Speaking with children: Advice from investigative interviewers

Thomas D. Lyon University of Southern California Law School October, 2002

DRAFT: Do not cite or quote without author's permission

To appear in: Handbook for the Treatment of Abused and Neglected Children (F. Talley & A. Urquiza, eds.). Needham Heights, MA: Allyn & Bacon.

Introduction: The therapist's dilemma

Imagine that you are treating a child suffering from the effects of neglect. You do not suspect sexual abuse, and do not directly question the child about abuse, but she makes what sounds like an abuse disclosure. Or, you hear from another source (a sibling, for example, or a caretaker) that the child has made statements hinting that she was abused. What should you do? If you decide to question the child, you may inadvertently suggest information. Even if you are careful to avoid leading questions, you may later be attacked for contaminating the child's story, given the inherent polarization of the legal process. Unless you record the disclosure, the suggestiveness of your interviewing will be subject to question.

On the other hand, if you drop the subject, you may be missing a unique opportunity to elicit important information. You can simply report your suspicions of abuse, and let a social worker or police officer question the child, but the child is likely to be less forthcoming with a stranger than with a trusted therapist, particularly if the investigator lacks sensitivity or training. Moreover, from a legal perspective, the statements the child makes in therapy are much more likely to be admissible in court than what she says to an investigator.

Child therapists are often faced with this dilemma, because children often disclose abuse in the course of therapy for other problems. If the disclosure leads to a battle in court—whether it be family court, dependency court or criminal court—the defense is sure to attack the interviewing practices of the therapist. And for good reason: a large amount of research over the past ten years has documented the suggestibility of young children to leading questioning (Ceci, Bruck, & Battin, 2000; Saywitz & Lyon, 2002).

Child sexual abuse cases will be carefully scrutinized for signs that the child's testimony was contaminated by pretrial influences, and a leading candidate for such influence is the professional who first heard the child disclose. If that professional is you, you must either sharpen your interviewing skills, or be prepared for a very unpleasant day in court. Moreover, even if you believe it unlikely that suggestive questioning produces false allegations of abuse (Lyon, 1999), another good reason to improve your interviewing skills is to reduce the likelihood that a true allegation will look false because of poor questioning. If you inadvertently suggest false information to a truly abused child, the child's story may start to sound incredible, or simply inconsistent.

The goal of this chapter is to provide you with basic information about developmentally appropriate investigative interviewing. The emphasis is on techniques that have been proven by field and laboratory research to both decrease the suggestibility and increase the productivity of child witnesses. I draw heavily on work that has been done by Michael Lamb, Kathleen Sternberg, and their colleagues at the National Institute of Child Health and Development (NICHD). I also rely on my experience using a version of the NICHD interview protocol working with Astrid Heger, Mary Morahan, Catherine Koverola and a team of interviewers at the Los Angeles County-USC Violence Intervention Program. If you use these methods, you will maximize the amount of useful

information obtainable from children while also avoiding the risks of creating a false allegation or of making a true allegation look false. The methods I'll discuss work best with grade school children. Very young children will benefit less because of their innate immaturity, and older children are not as needful of special treatment. However, this is not an excuse to ignore either younger or older children; the best rule is to learn to speak simply and clearly with any child.

The problem with interviewing children about abuse

Abused children often find it difficult to discuss abuse. Anything dealing with nakedness and genital touch is potentially embarrassing (Saywitz, Goodman, Nicholas, & Moan, 1991), even more so if the child recognizes that the touching is wrong. Sexual abuse is secretive. Abusers frequently warn or threaten their victims not to tell (Smith & Elstein, 1993), and even without warnings, the secrecy surrounding the abuse teaches the child not to tell. Sexual abusers are often violent towards the child and the child's mother, reinforcing a reluctance to disclose (Sas & Cunningham, 1995). On the other hand, perpetrators often seduce their victims, making the child reluctant to tell for a different reason. If she or her family have positive feelings about the abuser–most likely if he is a family member or a friend of the family–she will be reluctant to get him into trouble and to hurt others who love him (Sauzier, 1989). Fear, loyalty, and embarrassment are disincentives to disclosure (for a review, see Lyon, 2002).

Even if a child is highly motivated to tell, her cognitive immaturity may make it difficult for her to do so. Young children often provide more information when asked recognition questions than when simply asked to tell "what happened." (e.g., Baker-Ward, Gordon, Ornstein, Larus, & Clubb, 1993). In free recall, one has to generate the to-be-remembered information on one's own, whereas with recognition one simply confirms or denies. Children also have limited understanding of what details are important, and limited ability to estimate time or number.

