Conversational apprentices: Helping children become competent informants about their own experiences

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Alleged victims of child abuse are often the only sources of information about the crimes, and this places them in the role of experts when conversing about their experiences. Despite developmental deficiencies in memory, cognition, communication skills, and social style, researchers have shown that children's informativeness in such conversations is profoundly shaped by the interviewing practices of their adult interlocutors. We review techniques that degrade children's performance as well as those that help children perform to the best of their abilities, and discuss how these findings have important implications for the ways in which children learn to converse and interact with adults, and for their understanding of the roles played by conversations in information exchange. When adult interviewers conduct developmentally appropriate interviews with children, they help children become competent informants about their experiences.

When psychologists study conversations between children and adults, their focus is usually on the structure of the interaction, with emphasis on the lessons learned by children about the rules of empathy, reciprocity, and emotional exchange. These lessons play an important role in early socialization, as many contributions to this special issue illustrate. Conversations often communicate information as well, however, and such conversations provide important insights into what children know or remember. This review focuses on a particular class of conversations – investigative interviews in which alleged victims of child abuse are questioned about their alleged or suspected experiences. We briefly review factors that may enhance or detract from children's ability to provide accurate and informative accounts of their experiences, and summarize findings from a series of studies that have explored the effectiveness of an interview protocol developed to help forensic investigators conduct supportive

interviews with children. The research summarized below has shown that children can be remarkably competent informants in such conversations, but that the amount and quality of information children retrieve and report may be powerfully shaped by the strategies employed by adult interlocutors to elicit information. The relevance of these findings extends beyond forensic interviews to any context in which adults seek information from children, including research studies, educational settings, and everyday conversations.

In contemporary society, children are increasingly involved in the judicial system; often, though not always, when they are believed to have witnessed or experienced physical or sexual abuse. The evidence or testimony elicited from children in forensic interviews often plays a crucial role in these investigations because other evidence is typically unavailable. Children's conversational skills therefore take on particular significance in such investigations. These skills are usually developed through interactions with adults and are shaped by adults' expectations, both inside and outside the particular exchange (Fivush & Shukat, 1995). Children depend on their adult conversational partners, both for an understanding of the task and for retrieving and reporting detailed information about their experiences. We can thus view children as 'apprentices' learning how to communicate effectively.

Recognition that children are still learning to communicate effectively has had an insidious effect on our assumptions regarding children's abilities and capacities, however. Deficiencies in what children produce in conversations or interviews are readily attributed to children's limited capacities, even though their performance is in fact affected by the behaviour and capacities of *both* the children and the adult interlocutors. Because so much has been written about children's capacities and deficiencies (Ceci & Bruck, 1998; Pipe, Lamb, Orbach, & Esplin, 2004; Quas, Goodman, Ghetti, & Redlich, 2000), our focus in this article is on the adult –specifically, the ways in which adult behaviour during the interview can either degrade or enhance children's performance.

We begin by emphasizing that all conversations are guided by implicit rules. When the rules are not specified, children (like adults) follow those that guide most other conversations; for children, these typically involve adults testing their knowledge and seeking brief answers to focused questions. However, such assumptions are counterproductive when children must convey novel information to adults. In addition, after the communicative process begins, children are dependent on continued prompts from adults to guide the conversation; indeed, an eagerness to please enhances their sensitivity to cues and makes it essential that adults avoid inadvertently contaminating children's accounts by injecting information reflecting their assumptions about what the children experienced that children then come to incorporate into their accounts.

Our analysis of these interactive processes is informed by the large and growing literature on forensic interviewing but the principles emerging from this research are applicable to any conversation in which the goal is to obtain an elaborative narrative about a personal experience rather than assess the acquisition of discrete pieces of knowledge. Indeed, it is clear that over-reliance on conversational techniques better suited for testing have led professionals, including developmental psychologists, teachers, and forensic interviewers, to underestimate the exceptional abilities that children can deploy when their conversational partners make the most rather than the least of their capacities.

