what I mean” (with feedback).
- “You can tell me when I’m wrong” (with feedback).
- “I don’t know what’s happened to you and won’t be able to tell you the answer to my questions.”
- “Do you promise that you will tell the truth?”

### 6. Practice narratives

- “Tell me about things you like to do.”
- “Tell me about things you don’t like to do.”
- “Tell me everything that happened on your last birthday.”
- Follow-up prompts with “tell me more about [child’s words]” and “you said [child’s words]; what happened next?”

### 7. Allegation question

- “Tell me why I came to talk to you.”
- If no disclosure, ask questions about prior disclosure or abuse concerns.

### 8. Allegation follow-up

- “You said that [allegation]. Tell me everything that happened.”

### 9. Additional follow-up

- “Tell me more about [child’s words].”
- “You said [child’s words]; what happened next?”
- Open-ended wh- questions.
- Avoid yes/no and forced-choice questions.

### 10. Multiple incidents

- “Did [allegation] happen one time or more than one time?”
- “Tell me everything that happened the time you remember the most.”
- “Tell me everything that happened the first time.”
- “Tell me everything that happened the last time.”

Source: Lyon 2005; adapted from the NICHD structured protocol (Lamb et al. 2008)

This article reviews the state of the art with respect to interviewing child witnesses. Because children are most likely to appear as witnesses when they are the victims of sexual abuse (Goodman et al. 1999), that topic is emphasized, but it is important to note that the interview techniques are effective with child witnesses of all kinds, including children who are suspected of having experienced physical abuse or having witnessed violence. First, I discuss the evidence that sexually abused children are reluctant to disclose abuse. Reluctance helps us to understand secrecy and delays in disclosure. Somewhat paradoxically, reluctance ensures that most children who come forward with their abuse are willing to disclose and, therefore, provide an opportunity to elicit a complete and compelling disclosure. Second, I explain why closed-ended questions—questions that can be answered with a single word or short phrase—are a poor response to children who appear reticent about abuse. Third, I discuss how interviewers can move away from closed-ended questions and toward open-ended questions without sacrificing detail or specificity. I also discuss the utility of interview instructions in improving children’s performance but note continuing difficulties in overcoming reluctance among reticent children. Fourth, I discuss how the legal system can best respond to the current state of knowledge regarding child interviewing.

## NONDISCLOSURE OF ABUSE AND ITS IMPLICATIONS FOR INTERVIEWING

Large-scale nationally representative surveys of adults reveal that most respondents who disclose sexual abuse to surveyors do not recall disclosing the abuse to anyone as a child, and only 10% report that their abuse was ever reported to authorities (see review in Lyon 2009). These surveys provide some insight into the reasons for nondisclosure. Four of the five surveys that assessed the effects of the child–perpetrator relationship found that the closer the relationship, the less likely it is that disclosure occurred (Anderson et al. 1993, Kogan 2004, Smith et al. 2000, Wyatt & Newcomb 1990; but see Fleming 1997). Two surveys asked respondents what deterred disclosure (Anderson et al. 1993, Fleming 1997), and the most common reasons included embarrassment, shame, and expectations that the disclosure recipient would blame the child or fail to believe the allegation. Respondents also mentioned wanting to protect or fearing the perpetrator, wanting to avoid upsetting others, and not feeling bothered by the abuse.

Surveys are imperfect guides to abuse victims' willingness to disclose, because of survey reluctance: Surveyors have found that respondents only inconsistently report abuse when questioned over time (Fergusson et al. 2000), and the fewer the number of questions, the less likely respondents disclose abuse (Wilsnack et al. 2002). If surveys are overlooking victims because of their reluctance to disclose, they will exaggerate the percentage of victims who disclosed their abuse in childhood, because survey respondents who fail to disclose abuse to the surveyor are likely to be victims who also failed to disclose as children (Lyon 2009). Surveys of children are likely affected even more by reluctance to disclose; this explains why prevalence estimates are often lower in childhood surveys than in adult surveys (underreporting is a larger problem in childhood surveys) (Finkelhor 1994, Finkelhor & Dzuiba-Leatherman 1994) and why official recognition of cases are sometimes higher (childhood surveys disproportionately identify cases that had already come to light) (Boney-McCoy & Finkelhor 1995). In sum, surveys reveal high rates of nonreporting, and the rates are probably even higher, because the most reluctant victims fail to disclose to anyone.

Of course, it is also possible that surveys might exaggerate both the prevalence of abuse and the reluctance of abuse victims to disclose. But it is unlikely that a large percentage of survey respondents are falsely reporting abuse; as few cases were known to authorities, coercive investigative tactics could not be blamed for their reports, and only a very small percentage report having recovered memories of the abuse with the help of a therapist (Wilsnack et al. 2002). It is possible that some respondents did in fact disclose at some point but have forgotten doing so (London et al. 2008), but this possibility has not been quantified, and it may be countered by the fact that many respondents report disclosures that were vague and probably misunderstood (Ullman & Filipas 2005). Finally, the statistics on official intervention must be qualified by the fact that about a third of abuse victims who are subject to official intervention fail to report it when surveyed as adults (Hardt & Rutter 2004), and there is evidence this is attributable to reluctance to report (Femina et al. 1990). But if adults are reluctant to disclose officially recognized cases, they are likely even more reluctant to disclose cases that never came to the attention of the authorities. For that reason, the 10% figure for abuse known to authorities is probably a fair estimate.

The research examining abuse from the perspective of perpetrators also helps explain nondisclosure and reluctance. The modus operandi by which perpetrators commit abuse contributes to secrecy. Perpetrators often choose children on the basis of their vulnerability and the likelihood that they will comply and keep the abuse a secret (Beauregard et al. 2007, Conte et al. 1989). Perpetrators describe spending time with the child (Christiansen & Blake 1990, Smallbone & Wortley 2001) and giving the child gifts (Budin & Johnson 1989, Christiansen & Blake 1990). When the perpetrator is the child's parent (or parent figure), the extra attention paid to the child

not only has the effect of making the child feel special but also isolates the child and the offending parent from other family members (Christiansen & Blake 1990).

Perpetrators commonly desensitize the child to sexual touch through progressively more invasive sexual touch and talk (Kaufman et al. 1998). The perpetrator can test the child's willingness to acquiesce (Christiansen & Blake 1990) and the likelihood that the child will disclose (Kaufman et al. 1998). If the child discloses at an early stage of the process, the perpetrator can claim that the touch was merely affectionate, accidental, or otherwise nonsexual (Lang & Frenzel 1988). As the abuse progresses, the perpetrator can assure the child of the harmlessness and morality of his actions (Christiansen & Blake 1990). In part because of careful victim selection and preparation, initiation of overtly sexual acts need not involve violent force. Moreover, much of the persuasive power comes from the perpetrator's status as an authoritative adult (Kaufman et al. 1998).

Once the abuse has begun, perpetrators typically make an effort to keep the abuse a secret. The perpetrator may overtly threaten the child with harm (Smith & Elstein 1993), but more often the threats concern harms to the perpetrator (whom the child wants to protect) (Smallbone & Wortley 2001) and harms to the family if the abuse is disclosed (Lang & Frenzel 1988).

Nondisclosure can also be understood from the child's perspective. Among the youngest children, there is a lack of awareness that the abuse is wrong and difficulty in describing sexual behavior (Cederborg et al. 2007). Children are likely to feel complicit in sexual abuse and hence will often experience self-blame (Quas et al. 2003). The more manipulative forms of abuse are likely to increase children's perceptions that they are partially responsible for the abuse. If the child fails to resist, she is more likely to believe that she consented. If she delays in reporting, she is more likely to believe that subsequent acts of abuse were consensual, or at least that her failure to disclose was responsible for their reoccurrence. Studies examining children who ultimately disclosed their abuse support the contention that fears of negative consequences to the perpetrator, the self, and others close to the child deter immediate disclosure (Goodman-Brown et al. 2003, Hershkowitz et al. 2007, Malloy et al. 2011). Moreover, delays in disclosing are greater when the perpetrator is close to the child (London et al. 2008), when the perpetrator groomed the child (Hershkowitz 2006, Sas & Cunningham 1995), and when the child anticipated that the mother would be unsupportive post disclosure (Hershkowitz et al. 2007).