The solution to children's difficulties with disclosing abuse might seem simple: the interviewer can ask very direct questions in order to elicit a report, and if the child refuses to disclose, apply pressure on the child. However, pressure has some obvious problems. First, one does not know ahead of time which children one interviews have been abused. Pressure on a nonabused children may lead to a false allegation. Researchers have demonstrated that a number of coercive interviewing techniques can produce false reports, particularly in preschool children. These techniques include peer pressure (telling the child what other children have said), selective reinforcement (rewarding desired responses and punishing undesired responses), stereotype induction (telling the child that the suspect is a bad person), the use of authority (telling the child what the parent has said or what the interviewer believes), and the use and repetition of suggestive questions (for a review, see Ceci, Bruck, & Battin, 2000). Second, pressure may taint truly abused children's reports and make them look incredible or inconsistent. Finally, pressure conflicts with many clinician's perceptions of their role as a helping professional.

The "solution" is more complicated than direct questions and pressure on the child. Interviewers must search for a middle ground between a hands-off approach (any question is a

potentially leading question) and a highly coercive approach (every child is an abused and frightened child). Fortunately, such a middle ground often exists.

Question types

Everyone knows that they should not ask children leading questions, but few agree about what a leading question is. I find it useful to think of questions as lying along a continuum. On one end of the continuum the interviewer supplies details, and on the other end of the continuum the child supplies details. Consider the distinction between free recall and recognition. With free recall, the interviewer would simply ask "What happened," and the child supplies the details. With recognition, the interviewer provides choices and the child picks the correct choice. Hence, the interviewer supplies details that the child merely affirms or denies.

It is easy to understand why questions that move toward interviewer-supplied details increase the dangers of suggestibility. If the interviewer supplies details, many of the details are likely to be incorrect--the product of the interviewer's presuppositions or biases. And if children are susceptible to suggestion, because they trust the interviewer, because they wish to please the interviewer, and because they may doubt their own memory, interviewer-supplied details are going to taint the child's report, and possibly the child's memory for the event. Moreover, if children are inclined to guess, it will be easier for them to guess in response to questions with interviewer-supplied details.

Fortunately there are questions between free recall and recognition. These include whquestions (what, where, when, who, why, and how), which are often classified as either "general" or "specific." As wh- questions become more specific, the interviewer supplies more of the details. Compare "what was the man wearing?" (more general) with "what color were the man's shoes?" (more specific). Note that with a wh- question, unlike a free recall question like "what happened," the interviewer is focusing on particular aspects of the to-be-remembered event. This is helpful to the child who has difficulty in generating details on her own. However, as wh- questions become more specific, two dangers increase. One danger is that the interviewer's beliefs about the event will affect the child's report (e.g. the interviewer assumes the man was wearing shoes). Another danger is that a child who is inclined to guess will come up with a plausible response, one that is incorporated into the child's report.

Recognition questions can also vary in how leading they are. The simplest sort of recognition question is a yes/no question, which is any question that can simply be answered "yes" or "no." Like wh- questions, yes/no questions can also be either "general" ("Did he say anything?") or specific ("Did he tell you to keep a secret?"). Yes/no questions are not highly leading, but can be problematic if a child has a response-bias (a tendency to answer all questions "yes" or "no"), or is reluctant to answer "I don't know." The research is mixed on whether young children do indeed exhibit a "yes" bias to yes/no questions (cf. Greenhoot, Ornstein, Gordon, & Baker-Ward, 1999 [no yes-bias detected] with Peterson, Dowden, & Tobin, 1999 [yes-bias detected]). However, there is quite good evidence that young children are reluctant to answer "I don't know" to yes/no questions (Poole & Lindsay, 2001; Walker & Lunning, 1998). Moreover, children's responses to yes/no

questions are less accurate than their responses to open-ended questions (Baker-Ward, Gordon, Ornstein, Larus, & Clubb, 1993).

Yes/no questions can be made more leading by turning them into negative term questions (e.g., turn "Did he tell you to keep a secret?" into "Didn't he tell you to keep a secret?") (Whipple, 1915) or tag questions (e.g., "He told you to keep a secret, didn't he?") (Greenstock & Pipe, 1996). Negative term questions and tag questions are most likely to affect the responses of preschool children, who are more vulnerable to interviewer pressure.

Another kind of recognition question that is potentially problematic is the forced-choice question, in which the interviewer gives the child a series of choices from which the child chooses the correct response (e.g., "Was his shirt red or blue?"). Like yes/no questions, forced-choice questions assist the child in generating details but may also supply erroneous details. Because of their reluctance to answer "I don't know" to recognition questions, young children feel compelled to choose one of the options even if they don't know the correct answer, and even if neither answer is correct. When children do choose randomly, they tend to choose the last option (Walker & Lunning, 1998).