The forensic interview as a unique conversational context

The adult as a naïve partner

Typically, children interact with adults in contexts wherein the adults test whether children have acquired certain knowledge that the adults already possess (Lamb, Orbach, Warren, Esplin, & Hershkowitz, in press). By contrast, the alleged victims of abuse are often the experts – the sole sources of information about the suspected events. Children's understanding of the interviewers' rather unusual expectations therefore probably have a significant impact on their ability to be competent informants (Wattam, 1992). Children's meta-linguistic abilities are particularly important in forensic interviews because they need to recognize what the interviewers want to know, report information coherently, monitor the success of their conversations, and modify strategies as necessary to ensure that the interviewers have understood.

Normal conversational conventions dictate that responses to questions such as 'what did you do today?' will be brief *summaries* of the key activities that occurred during the day (Sternberg, Lamb, Esplin, Orbach, & Hershkowitz, 2002). Young children, in particular, typically respond to such questions with even greater brevity (e.g. 'I played'; e.g. Goodman & Reed, 1986; Johnson & Foley, 1984; Marin, Holmes, Guth, & Kovac, 1979; Oates & Shrimpton, 1991). Although in all likelihood very accurate, such responses are not particularly useful in forensic interviews where typical conversational conventions do not apply – victim/witnesses need to provide *elaborative* responses that provide as much detail as possible about their experiences (Wattam, 1992). Forensic interviewers must therefore help children function as informative conversational partners without compromising the accuracy of the information elicited.

The brevity of children's spontaneous reports may in part reflect deficient meta-linguistic abilities (Walker & Warren, 1995). Indeed, a recent study of investigative interview transcripts revealed that the children's accounts often lacked sufficient cohesion and content to be easily understood by jurors (Westcott & Kynan, 2004). Interventions developed to ameliorate the difficulties children have providing satisfactory narratives without adult support include the use of a practice interview (e.g. Orbach *et al.*, 2000; Sternberg *et al.*, 1997), explicit training in the essential components of informative narratives before recalling the target events (e.g. Brown & Pipe, 2003b; Saywitz & Snyder, 1996; Saywitz, Snyder, & Lamphear, 1996), and prompting by interviewers for forensically relevant categories of information (Bowen & Howie, 2002; Brown & Pipe, 2003a; Elischberger & Roebers, 2001). In a field study of investigative interviews with children about alleged abuse, Sternberg *et al.* (1997) demonstrated that open-ended questions and prompts for elaborative responses in a practice interview about a neutral event (e.g. a recent birthday) increased the amounts of information reported in response to the first prompt regarding the alleged abuse. These findings suggested that even in authentic forensic interviews, it is possible to entrain response styles that enhance the richness of information provided by children by having them practise providing detailed narrative accounts of experienced events before turning attention to substantive issues. A practice interview is recommended in best practice guidelines for forensic interviewers (e.g. Home Office, 2002), because it (1) provides opportunities to enhance rapport between children and interviewers, and (2) prepares children for the task at hand by demonstrating what level of detail is expected in their responses and illustrating the style of questioning interviewers may use to help them achieve it. These techniques could also assist researchers using interviews with children to obtain data. Application of these findings in research

interviews could help researchers elicit more informative responses that might enhance the contributions such studies make to our understanding of children's development.

Saywitz and her colleagues developed an innovative interviewing technique, the Narrative Elaboration Training (NET), to explore the effectiveness of pre-interview training and practice in talking about the past on children's subsequent reports of a target event (Saywitz & Snyder, 1993, 1996). The NET addresses meta-linguistic deficits by teaching children what information is necessary to provide a complete and coherent narrative about a past experience, and it addresses retrieval deficits by providing pictorial cue cards to prompt retrieval of forensically relevant categories of information (people, setting, actions, conversation, and affect). Children are first trained to talk about one experienced event using the cards, and are then asked about the to-be-remembered event. In the laboratory, the NET helps children, including preschoolers, to report events more completely, without compromising accuracy (Brown & Pipe, 2003a, 2003b; Dorado & Saywitz, 2001; Saywitz & Snyder, 1996; Saywitz et al., 1996), and does not prompt false event reports (Camparo, Wagner, & Saywitz, 2001). Verbal prompting for categories of information, without training, can be just as effective as the NET, however (Bowen & Howie, 2002; Brown & Pipe, 2003a; Elischberger & Roebers, 2001).