Developmental research examining children's false denials of wrongdoing also helps to explain nondisclosure, particularly of abuse that occurs within a family. Children begin to lie by two years of age, and their first lies predominantly involve denials of transgressions (Talwar & Crossman 2012). In the lab, children's tendency to lie about committing minor transgressions quickly increases from two to four years of age (Evans & Lee 2013, Talwar et al. 2002). Children are also willing to lie to cover for others' transgressions (Talwar et al. 2004) and those in which they are jointly implicated (Lyon et al. 2008), and are more likely to lie for a parent than a stranger (Tye et al. 1999). By four years of age, children recognize that they are more likely to lie for parents than for strangers, and by six years of age, they endorse this difference as a norm (Lyon et al. 2010). By six years of age, children recognize that parents are less likely to believe their children when they accuse another parent (rather than a stranger) of wrongdoing, and by eight years of age, children recognize that parents are less likely to contact authorities when another parent has harmed the child (Malloy et al. 2014). Hence, quite early in life, children learn that when bad things happen in the family, they stay in the family.

The literature thus supports two propositions: Sexual abuse is difficult to disclose, and officially recognized cases of sexual abuse constitute only a small percentage of child sexual abuse. These propositions enable us to understand the fact that high percentages of substantiated cases of sexual abuse involve children who disclose their abuse (London et al. 2008). Because children are not routinely screened for sexual abuse, sexual abuse cases usually come to the attention of the

authorities because of a disclosure (Heger et al. 2002). Because other evidence of abuse is typically lacking (e.g., medical evidence, eyewitnesses, or confessions by the perpetrator), sexual abuse cases are substantiated primarily by a disclosure (Haskett et al. 1995). Hence, if a child does not disclose abuse, he or she is unlikely to be suspected of being a victim and unlikely to be substantiated as a victim. It is therefore unsurprising that the disclosure rates of substantiated cases of sexual abuse are often close to 100%.

The high rate of disclosures of sexual abuse among substantiated cases does not mean that sexually abused children are forthcoming about abuse and that nondisclosure of abuse under questioning is convincing evidence against abuse. Rather, investigators are questioning children who have typically disclosed abuse before, and are substantiating cases when children are willing to disclose abuse again. Children who have disclosed abuse are nevertheless susceptible to pressures to recant, and when they are young, have disclosed against a member of the household, and have a nonsupportive caretaker, they are very likely to recant (Malloy et al. 2007). Moreover, children who are questioned about abuse for suspicions other than disclosure are likely to initially deny abuse. For example, a review of several decades of research examining disclosure rates among children with gonorrhea, most of whom had been diagnosed before ever being questioned about sexual abuse, found that less than half of the children disclosed sexual abuse when first questioned (Lyon 2007). Similarly low rates of initial disclosure have been found in studies examining cases in which evidence other than disclosure led to both the suspicion and substantiation of abuse (Muram et al. 1991, Sjöberg & Lindblad 2002).

Recognizing that most children who disclose abuse have disclosed abuse before, the authors of the leading protocol for interviewing children, the NICHD protocol, recommend that interviewers transition to disclosure by initially asking questions that do not directly mention abuse (Lamb et al. 2008). For example, the protocol begins with the statement “tell me why you came to speak with me,” which elicits disclosures in a majority of children who ultimately disclose abuse (Sternberg et al. 2001). If the initial question does not produce a disclosure, the protocol then recommends that the interviewer refer obliquely to prior disclosures (e.g., “I heard you talked to a teacher. Tell me what you talked about.”) before asking about anything explicitly “bad” or “wrong.” At the same time, proponents of the NICHD protocol approach emphasize that a substantial percentage of children for whom there are strong suspicions of abuse (but no prior disclosure) fail to disclose when interviewed using the protocol (Lamb et al. 2013).

In sum, there is substantial evidence that the typical victim of child sexual abuse will not disclose abuse during childhood. Children who disclose their abuse are therefore the tip of an iceberg and are unusually forthcoming about their abuse. And although this review focuses on sexual abuse, similar dynamics operate to deter children from reporting physical abuse and domestic violence (Hershkowitz 2006, Hershkowitz & Elul 1999). Recognizing the dangers of suggestibility, researchers have developed tools for interviewing children who have come forward with their allegations. With respect to children who are reluctant to disclose, research is ongoing, as I discuss below.

## THE PROBLEM WITH CLOSED-ENDED QUESTIONS IN INTERVIEWS

The NICHD protocol (and many other guidelines for interviewing children) emphasizes the need to avoid asking children closed-ended questions, so as to increase productivity and minimize suggestibility. Closed-ended questions are questions that can be answered with a single word or detail. Yes/no questions are clearly closed-ended, as are forced-choice questions (in which one asks the respondent to choose among options using the word *or*). Some types of suggestive questions are also closed-ended. In tag questions, one adds a tag to a declarative statement (e.g., “the car



was red, wasn't it?"), and in negative-term questions, one asks a yes/no question with a negative term (e.g., "wasn't the car red?"). (Questions may also be suggestive not because of their form but because of their presuppositions; for example, asking, "what happened after he shut the door?" would be suggestive if nothing had previously been said about shutting the door.) Wh- questions run along a continuum from open-ended to closed-ended (without clearly defined boundaries). An open-ended wh- question is, "what happened?," whereas a closed-ended wh- question is, "what color was the car?"

Closed-ended questions are ubiquitous in normal conversations (Stivers 2010). They are also the most common sort of question asked of children in forensic interviews (Lamb et al. 2008) and in court (Lyon et al. 2012, Stolzenberg & Lyon 2014). When child interviewers are provided misleading information and left to their own devices, they will predominantly ask yes/no questions about the suggested events (Gilstrap 2004, White et al. 1997).

Unfortunately, reliance on closed-ended questions in interviewing children about abuse raises several problems. First, closed-ended questions lead to simple, unelaborated responses in children. In adult/adult conversations, closed-ended questions are productive because respondents elaborate on their responses. For example, if a coworker asks, "did you have a good trip?," it would be uncooperative to simply answer yes or no. Rather, one interprets the question as, "tell me about your trip." The elaboration on one's response generates content that in turn enables the questioner to ask further questions. By contrast, in adult/child conversations, if a question can be answered with an unelaborated yes or no, then a child is very likely to do so (Stolzenberg & Lyon 2014). In order to keep the conversation going, the questioner must generate additional content on his own.

This raises the second problem with closed-ended questions. If the questioner is generating all the content, then the narrative that emerges reflects the questioner's perspective more than the child's perspective. For example, if one is asking a child about sexual abuse and asking predominantly yes/no questions, then one will ask about aspects of an abusive event with which one is familiar. If something unusual occurred, it is unlikely to be discovered. Moreover, the child's perspective is likely to be overlooked. This will make it more difficult to determine if the child's report is credible, because the report that emerges will look similar to a report that an adult may have suggested to the child.

The third problem with closed-ended questions also stems from the fact that the interviewer is doing all the talking. If most of the words are the interviewer's, then this maximizes the likelihood that the child's limited language abilities will undermine the reliability of the child's report. The child may answer yes or no to a question because the child misunderstands some part of the question. Of course, children sometimes misuse words, and therefore their narratives will contain errors as well. However, when a child spontaneously uses a word incorrectly, one is more likely to detect a problem, because the statement will often appear nonsensical, and the child can be asked to elaborate.

Attempting to avoid all words that might present problems for children is a difficult, indeed nearly impossible, task. For example, children often have limited understanding of terms that are ubiquitous in conversation, such as prepositions (e.g., on, off, in, and under). Interviewers sometimes attempt to test children's understanding of different prepositions by asking them to place various objects in or under other objects, but in addition to taking up precious time, there is no evidence that children's understanding of prepositions in that context applies to their understanding of the words in other contexts (e.g., under a box may be perceived differently than under one's clothing, because one is perceived vertically and the other proximally).