Interviewers often feel compelled to ask forced-choice questions, even when an open-ended question will elicit more details and be less subject to misunderstanding. For example, interviewers I train at the Violence Intervention Program often wish to ask "were your clothes on or off?" because this detail affects the seriousness of the abuse, and is often omitted by children describing abuse. One recent interview illustrates how dangerous this question is: my interviewer, doing her best to avoid such a question, instead asked "Where were your clothes?" and the child responded "around my ankles." The detail was much more informative than an "on" or "off." Indeed, if the child had picked one of the options, the interviewer would have an inaccurate picture of the abuse.

Interviewer also often rephrase wh- questions as yes/no questions, by prefacing the wh-question with "Can you tell me..." Although one could argue that prefacing wh- questions in this way reduces the likelihood that a child will guess a detail (because she can instead answer "no"), "no" responses are ambiguous. If a child says they "can't" tell you, do they mean they don't know or they don't wish to talk? It is preferable to ask a wh- question that is sufficiently general so that children will feel comfortable answering "I don't know."

Although it is surely difficult to keep all the types of questions straight in one's head, particularly during a sexual abuse interview, it is easy to remember three rules: keep questions as *general* as possible, use *wh*- questions, and avoid *recognition* questions. Wh- questions start with: what, where, when, who, why, and how. Recognition questions start with: did, was, and were. Let the child supply the details.

It is important to reiterate that the use of wh- questions is not only a means to avoid a negative—the dangers of suggestibility. It is also a means of eliciting details that one would never elicit were one to limit oneself to recognition questions. If you ask a series of yes/no questions, you will receive a series of yes/no answers, and the information you obtain will only be as good as your

ability to imagine the details. If you ask wh- questions, children will often mention idiosyncratic details of the abuse that lend their reports credibility and rebut claims of coaching. Moreover, the likelihood of logically inconsistent responses is reduced if your questions are wh- rather than yes/no, and in most cases consistency increases the credibility of a child's report.

Further guidance in the use of non-leading questioning can be found in the interview protocol developed by Michael Lamb and his colleagues at the National Institute of Child Health and Development (NICHD) (e.g. Sternberg, Lamb, Esplin, Orbach, & Hershkowitz, 2002). Of course, the NICHD protocol is not the only protocol (see, e.g., DeVoe & Faller, 1999), but it has received the most research support, and incorporates the best elements of a number of other protocols.

The NICHD protocol provides interviewers with two different types of prompts that elicit information from children without suggestion. The first type are time segmentation prompts, in which the interviewer asks the child to fill in the time-line of events that she has recalled (e.g. "What happened next?"). The second type are cue-questions in which the interviewer refers to details mentioned by the child and asks the child to elaborate (e.g. "You said he put some cream on his finger. Tell me more about that") (Sternberg et al., 2002).

In addition to being non-leading, an advantage of cue-questions is that they clearly specify the topic of interest. When interviewers use pronouns (such as "he" and "she") or deictics (such as "that" or "there"), children may become confused regarding the intended referent. Walker (1999) recommends that interviewers replace pronouns with names (e.g. replace "he" with "Steve") and specific nouns for deictics (e.g. replace "there" with "in the garage").

If an interviewer asks a specific wh- question, or a yes/no or forced-choice question, he or she should followup with an open-ended question, a technique the researchers call "pairing" (Sternberg et al., 2002). This minimizes the suggestiveness of the specific question.

Before asking the child to describe abuse, it is helpful to ask non-leading questions about innocuous events. Doing so teaches the child to provide narrative responses, allows one to assess the child's developmental level and ability to provide a coherent narrative, and puts the child at ease. In the NICHD protocol, the interviewer asks the child about things she likes to do and doesn't like to do, and the interviewer prompts the child with cue-questions so that the child elaborates her responses. For example, if a child responds "I like to play soccer," the interviewer says, "Tell me more about soccer." The interviewer then asks the child about a recent holiday, and follows up with time segmentation cues. The interviewer can determine if the child understands questions about what happened "just before" or "after" an event. Sternberg et al (1997) found that when sexual abuse interviewers used open-ended prompts rather than option-posing questions in the rapport-building phase of the interview, children provided longer and richer responses to the first substantive question about abuse, and longer responses to free recall questions throughout the interview.

The protocol also provides clear guidance for introducing the topic of abuse in an investigative interview. The first question is "Tell me why you came to talk to me." The researchers have found that most children understand the purpose of the investigative interview and

are ready to disclose (Sternberg, Lamb, Orbach, Esplin, & Mitchell, 2001). This is probably attributable to the fact that most reports of sexual abuse are due to disclosures by the victims, so that most children questioned about abuse have previously disclosed. If the child does not mention abuse, the interviewer says "It is important for me to understand why you came to talk to me." If the child remains unresponsive, the interviewer works through a series of increasingly focused questions, which are based on the child's previous disclosure (or the reason abuse is suspected), but avoid directly suggesting that a particular suspect has performed a specific act. The questions include:

I heard that you saw a policeman [social worker, doctor, etc.] last week [yesterday]. Tell me what you talked about.