Meta-linguistic deficits clearly undermine children's recall because children can report the required information when specifically prompted to do so (e.g. Brown & Pipe, 2003a). Adult interviewers can help children overcome meta-linguistic deficits by providing a supportive interview context that clearly communicates to children their role as expert informants and the interviewers' naïvety regarding the events in question, practise in providing elaborative accounts, and a scaffold for narratives using prompts for relevant information (e.g. chronology, forensically relevant details; Walker & Warren, 1995).

Children frequently attribute superior knowledge to adult interviewers as well (Ceci, Toglia, & Ross, 1987a, 1987b), and thus may refrain from reporting all they know, assuming that interviewers already know or understand what they are reporting (Wattam, 1992). Children may also respond inaccurately because they infer that interviewers would prefer particular responses and are attempting to be cooperative conversational partners, rather than to communicate their actual experiences (Ceci & Bruck, 1993, 1995). In the forensic context, therefore, interviewers must be sensitive to the possibility that children may overestimate the interviewers' prior knowledge and that the children may view them as authority figures with whom they need to be compliant. In order to facilitate comprehensive and accurate reporting by children, for example, interviewers should emphasize that they do not know the details of the children's experiences, that it is important for the children to tell as much as they know, and that it is okay for children to disagree with or correct the interviewers if they make mistakes (e.g. Sternberg et al., 2002; Wattam, 1992).

In sum, children's immature meta-linguistic skills may limit their informativeness because they have impoverished narrative skills, and inappropriate expectations about their own role and that of the interviewer. These deficits may be ameliorated, in part, by the conversational techniques and strategies employed by the adult interlocutors. Providing clear instructions to children regarding their role as experts, the importance of telling as much as they know, the acceptability of correcting or disagreeing with interviewers, and practise in narrating their experiences enhance the quality of children's contribution to their conversations.

Elaborative discussion

It is now generally accepted that even very young children (from about 4 years) can provide meaningful information about their experiences when interviewed in a careful and supportive manner (Lamb *et al.*, 2003). However, the quality of the information reported will probably depend on the methods used by interviewers to elicit it. Accounts elicited from young children using open ended questions ('tell me what happened') that tap recall rather than recognition memory are typically briefer, but no less accurate, than those provided by older children (e.g. Goodman & Reed, 1986; Johnson & Foley, 1984; Lamb, Sternberg, & Esplin, 2000; Marin *et al.*, 1979; Oates & Shrimpton, 1991). The completeness of these initially brief accounts can be increased if interviewers use the information provided by children in their first spontaneous utterance as prompts for further elaboration (e.g. 'you said the man touched you; tell me more about that touching'; Lamb *et al.*, 2003). Unfortunately, however, forensic interviewers frequently ask very specific questions ('did he touch you?') that draw upon recognition rather than recall memory. Such questions typically elicit less accurate responses than open-ended prompts (e.g. Dent, 1982, 1986; Dent & Stephenson, 1979; Hutcheson, Baxter, Telfer, & Warden, 1995; Lamb & Fauchier, 2001; Oates & Shrimpton, 1991; Orbach & Lamb, 2001), and may even cause erroneous information to be incorporated into children's testimony (e.g. Hunt & Borgida, 2001). Children have difficulty answering specific questions, and may exhibit a response bias (e.g. Fivush, Peterson, & Schwarzmeuller, 2002; Peterson, Dowdin, & Tobin, 1999), or a reluctance to give 'don't know' responses in the absence of knowledge (Davies, Tarrant, & Flin, 1989; Gee, Gregory, & Pipe, 1999; Saywitz & Moan-Hardie, 1994; Saywitz & Snyder, 1993). In addition, researchers have shown (Hughes & Grieve, 1980; Waterman, Blades, & Spencer, 2000, 2001, 2004) that children often attempt to answer impossible (nonsensical) or unanswerable (where the information has not been provided) questions, especially if they are phrased as *yes/no* rather than *wh*-questions. The type of question asked and the context in which they are introduced thus determine whether they enhance or degrade the reliability of children's reports (Poole & Lamb, 1998; Saywitz & Lyon, 2002).