Asking a child if he or she knows what X means is going to exaggerate comprehension, because children will answer yes if the word sounds like a word with which they are familiar (Saywitz et al. 1990). Asking a child to tell you what X means is going to understate comprehension, because



children understand far more than they can explain (Flavell et al. 1985). It is very hard to develop a task that accurately assesses comprehension. We have spent considerable time developing tasks for assessing children's understanding of the words truth and lie, because of courts' insistence that their understanding be tested (Lyon 2011). Despite our best efforts, however, our tasks are still insensitive to some understanding: Children who fail our truth/lie understanding tasks are nevertheless more likely to be honest when asked to promise to tell the truth (Lyon et al. 2008).

Children have deficiencies in comprehension monitoring, which enables one to determine when one understands another's utterance. At a very young age, the very possibility of incomprehension is not understood; recognizing that one doesn't understand something requires insight into the workings of one's mind. At still older ages, children understand less than they realize, because adequate comprehension monitoring requires active self-assessment (Lyons & Ghetti 2011). Furthermore, there are surely motivational barriers to acknowledging that one doesn't understand a statement. As a result, children are likely to attempt to answer even the most incomprehensible questions (Carter et al. 1996, Perry et al. 1995). A fourth problem with closed-ended questions is that children are unlikely to answer "I don't know" and instead will guess when they can (Poole & Lindsay 2001). It is easier to guess in response to a closed-ended question than an open-ended question, because the open-ended question requires the respondent to generate an answer.

The final problem is that children may exhibit response biases: a tendency to respond to certain types of questions in a particular way, regardless of the truth. For example, with respect to yes/no questions, one could exhibit a yes bias, a tendency to always say yes, or a no bias, a tendency to always say no. With respect to forced-choice questions, one could exhibit a tendency to always choose the first option or the last option.

The evidence regarding children's response biases to yes/no questions is mixed. Although some research has found a yes bias among young children (Peterson et al. 1999), other research has found a lack of any bias (Brady et al. 1999). It is likely that the content of the questions influences bias. Children are particularly likely to exhibit a no bias when they are asked about unpleasant content. As noted above, children's first lies are denials of misbehavior. Children are most adept at telling falsehoods when they can answer with reference to their desires rather than reality (Ahern et al. 2011). Relatedly, children exhibit a positivity bias, which reflects their assumption that they and other people are good (Boseovski 2010). Hence, if a young child recognizes that questions reference something negative, and imply misbehavior, then they will be biased to answer no.

Research specifically designed to examine children's response biases has used incomprehensible questions (this reduces the likelihood that content will influence children's responses). Although two-year-olds exhibit a yes bias, three-year-olds show no consistent pattern, and by age four, children exhibit a no bias (Fritzley & Lee 2003, Fritzley et al. 2013). The potential for children to simply say no to a series of yes/no questions about abuse raises the point that the danger of yes/no questions is not simply that false allegations can emerge (which is most likely if the yes/no questions are combined with overtly suggestive influences or if the child does not recognize the negative implications of the suggested behavior), but also that true allegations will be undiscovered because the child will simply answer no.

In order to override any no bias, it is necessary to make the questions more suggestive than simple yes/no questions. So, for example, tag questions make yes/no questions more suggestive by clearly communicating the questioner's expected response (e.g., "he hurt you, didn't he?") (Cassel et al. 1996). Furthermore, as noted above, repetition with positive reinforcement of yes responses increases children's acquiescence (Garven et al. 2000). Whether repetition alone is enough to create false reports is disputed (Lyon 2002); again, content appears to be key, with children unlikely to change their answers to repeated questions when those questions imply wrongdoing (Lyon et al. 2008).

In sum, closed-ended questions reduce the reliability and productivity of children's responses. Because of these limitations, interviewers must be concerned both with creating false allegations and with missing true allegations.

## HOW INTERVIEWERS CAN AVOID ASKING CLOSED-ENDED QUESTIONS

Interviewers questioning children are likely to feel frustrated when they first attempt to ask children open-ended questions. A classic finding in the memory literature is that although recall is more accurate than recognition, it is less complete (Pear & Wyatt 1914). Free recall utilizes open-ended questions (such as, "what happened?"), whereas recognition utilizes yes/no or forced-choice questions. In children, the difference between recall and recognition is accentuated because children's recall is particularly poor and their recognition abilities quite good (Fivush 1993). If one asks a preschool child, "what did you do today?," the most likely response is, "we played."

Moreover, open-ended questions may not elicit specific details that are important to an investigation, for several reasons. First, children are likely to omit details that are forensically important, because they are unaware of their importance (Fivush 1993). For example, a highly relevant detail is whether ejaculation occurred. Children who are unaware of the mechanics of sex, however, may not spontaneously mention this fact. Second, as they mature, children acquire the ability to tell more elaborate and convincing narratives that include, for example, the thoughts and feelings of the protagonist (McCabe & Peterson 1991). They are more likely to omit details that an observer would use to assess their credibility. For example, children disclosing sexual abuse are likely to omit any description of their reactions to abuse (Lamb et al. 1997). Third, if children are motivated to conceal information, they are more likely to do so when asked to use free recall than when asked recognition questions. Hence, when interviewers ask children, "what happened?," they are less likely to elicit a true report of a transgression than if they asked a yes/no question (Pipe & Wilson 1994).

Researchers have identified a number of means for increasing children's productivity in responding to open-ended questions. First, there is the method called narrative practice rapport building. Because children are unaccustomed to providing narrative responses, it is helpful if the interviewer first asks the child to narrate a neutral event by asking open-ended questions. In the field, narrative practice rapport building leads children disclosing sexual abuse to provide a significantly longer initial report before any follow-up questions are necessary (Sternberg et al. 1997). In the lab, the method has been found to increase the accuracy of children's responses (Roberts et al. 2004) and to increase the productivity of open-ended questions (Brown et al. 2013). Although narrative practice rapport building does not appear to increase children's willingness to disclose transgressions, it can increase the productivity of their disclosures when combined with other methods for overcoming reluctance (Lyon et al. 2014). Interviewers must be careful, however, to keep the practice to about five minutes because more lengthy rapport building can fatigue children (Hershkowitz 2009, Roberts et al. 2004).

Second, another effective tool for increasing the productivity of children's free recall is a type of question called a cued invitation. For example, if the child mentions being pushed onto a bed, the interviewer follows up with "you said he pushed you onto the bed" and then adds "tell me more about that" or "what happened next?" Cued invitations have been shown in field studies to elicit a large number of new details per question (Lamb et al. 2008), and lab research has found that they are highly accurate (Brown et al. 2013). Prior research has likely underestimated the potential for eliciting additional free recall from young children, because children were typically asked unelaborated "tell me more" questions, which provided no guidance with respect to the additional details that could be produced (Saywitz et al. 1991).

Third, children can be asked free recall questions keyed to their different sensory experiences. After children are asked to narrate everything that happened, additional details can be elicited by asking children to recall everything they saw and heard about the event (Elischberger & Roebbers 2001, Poole & Lindsay 1995). Fourth, there are nonsuggestive means of increasing the productivity of children's narratives, including vocatives (e.g., the use of the child's name) and back-channel responses (e.g., "uh-huh"; also known as facilitators), in which the interviewer signals that he or she is listening without taking the floor (Hershkowitz 2009).