As I told you, my job is to talk to kids about things that might have happened to them. It's very important that I understand why you are here. Tell me why you think your mom [your dad, etc.] brought you here today.

Is your mom [dad, etc.] worried that something may have happened to you? Tell me what they are worried about.

I heard that someone has been bothering you. Tell me everything about the bothering.

I heard that someone may have done something to you that wasn't right. Tell me everything about that, everything that you can remember.

In addition to the questions in the NICHD protocol, there are other ways of approaching the topic of abuse, and some of them even less leading. In our interviews at the Violence Intervention Program, a number of children who disclosed abuse did so in response to a "feelings task," in which we asked children to tell us about the time they were the most happy, the most mad, the most sad, and the most scared (Lyon, Koverola, Morahan, & Heger, 2002). Faller (1996) recommends that the interviewer ask the child about different people in the child's life and what the child likes and does not like about each individual. If the interviewer asks about a number of people other than the perpetrator, questions about the perpetrator would not be unduly leading. Another example of a good introductory question would be to ask children whose residence has changed because of the abuse allegations about their move and the reasons for it.

Interview instructions

It may be possible to reduce misconceptions children have about interviews through instructions. Young children are accustomed to speaking to authoritative adults (teachers, parents) who already know the answers to many of their questions. Given a strongly worded question, they may agree, not because of what they believe, but because of their desire to please the interviewer and because of their reluctance to appear ignorant. On the other hand, children who have been abused but who are afraid to reveal may need non-leading encouragement to do so. Researchers have examined instructions that will reduce children's tendency to defer to authoritative

interviewers, to increase children's willingness to say "I don't know" or "I don't understand," and increase children's willingness to disclose negative experiences (see Table 1)

Table 1: Interview Instructions for the Child

- 1. Tell the child you don't know what happened.
- 2. Tell the child it is o.k. to say "I don't know," but important to answer when she does know.
- 3. Tell the child it is o.k. to say "I don't understand," and that if she does, you will ask an easier question.
- 4. Elicit a promise from the child that she will tell the truth.

1. Tell the child you don't know what happened

It is helpful to tell the child, "I don't know what's happened to you. I won't be able to tell you the answers to my questions." Children often assume that interviewers are knowledgeable, even though the interviewer did not witness the to-be-remembered event (Saywitz & Nathanson, 1992). Children are more suggestible when they believe the interviewer knows what occurred (Ceci, Ross, & Toglia, 1987; Kwock & Winer, 1986; Lampinen & Smith, 1995; Toglia, Ross, Ceci, & Hembrooke, 1992). Informing children that one doesn't know has been shown to reduce suggestibility to misleading questions (Mulder & Vrij, 1996).

This instruction has its limitations. Young preschool children (three and younger) are not likely to benefit, because of their limited ability to reason about the knowledge states of others (Welch-Ross, 2000). Highly suggestive questions will still increase error, and children may forget the instruction.

2. Tell the child it is o.k. to say "I don't know," but important to answer when she does know.

The NICHD protocol recommends that the interviewer say the following: If I ask you a question and you don't know the answer, then just say "I don't know." So, if I ask you, what is my dog's name, what do you say? O.k., because you don't know. But what if I ask you, Do you have a dog? Ok, because you do know.

Children are often reluctant to answer "I don't know," particularly when asked yes/no questions (e.g., Poole & Lindsay, 2001) or specific wh- questions (e.g., Memon & Vartoukian, 1996). A number of studies have found that instructing children that "I don't know" answers are

acceptable reduces children's suggestibility to misleading questions (Endres, Poggenpohl, & Erben, 1999; Gee, Gregory, & Pipe, 1999; Saywitz & Moan-Hardie, 1994; Walker & Lunning, 1998; Warren, Hulse-Trotter, & Tubbs, 1991).

This instruction has its limitations as well. Unless the interviewer emphasizes answering when one does know as much as refusing to answer when one doesn't, children may overuse the "I don't know" response, and thus answer non-misleading questions less accurately (Gee, Gregory, & Pipe, 1999; Saywitz & Moan-Hardie, 1994; Warren, Hulse-Trotter, & Tubbs, 1991). Furthermore, if children already feel comfortable answering "I don't know," the instruction may be unproductive (Moston, 1987). Children are more likely to answer "I don't know" without instruction if asked whquestions in a comfortable atmosphere (Moston, 1987).

3. Tell the child that it is o.k. to say "I don't understand," and that if she does, you will ask an easier question.

Based on the NICHD protocol, our interviewers at the Violence Intervention Program tell children the following: If I ask you a question and you don't know what I mean or what I am saying, you can say "I don't know what you mean." I will ask it in a different way. So if I ask you, What is your gender, what do you say? Good, because Gender is a big word. So then I would ask, are you a boy or a girl? O.k. because "boy or girl" is an easier way to say "gender."