Young children do not spontaneously employ retrieval strategies to help them recall and report everything they know (Flavell, 1970). Instead, they are reliant on adult conversational partners to provide retrieval cues, signal what information is important to recall and report, and structure their reports using prompts and questions. Current professional guidelines for best practice in forensic interviews with children (e.g. American Professional Society on the Abuse of Children [APSAC], 1990, 1997; Home office, 2002) advocate a hierarchical or 'funnel' approach to questioning children. Such an approach uses open-ended prompts to elicit as much recall from children as possible (including prompts to elaborate further on information they have already reported) before moving to non-leading specific questions as necessary, at the end of the interview, to clarify any information that is unclear or that is necessary for the investigation to proceed. Such a questioning style provides support for children by encouraging exhaustive retrieval of information and increases the communicative value of their reports by helping children structure their reports in a coherent manner.

In addition to verbal prompting, several alternative techniques aimed at facilitating more complete recall have been explored. The use of prop items (e.g. real items, scale models, toys, photographs) may increase the similarity between the event and the retrieval condition (interview) and thereby enhance recall by providing reminders of the event (Tulving & Thomson, 1973), or provide opportunities for children to overcome

linguistic deficits by demonstrating rather than, or as well as, telling what they remember (Pipe, Gee, & Wilson, 1993). Although the use of props may increase the amount of information reported, however, the amount of erroneous information reported may also increase, particularly when toys are involved (see Salmon, 2001, for review).

Drawings have also been used to facilitate communication in various ways. Firstly, children have been asked to draw while talking about the event of interest. This technique increases the amount of information children report verbally about both positive and negative events, without increasing the amount of inaccurate information reported, at least under some conditions (Butler, Gross, & Hayne, 1995; Gross & Hayne, 1998, 1999; Salmon, Roncolato, & Gleitzman, 2003; Wesson & Salmon, 2001). Secondly, children may be asked to use drawings to communicate aspects of their experiences directly. Many forensic interviewers have viewed anatomically detailed drawings as a means of helping children to communicate information about touches that may have occurred. In a recent field study, for example, children who were presented with a drawing at the end of an exhaustive verbal interview reported a significant amount of unique information, although the accuracy of this information was unknown (Aldridge *et al.*, 2004). Thirdly, drawings may also be used to elicit children's names for different body parts, although it is recommended that drawings should only be used in this way at the end of the interview, to avoid inadvertently suggesting that discussion of sexual themes is expected (Poole & Lamb, 1998). Fourthly, drawings may be used as projective techniques with the content of the drawings analysed for indicators of psychopathology and/or abuse (e.g. Miller, Veltkamp, & Janson, 1987; Riordan & Verdel, 1991; Yates, Beutler, & Crago, 1985). The reliability and validity of these tests has not been established, however (Buros, 1989), and studies claiming to demonstrate differences between abused and non-abused children on the basis of their drawings have been criticized because they lacked appropriate control or comparison groups, and involved biased samples (Poole & Lamb, 1998).