Fifth, interviewers can supplement children's free recall through the judicious use of wh- questions, particularly open-ended wh- questions. One reason why children's free recall is so deficient is that there are large developmental improvements in children's ability to self-generate cues that enable them to recall information (Bjorklund & Muir 1988). For example, when asked to recall an event, adults naturally ask themselves questions about the context (e.g., "who was there?") in order to remember additional details. Therefore, the interviewer may need to scaffold the child's performance by asking the appropriate specific questions. Furthermore, most yes/no questions can be replaced with less-specific wh- questions. As noted above, children's narratives of abuse often exclude information about their emotional reactions. When questioned specifically about their reactions, children are likely to be asked closed-ended questions, such as, "did it hurt?" By contrast, asking children, "how did you feel?" focuses their attention on their reactions without suggesting information (Lyon et al. 2012), and asking a cued invitation as a follow-up may elicit additional content (Ahern & Lyon 2013). The most effective wh- questions concern actions; children's responses to wh- questions about actions are both most accurate (Peterson et al. 1999) and most productive (Lamb et al. 2003). A number of studies have found that wh- questions, particularly those involving central details of the event, elicit highly accurate information from even young children (Hudson 1990, Peterson & Bell 1996).

## INSTRUCTIONS AS A MEANS OF IMPROVING CHILDREN'S PERFORMANCE

In addition to changing the kinds of questions they ask of children, interviewers can improve children's performance through interview instructions. One purpose of instructions is to provide children guidance on the nature of an investigative interview. Children are accustomed to interacting with adults, such as teachers and parents, who know the answers to their questions. They may be accustomed to answering questions so as to conform to the expectations of the questioner. In an investigative interview, the usual roles are reversed: The child is the expert, and the adult is ignorant of the truth.

Providing children some practice with flagging incomprehensible questions improves their performance (Peters & Nunez 1999, Saywitz et al. 1999). Two studies have found positive effects from warning children that questions might mislead them and then giving permission for them to correct the interviewer (Saywitz & Moan-Hardie 1994, Warren et al. 1991). A number of studies have found that instructing children that "I don't know" answers are acceptable reduces children's errors (Cordón et al. 2005, Endres et al. 1999, Gee et al. 1999, Saywitz & Moan-Hardie 1994, Warren et al. 1991). In order to make the instruction effective, however, it is not enough to merely tell the child that "I don't know" responses are acceptable (Geddie et al. 2000, Memon & Vartoukian 1996, Moston 1987); rather, children should be given examples and feedback. Furthermore, interviewers should reinforce giving an answer when one does know, so children don't overuse the "I don't know" response (Gee et al. 1999, Saywitz & Moan-Hardie 1994).

Informing the child that the interviewer doesn't know the answers to his or her questions also reduces suggestibility (Mulder & Vrij 1996).

There are contexts in which instructions are likely to be less effective. Very young children are likely to be less responsive to instructions because they are less aware of when they don't know the answer to questions and when they don't understand questions. Furthermore, if an interview utilizes a great number of closed-ended or suggestive questions, instructions are likely less effective. Hence, instructions have the greatest utility if combined with moves toward more open-ended questioning.

Researchers have also identified some instructions that can reduce children's reluctance to disclose transgressions. Reassuring children that they will not get in trouble with the interviewer has had positive effects on children (Lyon & Dorado 2008, Lyon et al. 2008), but interviewers must be careful not to specify the suspected transgression, as this can be suggestive (Lyon & Dorado 2008). Eliciting a promise from children to tell the truth has been found to increase children's willingness to disclose self-transgressions (Evans & Lee 2010; Talwar et al. 2002, 2004) and joint transgressions (Lyon & Dorado 2008, Lyon et al. 2008) and to decrease children's willingness to provide a coached false report (Lyon et al. 2008). Most recently, we have found that children are more likely to disclose a transgression if they are told, without any specific details, that the suspect told the interviewer everything that happened and that the suspect wants the child to tell the truth, an approach called the putative confession (Lyon et al. 2014). This instruction must be used with caution, however, lest the interviewer suggest information. In the field, there is preliminary evidence that disclosures of abuse can be facilitated through various types of interviewer support, such as acknowledging the difficulties of the interview, without specifically reinforcing disclosure (Lamb et al. 2013). Much work remains to be done to understand how to overcome nondisclosing children's reluctance without risking suggestibility.

## IMPLICATIONS FOR THE LEGAL SYSTEM

The research reviewed here can assist the legal system in assessing the reliability of children's reports of abuse. A better understanding of the dynamics of abuse disclosure can help fact finders assess the significance of delays, inconsistencies, and recantation in deciding whether to believe that a child was abused. The fact that children who are recognized as abused are disproportionately those who are forthcoming about abuse and therefore nonrepresentative of the abused population teaches us that when a child fails to initially disclose, we should not inevitably conclude that the child's report was the product of suggestion. Just as we examine children's abuse disclosures for possible evidence of adult influence, children's denials may also be the product of pressure from others close to the children.

An understanding of optimal interviewing strategies, which both minimize suggestion and maximize productivity, can also assist legal decision makers. Courts are often in the position of assessing the quality of forensic interviews, including determining whether to admit them into evidence under special exceptions to the hearsay rule for children's complaints of abuse (Myers 2013). In some states, courts may exclude children from testifying if they conclude that pretrial interviewing tainted the child's report (Raeder 2010). Defense attorneys will routinely argue that children's reports are the product of adult influence (Stolzenberg & Lyon 2014). Moreover, the defense will often seek to offer expert testimony on the suggestibility of children and the quality of interviews (Bruck & Ceci 2013).

Unfortunately, the legal system has failed to fully heed the lessons of current knowledge. The law knows how to criticize the interviewing performance of professionals who work outside the

courtroom, but it has been slow to reform how children are questioned inside the courtroom. Prosecutors' questions tend to be closed-ended, leading to unelaborated responses from children (Lyon et al. 2012, Stolzenberg & Lyon 2014), and their questions are often unnecessarily difficult (Evans & Lyon 2012) and as complex as defense attorneys' (Evans et al. 2009). Prosecutors frequently fail to ask children about their reasons for failing to disclose (or why they disclosed when they did), and they do little to teach jurors how abuse perpetrators' behavior induces compliance and silence (Stolzenberg & Lyon 2014).

## CONCLUSION

This review has highlighted the positive advice that psychological research examining child witnesses' performance in the lab and in the field has for child interviewing. There is substantial evidence that the child abuse cases that come to light are disproportionately cases in which children have disclosed and can provide a complete report if questioned effectively. Interviewers can avoid suggesting information by steering clear of the egregious forms of suggestion that have been exposed in high-profile abuse cases, and by moving from closed-ended to open-ended questions. Instructions about the nature of interviews can improve children's performance. Researchers are now developing methods for overcoming reluctance to disclose among children who remain silent about abuse. The findings are of use to the legal community, both when assessing the quality of children's reports and in prescribing optimal methods for questioning children in future cases.

## DISCLOSURE STATEMENT

The author is not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

## ACKNOWLEDGMENTS

Preparation of this article was supported in part by National Institute of Child Health and Human Development Grant HD047290 and National Science Foundation Grant 1228560.