Children rarely ask for clarification of questions they do not understand (Carter, Bottoms, & Levine, 1996; Perry et al., 1995; Saywitz, Snyder & Nathanson, 1999). Children are less adept than adults at monitoring their comprehension. Even if they recognize incomprehension, they are more reluctant to let the interviewer know.

Telling children that it is permissible to say they do not understand and that doing so will lead the interviewer to reword the question reduces the likelihood that grade school children will attempt to answer incomprehensible questions (Saywitz, Snyder, & Nathanson, 1999). More extensive training and reinforcement improves performance still further (Saywitz et al., 1999), and even has some effect with preschool children (Peters & Nunez, 1999).

As with the other instructions, the efficacy of the "I don't understand" instruction is likely limited by the age of the child: very young children will be incapable of detecting anything but the most obvious complexities. Moreover, children underutilize the option, instead attempting to answer most difficult questions (Peters & Nunez, 1999; Saywitz et al., 1999).

4. Elicit a promise from the child that she will tell the truth.

Ask the child, "Do you promise that you will tell me the truth?" Then ask, "Are you going to tell me any lies?"

Although children are unlikely to understand adult versions of the oath, they recognize the significance of promises by grade school, and still younger children understand that when one says

one "will" do something, one is likely to do it (Lyon, 2000). Research with both maltreated and non-maltreated children has found that eliciting a promise to tell the truth increases children's honesty (Lyon, 2000; Talwar, Lee, Bala, & Lindsay, 2002).

The promise must be worded carefully, however. It is a good idea to mention both "promise" and "will," because children understand the meaning of "will" before they understand the meaning of "promise." Following up with "are you going to tell me any lies?" will ensure that the child is not simply assenting to questions she does not understand (because the appropriate answer is "no"), and the question is easier than asking the child to "promise not to tell any lies" (Lyon, 2000).

In sum, interview instructions are easy to administer, and will improve the performance of many children. They will have the greatest effect on older children, and when highly suggestive questions are asked. However, given the limitations of instructions, the optimal solution is to ask simple non-leading questions. The best way to improve children's performance is to improve the questions we ask.

Difficult concepts: Number and time

Interviewers often wish to know when and how many times abusive acts occurred. If one consults the literature, one often reads that children understand a particular concept at such and such an age. However, discussion of the ages of acquisition can be misleading when one decides how to question an individual child.

When developmental researchers state that children achieve some competence at a particular age, it is fair to assume that in an interview, much older children will often have difficulty exhibiting such competence. This is so for several reasons. First, the research usually refers to the youngest age at which a competency *first* appears in the *most* supportive context. For example, children's understanding of language is usually tested in a non-stressful environment using visible materials, rather than in a stressful context involving to-be-remembered events. Second, much of the research examines the ability of healthy children from enriched home environments, with little effort to sample children with diverse backgrounds. This is in large part because developmental psychologists are often more interested in the order in which abilities appear rather than the precise age at which they appear. Children with different abilities will acquire skills in the same order (generally speaking), but obviously not at the same time. Third, the fact that an age group shows evidence of understanding does not mean that an individual within that group will. Indeed, it is possible for a group of children to perform above chance on a task based on the good performance of a small proportion of children.

In addition to potentially overestimating children's abilities, age guides may sometimes underestimate what children can do. The history of developmental psychology is filled with research demonstrating good performance by preschoolers on tasks once believed to be mastered only by second or third grade. Part of the problem is that the tasks were difficult for reasons unrelated to the competencies being tested. This is the flip-side of the point above about supportive contexts: a highly supportive context may overestimate abilities, but a confusing context may underestimate abilities.

A final problem with age guides is that they focus one's attention on the competency of the child rather than on the abilities of the interviewer. It is rarely the case that a child lacks competency essential to communication. It is more often the case that a child lacks understanding of an unnecessarily complex form of speaking preferred by adults.

Number

In general, it is a mistake to ask a child "how many times" an event occurred, because of the likelihood that a child will arbitrarily pick a inherently incredible or arbitrary number ("a million", "thirty-eight"), and because the number changes from interview to interview. A moment's reflection highlights what a difficult task it is to estimate how many times something has occurred. Either one imagines each event and mentally counts, or one estimates the number by multiplying the frequency the events occurred in a particular time span (e.g. "every weekend") by the total time span over which the events occurred (Bradburn, 2000).

It is easy to misjudge a child's ability to make such an estimate. Children can often recite numbers before they know how to count, and can count objects before they can count events in memory (Walker, 1999). What constitutes an "event" is also open to question—does the child enumerate abuse by reflecting on particular acts, or on times when a series of acts occurred? Legally, enumeration is not necessary. If the child's case ever goes to court, he or she can be asked about specific events, and questions about numerosity should be disallowed as developmentally inappropriate.