Studies of cognitive techniques such as mental context reinstatement (guiding children to mentally reconstruct the setting in which the event occurred) indicate that this may be a promising technique for helping children to retrieve as much information as possible (Bekerian, Dennet, Hill, & Hitchcock, 1990; Hershkowitz, Orbach, Lamb, Sternberg, & Horowitz, 2001; McCauley & Fisher, 1995, 1996). Children are instructed to think about different sensory features of the event (e.g. what they could hear, see, smell etc.) and different aspects of the event (e.g. what the place looked like) before beginning to verbally recount what they remember. The premise underlying mental reinstatement of context as a retrieval aid is that it helps witnesses reactivate their memories of the event by mentally travelling back in time and 'reliving' the experience. This increases the similarity between the conditions at recall and those at the time of the experience, thereby making the information associated with the event more accessible. Mental reinstatement of context is one of the main components of the Cognitive Interview (Fisher, Geiselman, Raymond, Jurkevich, & Warhaftig, 1987), which is used widely by police officers interviewing adult witnesses. The cognitive interview progresses through five stages, beginning with an introduction to the purpose of the interview, a request for open-ended recall, probed recall, review, and closing. During the probed recall stage of the interview, four techniques are used to encourage complete recall and reporting. Firstly, witnesses are encouraged to report everything they can remember, even small details they may feel are unimportant. Secondly, they are asked to mentally reinstate the context of the incident and report any details that they can recall,

including descriptions of the environment, the people, smells, feelings, and reactions to events. Thirdly, witnesses are asked to recall the event in different temporal sequences (e.g. reverse order, starting from the most salient aspect and moving forward and then backward in time from that aspect), and fourthly, to recall the event from different perspectives (e.g. from the perspective of others who were present). The cognitive interview has also been used successfully with children (Köhnken, Milne, Memon, & Bull, 1999), although some of the component techniques (e.g. changing perspectives, changing the temporal ordering) may make demands that exceed the cognitive competencies of children under 8 years of age (Geiselman, 1999; Geiselman & Padilla, 1988; Hayes & Delamothe, 1997; Memon, Cronin, Eaves, & Bull, 1993, 1995; Memon, Wark, Bull, & Köhnken, 1997; Saywitz, Geiselman, & Bornstein, 1992).

In addition to meta-linguistic deficits that may limit children's ability to effectively communicate their experiences in a forensic interview, inadequate retrieval techniques may thus limit children's informativeness. Retrieval of information can be facilitated using non-verbal methods of communication, instructions to mentally reinstate the context of the event prior to reporting it, opportunities to practise talking about the past, and carefully worded prompts that encourage detailed reporting of different categories of information.

Unfamiliar adults as conversational partners

Investigative interviews also require that children share information with unfamiliar adults, who often engender reticence and shyness. Forensic interviewers are thus routinely encouraged to establish rapport with children before attempting to discuss the alleged abuse, although, in practice, many interviewers make little effort to establish rapport before beginning to ask about the allegations under investigation (Sternberg, Lamb, Esplin, & Baradaran, 1999; Warren, Woodall, Hunt, & Perry, 1996). Establishing rapport is an important component of any assessment exercise with children, whether for research, clinical or forensic purposes (Rotenberg *et al.*, 2003). Children are unlikely to perform at their best unless they are comfortable with the adults conducting the assessment and understand what is expected from them. In fact, the techniques used to establish rapport may dramatically affect the dynamics of the interview. For example, Sternberg *et al.* (1997) found that rapport building using open-ended questions (invitations) about the child's everyday life and a particular past event (such as a recent birthday or holiday) helped interviewers elicit more abuse-relevant information than closed-ended specific rapport-building questions did. Children with whom rapport had been established using open-ended questions provided 2.5 times as many details and words in response to the first substantive utterance as did children in the 'direct introduction' condition. Children in the 'open-ended' condition continued to provide more information in response to subsequent invitations, suggesting that the initial questioning style was successful in conveying the interviewers' desire for detailed description of the alleged events.