## LITERATURE CITED

- Ahern EC, Lyon TD. 2013. Facilitating maltreated children's use of emotional language. *J. Forensic Soc. Work* 3:176–203
- Ahern EC, Lyon TD, Quas JA. 2011. Young children's emerging ability to make false statements. *Dev. Psychol.* 47:61–66
- Anderson J, Martin J, Mullen P, Romans S, Herbison P. 1993. Prevalence of childhood sexual abuse experiences in a community sample of women. *J. Am. Acad. Child Adolesc. Psychiatry* 32:911–19
- APSAC (Am. Prof. Soc. Abus. Child.). 2012. *Forensic Interviewing in Cases of Suspected Child Abuse*. Chicago: APSAC
- Bauregard E, Rossmo DK, Proulx J. 2007. A descriptive model of the hunting process of serial sex offenders: a rational choice perspective. *J. Fam. Violence* 22:449–63
- Billings FJ, Taylor T, Burns J, Corey DL, Garven S, Wood JM. 2007. Can reinforcement induce children to falsely incriminate themselves? *Law Hum. Behav.* 31:125–39
- Bjorklund DF, Muir JE. 1988. Children's development of free recall memory: remembering on their own. *Ann. Child Dev.* 5:79–123
- Boney-McCoy S, Finkelhor D. 1995. Psychosocial sequelae of violent victimization in a national youth sample. *J. Consult. Clin. Psychol.* 63:726–36

- Boseovski JJ. 2010. Evidence for “rose-colored glasses”: an examination of the positivity bias in young children’s personality judgments. *Child Dev. Perspec.* 4:212–18
- Brady MS, Poole DA, Warren AR, Jones HR. 1999. Young children’s responses to yes-no questions: patterns and problems. *Appl. Dev. Sci.* 3:47–57
- Brown DA, Lamb ME, Lewis C, Pipe ME, Orbach Y, Wolfman M. 2013. The NICHD Investigative Interview Protocol: an analogue study. *J. Exp. Psychol.: Appl.* 19:367–82
- Bruck M, Ceci SJ. 2009. Reliability of child witnesses’ reports. In *Psychological Science in the Courtroom: Consensus and Controversy*, ed. JL Skeem, KS Douglas, SO Lilienfeld, pp. 149–71. New York: Guilford
- Bruck M, Ceci SJ. 2013. Expert testimony in a child sex abuse case: translating memory development research. *Memory* 21:556–65
- Bruck M, Ceci SJ, Francoeur E, Barr R. 1995. “I hardly cried when I got my shot!” Influencing children’s reports about a visit to their pediatrician. *Child Dev.* 66:193–208
- Bruck M, Ceci SJ, Hembrooke H. 2002. The nature of children’s true and false narratives. *Dev. Rev.* 22:520–54
- Budin LE, Johnson CF. 1989. Sex abuse prevention programs: offenders’ attitudes about their efficacy. *Child Abus. Negl.* 13:77–87
- Carter CA, Bottoms BL, Levine M. 1996. Linguistic and socioemotional influences on the accuracy of children’s reports. *Law Hum. Behav.* 20:335–58
- Cassel WS, Roebbers CE, Bjorklund DF. 1996. Developmental patterns of eyewitness responses to repeated and increasingly suggestive questions. *J. Exp. Child Psychol.* 61:116–33
- Ceci SJ, Bruck M. 1995. *Jeopardy in the Courtroom: A Scientific Analysis of Children’s Testimony*. Washington, DC: Am. Psychol. Assoc.
- Ceci SJ, Loftus EF, Leichtman MD, Bruck M. 1994. The possible role of source misattributions in the creation of false beliefs among preschoolers. *Int. J. Clin. Exp. Hypn.* 42:304–20
- Cederborg A-C, Lamb ME, Laurell O. 2007. Delay of disclosure, minimization, and denial when the evidence is unambiguous: a multi-victim case. In *Child Sexual Abuse: Disclosure, Delay, and Denial*, ed. ME Pipe, ME Lamb, Y Orbach, A-C Cederborg, pp. 159–73. Mahwah, NJ: Erlbaum
- Christiansen JR, Blake RH. 1990. The grooming process in father-daughter incest. In *The Incest Perpetrator: A Family Member No One Wants to Treat*, ed. AL Horton, BL Johnson, LM Roundy, D Williams, pp. 88–98. Newbury Park, CA: Sage
- Conte J, Wolf S, Smith T. 1989. What sexual offenders tell us about prevention strategies. *Child Abus. Negl.* 13:293–301
- Cordón IM, Saetermoe CL, Goodman GS. 2005. Facilitating children’s accurate responses: conversational rules and interview style. *Appl. Cogn. Psychol.* 19:249–66
- Elischberger HB, Roebbers CM. 2001. Improving young children’s free narratives about an observed event: the effects of nonspecific verbal prompts. *Int. J. Behav. Dev.* 25:160–66
- Endres J, Poggenpohl C, Erben C. 1999. Repetitions, warnings and video: cognitive and motivational components in preschool children’s suggestibility. *Leg. Criminol. Psychol.* 4:129–46
- Evans AD, Lee K. 2010. Promising to tell the truth makes 8- to 16-year-olds more honest. *Behav. Sci. Law* 28:801–11
- Evans AD, Lee K. 2013. Emergence of lying in very young children. *Dev. Psychol.* 49:1958–63
- Evans AD, Lee K, Lyon TD. 2009. Complex questions asked by defense lawyers but not prosecutors predicts convictions in child abuse trials. *Law Hum. Behav.* 33:258–64
- Evans AD, Lyon TD. 2012. Assessing children’s competency to take the oath in court: the influence of question type on children’s accuracy. *Law Hum. Behav.* 36:195–205
- Femina DD, Yeager CA, Lewis DO. 1990. Child abuse: adolescent records versus adult recall. *Child Abus. Negl.* 14:227–31
- Fergusson DM, Horwood LJ, Woodward LJ. 2000. The stability of child abuse reports: a longitudinal study of the reporting behaviour of young adults. *Psychol. Med.* 30:529–44
- Finkelhor D. 1994. Current information on the scope and nature of child sexual abuse. *Futur. Child.* 4:31–53
- Finkelhor D, Dzuiba-Leatherman J. 1994. Children as victims of violence: a national survey. *Pediatrics* 94:413–20
- Fivush R. 1993. Developmental perspectives on autobiographical recall. In *Child Victims, Child Witnesses: Understanding and Improving Testimony*, ed. GS Goodman, BL Bottoms, pp. 1–24. New York: Guilford



- Flavell JH, Miller PH, Miller SA. 1985. *Cognitive Development*. Englewood Cliffs, NJ: Prentice-Hall
- Fleming JM. 1997. Prevalence of childhood sexual abuse in a community sample of Australian women. *Med. J. Aust.* 166:65–68
- Fritzley VH, Lee K. 2003. Do young children always say yes to yes–no questions? A metadevelopmental study of the affirmation bias. *Child Dev.* 74:1297–313
- Fritzley VH, Lindsay RC, Lee K. 2013. Young children’s response tendencies toward yes–no questions concerning actions. *Child Dev.* 84:711–25
- Garven S, Wood JM, Malpass RS. 2000. Allegations of wrongdoing: the effects of reinforcement on children’s mundane and fantastic claims. *J. Appl. Psychol.* 85:38–49
- Geddie L, Fradin S, Beer J. 2000. Child characteristics which impact accuracy of recall and suggestibility in preschoolers: Is age the best predictor? *Child Abus. Negl.* 24:223–35
- Gee S, Gregory M, Pipe ME. 1999. ‘What colour is your pet dinosaur?’ The impact of pre-interview training and question type on children’s answers. *Leg. Criminol. Psychol.* 4:111–28
- Gilstrap LL. 2004. A missing link in suggestibility research: What is known about the behavior of field interviewers in unstructured interviews with young children? *J. Exp. Psychol.: Appl.* 10:13–24
- Goodman GS, Aman C. 1990. Children’s use of anatomically detailed dolls to recount an event. *Child Dev.* 61:1859–71
- Goodman GS, Quas JA, Bulkley J, Shapiro C. 1999. Innovations for child witnesses: a national survey. *Psychol. Public Policy Law* 5:255–81
- Goodman-Brown TB, Edelstein RS, Goodman GS, Jones DP, Gordon DS. 2003. Why children tell: a model of children’s disclosure of sexual abuse. *Child Abus. Negl.* 27:525–40
- Hardt J, Rutter M. 2004. Validity of adult retrospective reports of adverse childhood experiences: review of the evidence. *J. Child Psychol. Psychiatry* 45:260–73
- Haskett ME, Wayland K, Hutcheson JS, Tavana T. 1995. Substantiation of sexual abuse allegations: factors involved in the decision-making process. *J. Child Sex. Abus.* 4:19–47
- Heger A, Tison L, Velasquez O, Bernier R. 2002. Children referred for possible sexual abuse: medical findings in 2384 children. *Child Abus. Negl.* 26:645–59
- Hershkowitz I. 2006. Delayed disclosure of alleged child abuse victims in Israel. *Am. J. Orthopsychiatr.* 76:444–50
- Hershkowitz I. 2009. Socioemotional factors in child sexual abuse investigations. *Child Maltreatment* 14:172–81
- Hershkowitz I, Elul A. 1999. The effects of investigative utterances on Israeli children’s reports of physical abuse. *Appl. Dev. Sci.* 3:28–33
- Hershkowitz I, Lanes O, Lamb ME. 2007. Exploring the disclosure of child sexual abuse with alleged victims and their parents. *Child Abus. Negl.* 31:111–23
- Hudson JA. 1990. Constructive processing in children’s event memory. *Dev. Psychol.* 26:180–87
- Kaufman KL, Holmberg JK, Orts KA, McCrady FE, Rotzien AL, et al. 1998. Factors influencing sexual offenders’ modus operandi: an examination of victim-offender relatedness and age. *Child Maltreatment* 3:349–61
- Kogan SM. 2004. Disclosing unwanted sexual experiences: results from a national sample of adolescent women. *Child Abus. Negl.* 24:147–65
- Lamb ME. 2014. Drawn into the life of crime: learning from, by, and for child victims and witnesses. *Appl. Cogn. Psychol.* 28:607–11
- Lamb ME, Hershkowitz I, Lyon TD. 2013. Interviewing victims and suspected victims who are reluctant to talk. *APSAC Advis.* 25(4):16–19
- Lamb ME, Hershkowitz I, Orbach Y, Esplin PW. 2008. *Tell Me What Happened: Structured Investigative Interviews of Child Victims and Witnesses*. Chichester, UK: Wiley
- Lamb ME, Sternberg KJ, Esplin PW, Hershkowitz I, Orbach Y, Hovav M. 1997. Criterion-based content analysis: a field validation study. *Child Abus. Negl.* 21:255–64
- Lamb ME, Sternberg KJ, Orbach Y, Esplin PW, Stewart H, Mitchell S. 2003. Age differences in young children’s responses to open-ended invitations in the course of forensic interviews. *J. Consult. Clin. Psychol.* 71:926–34
- Lang RA, Frenzel RR 1988. How sex offenders lure children. *Ann. Sex Res.* 1:303–31