The NICHD protocol recommends that after the child has first disclosed abuse, and described an episode, the interviewer ask "Did this happen one time or more than one time?" If the child says "more than one time," the interviewer then inquires about the "last time" the abuse occurred, the "first time" the abuse occurred, and the time the child remembers "the most." The interviewer follows up by asking if there are "any other times" the child remembers. For each narrative, the interviewer asks the time segmentation prompts and cue questions described above.

Time

Similar to number skills, children learn how to tell time before they can tell what time an event occurred. Unless one looks at a watch or calendar during an event, subsequent recall of the time requires inferential skills (e.g. "it was shortly before New Year's, so it probably was December") (Friedman, 1993). Although many children will fail to make such inferences, the interviewer can often elicit information from the child about contemporaneous events, which enables the interviewer to estimate the time. For example, children can often tell you where others were at the time of the abuse (e.g. "my mother was at church"), or what the child had been doing (e.g. asleep at night, taking a nap after school), in order to estimate clock time, and where the child was living or staying in order to estimate the year. Legally, exact dates and times are not necessary, particularly if the abuser had frequent access to the child and the abuse occurred on multiple occasions over a period of time (Myers, 1997).

Some temporal terms can be confusing for the young child. "Yesterday" and "today" are difficult for young children, in part because of their shifting meaning (today is tomorrow's yesterday). Moreover, the amount of time segmented by the words is initially unclear; for the young child "yesterday" often refers to anything in the past, and "tomorrow" refers to anything in the future (Harner, 1982). Obviously, the interviewer should not assume that the child understands weeks and months, or that she can estimate time using these intervals.

The practice narrative in which the child describes a recent holiday enables the interviewer to determine if the child understands terms that are essential for providing a chronology. Most important is understanding of "next," "before," and "after," because these words are used extensively when providing the child with time segmentation cues. Because younger children will often describe events in the order in which they occurred, regardless of whether one asks about what happened "before" or "after" another event (Carni & French, 1984), the safest course is to ask "what happened next" questions as much as possible.

However, even children who understand "before" and "after" can be confused by the order in which events are mentioned. Young children "may assume the order in which events are mentioned in a sentence is the same as the chronological order in which the events occurred" (Richardson, 1993, p. 111). For example, Richardson (1993) cites a sexual abuse case in which the child was asked "Before your father took you to the hospital, where were you?" Because "where were you" was asked after "before your father took you to the hospital," the child responded to "where were you" by stating where she was after she went to the hospital. The child might not exhibit the same confusion if asked "Where were you before you went to the hospital?" A child's apparent confusion regarding chronology may be attributable to the interviewer's questions rather than the child's failing memory.

Conclusion

I've attempted to provide the reader with a brief overview of developmentally appropriate interview strategies (see Table 2). The goal of these strategies is to maximize the amount of information one obtains from children while minimizing errors and misunderstandings attributable to poorly worded and suggestive questions. I've focused on techniques that are supported by laboratory and observational research on investigative interviewing, which was inspired by concerns over children's suggestibility.

Much more should be done. The "new wave" of modern research on children's suggestibility (Bruck, Ceci, & Hembrooke, 1998) emphasized the dangers of false allegations and suggestive techniques, and generated a list of techniques to be avoided. I predict that the next wave will acknowledge the risks of false denials and emphasize techniques for overcoming reluctance and minimizing developmental limitations. Researchers developing structured protocols have already taken important steps in this direction.

Table 2: Ten Tips For Interviewing Children

- 1. Begin with instructions.
- 2. Ask for a practice narrative.
- 3. Keep questions as general and open-ended as possible.
- 4. Use 'wh' questions (what, where, when, who, why, how).
- 5. Ask time-segmentation questions (e.g., "What happened just after he...") and cue-questions (e.g., "You said he...Tell me more about that").
- 6. Avoid recognition questions (did, was, were). If you ask a recognition question, follow up with an open-ended question.
- 7. Replace pronouns with names (e.g., "Steve" instead of "he").
- 8. Replace deictics with nouns (e.g. "In the garage" instead of "there").
- 9. Don't ask how many times an event occurred, but whether it happened once or more than once. Follow up by focusing on individual episodes.
- 10. Don't ask what time or what date an event occurred, but about concurrent events that enable you to estimate the time.

References

Baker-Ward, L., Gordon, B.N., Ornstein, P.A., Larus, D.M., & Clubb, P.A. (1993). Young children's long-term retention of a pediatric examination. *Child Development*, 64, 1519-1533.

Bradburn, N.M. (2000). Temporal representation and event dating. In A.A. Stone, et al. (Eds.), *The science of self-report: Implications for research and practice* (pp. 49-61). Mahwah, NJ: Erlbaum.