Much has been written about the degree to which children's responses may be influenced by adult interviewers (Bruck & Ceci, 1999; Ceci & Bruck, 1993, 1995; Ceci & Friedman, 2000), with suggestibility exacerbated by poor memory of the events and the social demand characteristics of the interview. Children are especially susceptible to suggestive influence when interviews occur long after the alleged events and the memories are thus neither rich nor recent (e.g. Holliday, Douglas, & Hayes, 1999; Marche, 1999; Pezdek & Hodge, 1999). The effects of suggestibility may also vary

depending on the features of the event such that children are better able to resist misleading suggestions if they pertain to central or 'core' rather than peripheral features of the event (e.g. Cassel, Roebers, & Bjorklund, 1996; Dent & Stephenson, 1979; Dodd & Bradshaw, 1980; King & Yuille, 1987). Suggestibility is also greater when misleading questions refer to details observed, experienced, or heard about in other contexts (Roberts & Blades, in press), indicating that children may report inaccurate information when source monitoring breaks down. Source monitoring is the ability to identify the source of knowledge or memory (e.g. information heard about from someone else rather than experienced directly). Incorrect source monitoring may lead children to incorporate information into their testimony that they have heard from others, seen (e.g. on television), or imagined. Children may use or remember information without remembering where they learned it, or they may attribute their knowledge to the wrong source (Roberts & Blades, 2000). In such cases, errors may reflect children's retrieval of the most recently acquired information about the events in question, although they might be able to retrieve information about the actual event if prompted to do so (Newcombe & Siegal, 1996, 1997), or reflect genuine source-monitoring confusion that prevents them from discriminating between the original event and misinformation about it (Poole & Lindsay, 1997, 2001; Roberts, 2000). The social dynamics of a forensic interview may also degrade children's reliability. Children typically perceive adult interviewers as authority figures, and so may acquiesce to their suggestions or misconstructions of the event (Ceci *et al.*, 1987a, 1987b). Davies and Bottoms (1998) and Carter, Bottoms, and Levine (1996) found that 6- and 7-year-old children interviewed by supportive interviewers provided more accurate responses to misleading questions than children interviewed by neutral or non-supportive interviewers, while Goodman, Wilson, Hazan, and Reed (1989) reported that 7- and 10-year-old children were more suggestible when the interview was conducted in an accusatory manner. Garven, Wood, Malpass, and Shaw (1998) demonstrated that suggestive questions reinforced by social pressure (telling the children that other children had told, giving praise, criticizing responses, repeating questions, and inviting speculation) drastically inflated the rate at which children made false reports and acquiesced to misleading questions.

Taken together, this research illustrates how the adult's behaviour during the conversation influences the child's informativeness and accuracy. Furthermore, the environmental context may make the perceived authority of the interviewer even more salient. Interviews are typically conducted at a child protection unit that is unfamiliar to the child but very familiar to the adult interviewer, and are video recorded for use in any subsequent proceedings. These conditions may emphasize the formality of the situation, and contribute to children's feelings of confusion and/or anxiety regarding what is expected of them, and how they should respond.

Outcome of the conversation

Forensic interviews have very specific purposes – establishing the credibility of allegations, assessing the safeness of children's living arrangements, and evaluating the viability of criminal charges. As a result, the outcomes of the conversations between children and forensic interviewers are more significant than those of everyday conversations are and may have far-reaching consequences (e.g. disruption of the family), awareness of which may affect the children's willingness to disclose and discuss their experiences. Indeed, as discussed in a recent anthology (Pipe, Lamb, Orbach, & Cederborg, in press), children may be reluctant to disclose abuse and/or participate in