- Leichtman MD, Ceci SJ. 1995. The effects of stereotypes and suggestions on preschoolers' reports. *Dev. Psychol.* 31:568–78
- Lepore SJ, SESCO B. 1994. Distorting children's reports and interpretations of events through suggestion. *J. Appl. Psychol.* 79:108–20
- London K, Bruck M, Wright DB, Ceci SJ. 2008. Review of the contemporary literature on how children report sexual abuse to others: findings, methodological issues, and implications for forensic interviewers. *Memory* 16:29–47
- Lyon TD. 2002. Applying suggestibility research to the real world: the case of repeated questions. *Law Contemp. Probl.* 65:97–126
- Lyon TD. 2005. *Ten Step Investigative Interview*. Los Angeles, CA: TD Lyon. <http://works.bepress.com/thomaslyon/5/>
- Lyon TD. 2007. False denials: overcoming methodological biases in abuse disclosure research. In *Disclosing Abuse: Delays, Denials, Retractions and Incomplete Accounts*, ed. ME Pipe, ME Lamb, Y Orbach, AC Cederborg, pp. 41–62. Mahwah, NJ: Erlbaum
- Lyon TD. 2009. Abuse disclosure: what adults can tell. In *Children as Victims, Witnesses, and Offenders: Psychological Science and the Law*, ed. BL Bottoms, CJ Najdowski, GS Goodman, pp. 19–35. New York: Guilford
- Lyon TD. 2011. Assessing the competency of child witnesses: best practice informed by psychology and law. In *Children's Testimony: A Handbook of Psychological Research and Forensic Practice*, ed. ME Lamb, D La Rooy, LC Malloy, C Katz, pp. 69–85. Chichester, UK: Wiley-Blackwell
- Lyon TD, Ahern EC, Malloy LC, Quas JA. 2010. Children's reasoning about disclosing adult transgressions: effects of maltreatment, child age, and adult identity. *Child Dev.* 81:1714–28
- Lyon TD, Dorado JS. 2008. Truth induction in young maltreated children: the effects of oath-taking and reassurance on true and false disclosures. *Child Abuse Negl.* 32:738–48
- Lyon TD, Malloy LC, Quas JA, Talwar VA. 2008. Coaching, truth induction, and young maltreated children's false allegations and false denials. *Child Dev.* 79:914–29
- Lyon TD, Scurich N, Choi K, Handmaker S, Blank K. 2012. "How did you feel?" Increasing child sexual abuse witnesses' production of evaluative information. *Law Hum. Behav.* 36:448–57
- Lyon TD, Wandrey L, Ahern EC, Licht R, Sim M, Quas JA. 2014. Eliciting maltreated and non-maltreated children's transgression disclosures: narrative practice rapport building and a putative confession. *Child Dev.* 85:1756–69
- Lyons KE, Ghetti S. 2011. The development of uncertainty monitoring in early childhood. *Child Dev.* 82:1778–87
- Malloy LC, Brubacher SP, Lamb ME. 2011. Expected consequences of disclosure revealed in investigative interviews with suspected victims of child sexual abuse. *Appl. Dev. Sci.* 15:8–19
- Malloy LC, Lyon TD, Quas JA. 2007. Filial dependency and recantation of child sexual abuse allegations. *J. Am. Acad. Child Adolesc. Psychiatry* 46:162–70
- Malloy LC, Quas JA, Lyon TD, Ahern EC. 2014. Disclosing adult wrongdoing: maltreated and non-maltreated children's expectations and preferences. *J. Exp. Child Psychol.* 124:78–96
- McCabe A, Peterson C, eds. 1991. *Developing Narrative Structure*. Hillsdale, NJ: Erlbaum
- Memon A, Vartoukian R. 1996. The effects of repeated questioning on young children's eyewitness testimony. *Br. J. Psychol.* 87:403–15
- Moston S. 1987. The suggestibility of children in interview studies. *First Lang.* 7:67–78
- Mulder MR, Vrij A. 1996. Explaining conversation rules to children: an intervention study to facilitate children's accurate responses. *Child Abuse Negl.* 20:623–31
- Muram D, Speck PM, Gold SS. 1991. Genital abnormalities in female siblings and friends of child victims of sexual abuse. *Child Abuse Negl.* 15:105–10
- Myers JEB. 2013. *Evidence of Interpersonal Violence: Child Maltreatment, Intimate Partner Violence, Rape, Stalking, and Elder Abuse*. New York: Wolters Kluwer
- Pear TH, Wyatt S. 1914. The testimony of normal and mentally defective children. *Br. J. Psychol.* 6:388–419
- Perry NW, McAuliff BD, Tam P, Claycomb L, Dostal C, Flanagan C. 1995. When lawyers question children: Is justice served? *Law Hum. Behav.* 19:609–29