Bruck, M., Ceci, S.J., & Hembrooke, H. (1998). Reliability and credibility of young children's reports: From research to policy and practice. *American Psychologist*, *53*, 136-151.

Carni, E., & French, L.A. (1984). The acquisition of before and after reconsidered: What develops? *Journal of Experimental Child Psychology*, *37*, 394-403.

Carter, C.A., Bottoms, B.L., & Levine, M. (1996). Linguistic and socioemotional influences on the accuracy of children's reports. *Law & Human Behavior*, 20, 335-358.

Ceci, S.J., Bruck, M., & Battin, D.B. (2000). The suggestibility of children's testimony. In D.F. Bjorklund (Ed.), *False-memory creation in children and adults: Theory, research, and implications* (pp. 169-201). Mahwah, NJ: Erlbaum.

Ceci, S.J., & Bruck, M. (1998). Children's testimony: Applied and basic issues. In W. Damon (Series Ed.), I.E. Siegal & K.A. Renninger (Vol. Eds.), *Handbook of child psychology: Vol. 4. Child Psychology in Practice* (5th ed., pp. 713-773). New York: Wiley.

Ceci, S.J., Ross, D.F., & Toglia, M.P. (1987). Suggestibility of children's memory: Psychologal implications. *Journal of Experimental Psychology: General*, 116, 38-49.

Devoe, E.R., & Faller, K.C. (1999). The characteristics of disclosure among children who may have been sexually abused. *Child Maltreatment*, *4*, 217-227.

Endres, J., Poggenpohl, C., & Erben, C. (1999). Repetitions, warnings, and video: Cognitive and motivational components in preschool children's suggestibility. *Legal & Criminological Psychology*, *4*, 129-146.

Faller, K. C. (1996). Evaluating Children Suspected of Having Been Sexually Abused. Newbury Park, CA.: Sage.

Friedman, W.J. (1993). Memory of the time of past events. *Psychological Bulletin*, 113, 44-66.

Gee, S., Gregory, M., & Pipe, M-E. (1999). 'What colour is your pet dinosaur?' The impact of preinterview training and question type on children's answers. *Legal & Criminological Psychology*, 4, 111-128. Greenhoot, A.F., Ornstein, P.A., Gordon, B.N., & Baker-Ward, L. (1999). Acting out the details of a pediatric check-up: The impact of interview condition and behavioral style on children's memory reports. *Child Development*, 70, 363-380.

Greenstock, G., & Pipe, M.E. (1996). Interviewing children about past events: The influence of peer support and misleading questions. *Child Abuse & Neglect*, 20, 69-80.

Harner, L. (1982). Talking about the past and the future. In W.J. Friedman (Ed.), *The developmental psychology of time* (pp. 141-169). New York: Academic Press.

Kwock, M.S., & Winer, G.A. (1986). Overcoming leading questions: Effects of psychosocial task variables. *Journal of Educational Psychology*, 78, 289-293.

Lampinen, J.M., & Smith, V.L. (1995). The incredible (and sometimes incredulous) child witness: Child eyewitnesses' sensitivity to source credibility cues. *Journal of Applied Psychology*, 80, 621-627.

Lyon, T.D. (1999). The new wave of suggestibility research: A critique. *Cornell Law Review, 84,* 1004-1087.

Lyon, T.D. (2000). Child witnesses and the oath: Empirical evidence. Southern California Law Review, 73, 1017-1074.

Lyon, T.D. (2002). Scientific Support for Expert Testimony on Child Sexual Abuse Accommodation In J.R. Conte (Ed.), *Critical issues in child sexual abuse* (pp. 107-138). Newbury Park, CA: Sage.

Lyon, T.D., Koverola, C., Morahan, M., & Heger, A. (March, 2002). *Disclosure patterns with a structured sexual abuse interview*. Paper presented at the biennial meeting of the American Psychology and Law Society conference, Austin, TX.

Memon, A., & Vartoukian, R. (1996). The effects of repeated questioning on young children's eyewitness testimony. *British Journal of Psychology*, 87, 403-415.

Moston, S. (1987). The suggestibility of children in interview studies. First Language, 7, 67-78.

Mulder, M.R., & Vrij, A. (1996). Explaining conversation rules to children: An intervention study to facilitate children's accurate responses. *Child Abuse & Neglect*, 20, 623-631.

Myers, J.E.B. (1997). *Evidence in child abuse and neglect cases*. (3rd ed., Vol. 2). New York: Wiley Law Publications.

Perry, N.W., McAuliff, B.D., Tam, P., Claycomb, L., Dostal, C., & Flanagan, C. (1995). When lawyers question children: is justice served? *Law & Human Behavior*, 19, 609-629.

Peterson, C., Dowden, C., & Tobin, J. (1999). Interviewing preschoolers: Comparisons of yes/no and wh- questions. *Law & Human Behavior*, *23*, 539-555.

Poole, D.A., & Lindsay, D.S. (2001). Children's eyewitness reports after exposure to misinformation from parents. *Journal of Experimental Psychology: Applied*, 7, 27-50.

Peters, W.W., & Nunez, N. (1999). Complex language and comprehension monitoring: Teaching child witnesses to recognize linguistic confusion. *Journal of Applied Psychology*, 84, 661-669.

Richardson, G.C. (1993). *The child witness: A linguistic analysis of child sexual abuse testimony*. (Doctoral dissertation, Georgetown University, 1993).

Sas, L.D., & Cunningham, A.H. (1995). *Tipping the balance to tell the secret: The public discovery of child sexual abuse.* London, Ontario: London Family Court Clinic.

Sauzier, M. (1989). Disclosure of child sexual abuse: For better or for worse. *Psychiatric Clinics of North America*, *12*, 455-469.

Saywitz, K., Goodman, G., Nicholas, G., & Moan, S. (1991). Children's memory of a physical examination involving genital touch: Implications for reports of child sexual abuse. *Journal of Consulting and Clinical Psychology*, *59*, 682-691.

Saywitz, K.J., & Lyon, T.D. (2002). Coming to grips with children's suggestibility. In M.L. Eisen, J.A. Quas, & G.S. Goodman (Eds.), *Memory and suggestibility in the forensic interview* (pp. 85-113). Mahwah, NJ: Erlbaum.

Saywitz, K.J., & Moan-Hardie, S. (1994). Reducing the potential for distortion of childhood memories. *Consciousness & Cognition*, *3*, 408-425.

Saywitz, K., & Nathanson, R. (1992, August). Effects of environment on children's testimony and perceived stress. In B. Bottoms & M. Levine (Chairs), *Actual and perceived competency of child witnesses*. Symposium conducted at the annual convention of the American Psychological Association, Washington, D.C.

Saywitz, K.J., Snyder, L., & Nathanson, R. (1999). Facilitating the communicative competence of the child witness. *Applied Developmental Science*, *3*, 58-68.

Smith, B.E., & Elstein, S.G. (1993). *The prosecution of child sexual and physical abuse cases: Final report.* Washington, DC: National Center on Child Abuse and Neglect.

Sternberg, K.J., Lamb, M.E., Esplin, P.W., Orbach, Y., & Hershkowitz, I.(2002). Using a structured protocol to improve the quality of investigative interviews. In M.L. Eisen, J.A. Quas, & G.S. Goodman (Eds.), Memory and suggestibility in the forensic interview (pp. 409-436). Mahwah, NJ: Erlbaum.

Sternberg, K.J., Lamb, M.E., Hershkowitz, I., Yudilevitch, L., Orbach, Y., Esplin, P.W., & Hovav, M. (1997). Effects of introductory style on children's abilities to describe experiences of sexual abuse. Child Abuse & Neglect, 21, 1133-1146.

Sternberg, K.J., Lamb, M.E., Orbach, Y., Esplin, P.W., & Mitchell, S. (2001). Use of a structured investigative protocol enhances young children's responses to free recall prompts in the course of forensic interviews. *Journal of Applied Psychology*, 86, 997-1005.

Talwar, V., Lee, K., Bala, N., & Lindsay, R.C.L. (2002). Children's conceptual knowledge of lying and its relation to their actual behaviors: Implications for court competence examinations. *Law & Human Behavior*, *26*, 395-415.

Toglia, M.P., Ross, D.F., Ceci, S.J., & Hembrooke, H. (1992). The suggestibility of children's memory: A social-psychological and cognitive interpretation. In M.L. Howe, C.J. Brainerd, & V.F. Reyna (Eds.), *Development of long-term retention* (pp. 217-241). New York: Springer-Verlag.

Walker, A.G. (1999). Handbook on questioning children: A linguistic perspective (2nd ed.). Washington, DC: ABA Center on Children and the Law.

Walker, N.E., & Lunning, S.M. (1998). Do children respond accurately to forced choice questions?: Yes or no? Manuscript in preparation.

Warren, A., Hulse-Trotter, K., & Tubbs, E.C. (1991). Inducing resistance to suggestibility in children. *Law & Human Behavior*, 15, 273-285.

Whipple, G.M. (1915). *Manual of mental and physical tests: Part 2. Complex processes*. (2nd ed.). Baltimore: Warwick & York.

Welch-Ross, M. (2000). A mental-state reasoning model of suggestibility and memory source monitoring. In K.P. Roberts & M. Blades (eds.), *Children's source monitoring* (pp. 227-255). Mahwah, NJ: Erlbaum.