- Peters WW, Nunez N. 1999. Complex language and comprehension monitoring: teaching child witnesses to recognize linguistic confusion. *J. Appl. Psychol.* 84:661–69
- Peterson C, Bell M. 1996. Children's memory for traumatic injury. *Child Dev.* 67:3045–70
- Peterson C, Dowden C, Tobin J. 1999. Interviewing preschoolers: comparisons of yes/no and wh- questions. *Law Hum. Behav.* 23:539–55
- Pipe ME, Wilson JC. 1994. Cues and secrets: influences on children's event reports. *Dev. Psychol.* 30:515–25
- Poole DA, Lindsay DS. 1995. Interviewing preschoolers: effects of nonsuggestive techniques, parental coaching, and leading questions on reports of nonexperienced events. *J. Exp. Child Psychol.* 60:129–54
- Poole DA, Lindsay DS. 2001. Children's eyewitness reports after exposure to misinformation from parents. *J. Exp. Psychol. Appl.* 7(1):27–50
- Principe GF, Kanaya T, Ceci SJ, Singh M. 2006. Believing is seeing: how rumors can engender false memories in preschoolers. *Psychol. Sci.* 17:243–48
- Quas JA, Goodman GS, Jones DP. 2003. Predictors of attributions of self-blame and internalizing behavior problems in sexually abused children. *J. Child Psychol. Psychiatry* 44:723–36
- Raeder MS. 2010. Distrusting young children who allege sexual abuse: why stereotypes don't die and ways to facilitate child testimony. *Widener Law Rev.* 16:239–78
- Roberts KP, Lamb ME, Sternberg KJ. 2004. The effects of rapport-building style on children's reports of a staged event. *Appl. Cogn. Psychol.* 18:189–202
- Sas LD, Cunningham AH. 1995. *Tipping the Balance to Tell the Secret: The Public Discovery of Child Sexual Abuse*. London, Can.: London Fam. Court Clin.
- Saywitz KJ, Goodman GS, Nicholas E, Moan SF. 1991. Children's memories of a physical examination involving genital touch: implications for reports of child sexual abuse. *J. Consult. Clin. Psychol.* 59:682–91
- Saywitz K, Jaenicke C, Camparo L. 1990. Children's knowledge of legal terminology. *Law Hum. Behav.* 14:523–35
- Saywitz KJ, Moan-Hardie S. 1994. Reducing the potential for distortion of childhood memories. *Conscious. Cogn.* 3:408–25
- Saywitz KJ, Snyder L, Nathanson R. 1999. Facilitating the communicative competence of the child witness. *Appl. Dev. Sci.* 3:58–68
- Schreiber N. 2000. Interviewing techniques in sexual abuse cases—a comparison of a day-care abuse case with normal abuse cases. *Swiss J. Psychol.* 59:196–206
- Schreiber N, Bellah LD, Martinez Y, McLaurin KA, Strok R, et al. 2006. Suggestive interviewing in the McMartin Preschool and Kelly Michaels daycare abuse cases: a case study. *Soc. Influ.* 1:16–47
- Sjoberg RL, Lindblad F. 2002. Limited disclosure of sexual abuse in children whose experiences were documented by videotape. *Am. J. Psychiatry* 159:312–14
- Smallbone SW, Wortley RK. 2001. Child sexual abuse: offender characteristics and modus operandi. *Trends Issues Crim. Justice* 193:1–6
- Smith BE, Elstein SG. 1993. *The Prosecution of Child Sexual and Physical Abuse Cases: Final Report*. Washington, DC: Natl. Cent. Child Abus. Negl.
- Smith DW, Letourneau EJ, Saunders BE, Kilpatrick DG, Resnick HS, Best CL. 2000. Delay in disclosure of childhood rape: results from a national survey. *Child Abus. Negl.* 24:273–87
- Sternberg KJ, Lamb ME, Hershkowitz I, Yudilevitch L, Orbach Y, et al. 1997. Effects of introductory style on children's abilities to describe experiences of sexual abuse. *Child Abus. Negl.* 21:1133–46
- Sternberg KJ, Lamb ME, Orbach Y, Esplin PW, Mitchell S. 2001. Use of a structured investigative protocol enhances young children's responses to free-recall prompts in the course of forensic interviews. *J. Appl. Psychol.* 86:997–1005
- Stivers T. 2010. An overview of the question–response system in American English conversation. *J. Pragmat.* 42:2772–81
- Stolzenberg SN, Lyon TD. 2014. How attorneys question children about the dynamics of sexual abuse and disclosure in criminal trials. *Psychol. Public Policy Law* 20:19–30
- Talwar V, Crossman AM. 2012. Children's lies and their detection: implications for child witness testimony. *Dev. Rev.* 32:337–59
- Talwar V, Lee K, Bala N, Lindsay RCL. 2002. Children's conceptual knowledge of lying and its relation to their actual behaviors: implications for court competence examinations. *Law Hum. Behav.* 26:395–415

- Talwar V, Lee K, Bala N, Lindsay RCL. 2004. Children's lie-telling to conceal a parent's transgression: legal implications. *Law Hum. Behav.* 28:411–35
- Tye MC, Amato SL, Honts CR, Devitt MK, Peters D. 1999. The willingness of children to lie and the assessment of credibility in an ecologically relevant laboratory setting. *Appl. Dev. Sci.* 3:92–109
- Ullman SE, Filipas HH. 2005. Gender differences in social reactions to abuse disclosures, post-abuse coping, and PTSD of child sexual abuse survivors. *Child Abus. Negl.* 29:767–82
- Walker AG. 2013. *Handbook on Questioning Children*. Washington, DC: Am. Bar Assoc. 3rd ed.
- Warren A, Hulse-Trotter K, Tubbs EC. 1991. Inducing resistance to suggestibility in children. *Law Hum. Behav.* 15:273–85
- Warren AR, Woodall CE, Hunt JS, Perry NW. 1996. "It sounds good in theory, but...": Do investigative interviewers follow guidelines based on memory research? *Child Maltreatment* 1:231–45
- White TL, Leichtman MD, Ceci SJ. 1997. The good, the bad, and the ugly: accuracy, inaccuracy, and elaboration in preschoolers' reports about a past event. *Appl. Cogn. Psychol.* 11:S37–54
- Wilsnack S, Wonderlich SA, Kristjanson AF, Vogeltanz-Holm ND, Wilsnack RW. 2002. Self-reports of forgetting and remembering childhood sexual abuse in a nationally representative sample of US women. *Child Abus. Negl.* 26:39–147
- Wyatt GE, Newcomb M. 1990. Internal and external mediators of women's sexual abuse in childhood. *J. Consult. Clin. Psychol.* 58:758–67



# Contents

In Praise of Tents: Regulatory Studies and Transformative Social Science <i>John Braithwaite</i> .....	1
Legal Education in the Corporate University <i>Margaret Thornton</i> .....	19
Legal Indicators: The Power of Quantitative Measures of Law <i>Kevin E. Davis</i> .....	37
Field Experimentation and the Study of Law and Policy <i>Donald P. Green and Dane R. Thorley</i> .....	53
Interviewing Children <i>Thomas D. Lyon</i> .....	73
Law and Society in Brazil at the Crossroads: A Review <i>José Reinaldo de Lima Lopes and Roberto Freitas Filho</i> .....	91
The Dispute Tree and the Legal Forest <i>Catherine R. Albiston, Lauren B. Edelman, and Joy Milligan</i> .....	105
Disentangling Law: The Practice of Bracketing <i>Nicholas Blomley</i> .....	133
Critical Race Theory Meets Social Science <i>Devon W. Carbado and Daria Roithmayr</i> .....	149
Language-and-Law Scholarship: An Interdisciplinary Conversation and a Post-9/11 Example <i>Elizabeth Mertz and Jothie Rajah</i> .....	169
Judicial Independence as an Organizing Principle <i>Charles Gardner Geyb</i> .....	185
The Legitimacy of the US Supreme Court: Conventional Wisdoms and Recent Challenges Thereto <i>James L. Gibson and Michael J. Nelson</i> .....	201
Human Trafficking and the New Slavery <i>Lauren A. McCarthy</i> .....	221

Public Disorders: Theory and Practice <i>Sophie Body-Gendrot</i> .....	243
Crime, Law, and Regime Change <i>Joachim J. Savelsberg and Suzy McElrath</i> .....	259
Law and Courts in Authoritarian Regimes <i>Tamir Moustafa</i> .....	281
Cause Lawyering <i>Anna-Maria Marshall and Daniel Crocker Hale</i> .....	301
Construction of Justice at the Street Level <i>Shannon Portillo and Danielle S. Rudes</i> .....	321
The Law and Social Science of Stop and Frisk <i>Tracey L. Meares</i> .....	335
Immigration Law Beyond Borders: Externalizing and Internalizing Border Controls in an Era of Securitization <i>Cecilia Menjívar</i> .....	353

## Indexes

Cumulative Index of Contributing Authors, Volumes 1–10 .....	371
Cumulative Index of Article Titles, Volumes 1–10 .....	374

## Errata

An online log of corrections to *Annual Review of Law and Social Science* articles may be found at <http://www.annualreviews.org/errata/lawsocsci>



# ANNUAL REVIEWS

It's about time. Your time. It's time well spent.

## New From Annual Reviews:

### ***Annual Review of Organizational Psychology and Organizational Behavior***

Volume 1 • March 2014 • Online & In Print • <http://orgpsych.annualreviews.org>

Editor: **Frederick P. Morgeson**, *The Eli Broad College of Business, Michigan State University*

The *Annual Review of Organizational Psychology and Organizational Behavior* is devoted to publishing reviews of the industrial and organizational psychology, human resource management, and organizational behavior literature. Topics for review include motivation, selection, teams, training and development, leadership, job performance, strategic HR, cross-cultural issues, work attitudes, entrepreneurship, affect and emotion, organizational change and development, gender and diversity, statistics and research methodologies, and other emerging topics.

**Complimentary online access to the first volume will be available until March 2015.**

#### TABLE OF CONTENTS:

- *An Ounce of Prevention Is Worth a Pound of Cure: Improving Research Quality Before Data Collection*, Herman Aguinis, Robert J. Vandenberg
- *Burnout and Work Engagement: The JD-R Approach*, Arnold B. Bakker, Evangelia Demerouti, Ana Isabel Sanz-Vergel
- *Compassion at Work*, Jane E. Dutton, Kristina M. Workman, Ashley E. Hardin
- *Constructively Managing Conflict in Organizations*, Dean Tjosvold, Alfred S.H. Wong, Nancy Yi Feng Chen
- *Coworkers Behaving Badly: The Impact of Coworker Deviant Behavior upon Individual Employees*, Sandra L. Robinson, Wei Wang, Christian Kiewitz
- *Delineating and Reviewing the Role of Newcomer Capital in Organizational Socialization*, Talya N. Bauer, Berrin Erdogan
- *Emotional Intelligence in Organizations*, Stéphane Côté
- *Employee Voice and Silence*, Elizabeth W. Morrison
- *Intercultural Competence*, Kwok Leung, Soon Ang, Mei Ling Tan
- *Learning in the Twenty-First-Century Workplace*, Raymond A. Noe, Alena D.M. Clarke, Howard J. Klein
- *Pay Dispersion*, Jason D. Shaw
- *Personality and Cognitive Ability as Predictors of Effective Performance at Work*, Neal Schmitt
- *Perspectives on Power in Organizations*, Cameron Anderson, Sebastien Brion
- *Psychological Safety: The History, Renaissance, and Future of an Interpersonal Construct*, Amy C. Edmondson, Zhike Lei
- *Research on Workplace Creativity: A Review and Redirection*, Jing Zhou, Inga J. Hoever
- *Talent Management: Conceptual Approaches and Practical Challenges*, Peter Cappelli, JR Keller
- *The Contemporary Career: A Work-Home Perspective*, Jeffrey H. Greenhaus, Ellen Ernst Kossek
- *The Fascinating Psychological Microfoundations of Strategy and Competitive Advantage*, Robert E. Ployhart, Donald Hale, Jr.
- *The Psychology of Entrepreneurship*, Michael Frese, Michael M. Gielnik
- *The Story of Why We Stay: A Review of Job Embeddedness*, Thomas William Lee, Tyler C. Burch, Terence R. Mitchell
- *What Was, What Is, and What May Be in OP/OB*, Lyman W. Porter, Benjamin Schneider
- *Where Global and Virtual Meet: The Value of Examining the Intersection of These Elements in Twenty-First-Century Teams*, Cristina B. Gibson, Laura Huang, Bradley L. Kirkman, Debra L. Shapiro
- *Work-Family Boundary Dynamics*, Tammy D. Allen, Eunae Cho, Laurenz L. Meier

Access this and all other Annual Reviews journals via your institution at [www.annualreviews.org](http://www.annualreviews.org).

## ANNUAL REVIEWS | Connect With Our Experts

Tel: 800.523.8635 (US/CAN) | Tel: 650.493.4400 | Fax: 650.424.0910 | Email: [service@annualreviews.org](mailto:service@annualreviews.org)







# ANNUAL REVIEWS

It's about time. Your time. It's time well spent.

## New From Annual Reviews:

### ***Annual Review of Statistics and Its Application***

Volume 1 • Online January 2014 • <http://statistics.annualreviews.org>

Editor: **Stephen E. Fienberg**, *Carnegie Mellon University*

Associate Editors: **Nancy Reid**, *University of Toronto*

**Stephen M. Stigler**, *University of Chicago*

The *Annual Review of Statistics and Its Application* aims to inform statisticians and quantitative methodologists, as well as all scientists and users of statistics about major methodological advances and the computational tools that allow for their implementation. It will include developments in the field of statistics, including theoretical statistical underpinnings of new methodology, as well as developments in specific application domains such as biostatistics and bioinformatics, economics, machine learning, psychology, sociology, and aspects of the physical sciences.

**Complimentary online access to the first volume will be available until January 2015.**

#### TABLE OF CONTENTS:

- *What Is Statistics?* Stephen E. Fienberg
- *A Systematic Statistical Approach to Evaluating Evidence from Observational Studies*, David Madigan, Paul E. Stang, Jesse A. Berlin, Martijn Schuemie, J. Marc Overhage, Marc A. Suchard, Bill Dumouchel, Abraham G. Hartzema, Patrick B. Ryan
- *The Role of Statistics in the Discovery of a Higgs Boson*, David A. van Dyk
- *Brain Imaging Analysis*, F. DuBois Bowman
- *Statistics and Climate*, Peter Guttorp
- *Climate Simulators and Climate Projections*, Jonathan Rougier, Michael Goldstein
- *Probabilistic Forecasting*, Tilmann Gneiting, Matthias Katzfuss
- *Bayesian Computational Tools*, Christian P. Robert
- *Bayesian Computation Via Markov Chain Monte Carlo*, Radu V. Craiu, Jeffrey S. Rosenthal
- *Build, Compute, Critique, Repeat: Data Analysis with Latent Variable Models*, David M. Blei
- *Structured Regularizers for High-Dimensional Problems: Statistical and Computational Issues*, Martin J. Wainwright
- *High-Dimensional Statistics with a View Toward Applications in Biology*, Peter Bühlmann, Markus Kalisch, Lukas Meier
- *Next-Generation Statistical Genetics: Modeling, Penalization, and Optimization in High-Dimensional Data*, Kenneth Lange, Jeanette C. Papp, Janet S. Sinsheimer, Eric M. Sobel
- *Breaking Bad: Two Decades of Life-Course Data Analysis in Criminology, Developmental Psychology, and Beyond*, Elena A. Erosheva, Ross L. Matsueda, Donatello Telesca
- *Event History Analysis*, Niels Keiding
- *Statistical Evaluation of Forensic DNA Profile Evidence*, Christopher D. Steele, David J. Balding
- *Using League Table Rankings in Public Policy Formation: Statistical Issues*, Harvey Goldstein
- *Statistical Ecology*, Ruth King
- *Estimating the Number of Species in Microbial Diversity Studies*, John Bunge, Amy Willis, Fiona Walsh
- *Dynamic Treatment Regimes*, Bibhas Chakraborty, Susan A. Murphy
- *Statistics and Related Topics in Single-Molecule Biophysics*, Hong Qian, S.C. Kou
- *Statistics and Quantitative Risk Management for Banking and Insurance*, Paul Embrechts, Marius Hofert

Access this and all other Annual Reviews journals via your institution at [www.annualreviews.org](http://www.annualreviews.org).

## ANNUAL REVIEWS | Connect With Our Experts

Tel: 800.523.8635 (US/CAN) | Tel: 650.493.4400 | Fax: 650.424.0910 | Email: [service@annualreviews.org](mailto:service@annualreviews.org)