interviews for a variety of reasons that include close relationships with the alleged perpetrators (DiPietro, Runyan, & Fredrickson, 1997; Goodman-Brown, Edelstein, Goodman, Jones, & Gordon, 2003; Hershkowitz, Horowitz, & Lamb, 2005, in press; Sas, 1993; Sauzier, 1989; Smith *et al.*, 2000; Wyatt & Newcomb, 1990), a sense of loyalty to the alleged perpetrator (Mian, Wehrspann, Kaljner-Diamond, LeBaron, & Winder, 1986), a fear of retribution and abandonment (Sauzier, 1989; Summit, 1983), feelings of complicity, embarrassment, guilt, and shame (Cederborg, Lamb, & Laurel, in press; Goodman-Brown *et al.*, 2003; Sauzier, 1989; Summit, 1983), a fear of consequences for others (Burgess & Holmstrom, 1978; Goodman-Brown *et al.*, 2003), a fear of not being believed and therefore punished (Browne & Finkelhor, 1986), and a fear of family disruption (Lawson & Chaffin, 1992). Children may be preoccupied during the interview itself due to the above issues, or because of the way in which the forensic process was implemented. Wade and Westcott (1997) assessed children's views of the investigative process and found that children were often disconcerted by the speed at which the investigation was initiated. They frequently felt that they had little control over the process, and were often uncomfortable with the manner in which the interview was conducted (e.g. unsupportive interviewers, not being able to have supportive companions present, or persistent attempts by interviewers to elicit details the children could not remember).

Conversational topic

In contrast to everyday conversations, forensic interviews require children to talk about subjects that may be embarrassing and/or traumatic, and, as discussed above, children's feelings of fear, guilt, shame or complicity may adversely affect their willingness to converse with interviewers. The task of forensic interviewers is thus to create an atmosphere in which children are willing to discuss topics that are not normally sanctioned. When interviewers fail in this task, either by neglecting to establish rapport, or by failing to communicate ground rules for the conversation, children are less likely to share their experiences completely and accurately.

Summary

The forensic interview is thus a unique conversational context due to the roles assumed by the participants, the style and content of the conversations, the participants themselves, and the impetus for the conversation. In contrast to everyday conversations, forensic interviews require children to talk to unfamiliar adults about potentially sensitive (e.g. traumatic, embarrassing, frightening, painful) topics in a formal and unfamiliar setting. The conversation may have far-reaching consequences for the lives of the children (e.g. reactions from family members, loss of a family member, instigation of formal court proceedings etc.), the children may not have been willing informants, and they may have been pressured to either disclose or recant. Furthermore, forensic conversations require elaborative reporting of past events, contrary to normal conversational conventions, and children may thus need support and guidance from interviewers to meet these expectations. As a result, children's ability to be informative 'experts' about their experiences, like their reliability and suggestibility, is influenced by a number of factors, most significantly, the ways in which adult interviewers steer the conversations and the strategies they use to help children retrieve and report their experiences. In the next section, we review studies showing how the interviewers' ability to elicit information from children and

recognize or adapt to their capacities, tendencies, and limitations shape children's performance in forensic interviews.

Adults as supportive communicative partners

The development of a structured investigative protocol

Two decades of research on children's ability to describe their experiences reliably resulted in a general consensus regarding the best ways of conducting forensic interviews with children (e.g. APSAC, 1990, 1997; Bull, 1996; Fisher & Geiselman, 1992; Home office, 1992, 2002; Jones, 1992; Lamb, Sternberg, & Esplin, 1994, 1995, 1998; Orbach *et al.*, 2000; Poole & Lamb, 1998; Raskin & Esplin, 1991; Sattler, 1998). Unfortunately, there is a clear disparity between theory and practice in the field (Hershkowitz *et al.*, 1997; Lamb *et al.*, 1996; Sternberg *et al.*, 1996, 1997; Sternberg, Lamb, Davies, & Westcott, 2001). Training affects interviewers' knowledge of appropriate techniques but not their actual behaviour: They continue to rely on closed or focused questions, option-posing prompts, suggestive questions, anatomical dolls, and other techniques which they 'know' are risky or 'wrong' (Aldridge & Cameron, 1999; Cederborg *et al.*, 2000; Craig, Scheibe, Kircher, Raskin, & Dodd, 1999; Lamb *et al.*, 2002, 2003; Stevenson, Leung, & Cheung, 1992; Warren *et al.*, 1999).

The National Institute of Child Health and Human Development's (NICHD) investigative interview protocol was developed to help forensic interviewers adhere to professional guidelines when interviewing alleged victims (Orbach *et al.*, 2000). The NICHD protocol covers all phases of the investigative interview and is designed to translate research-based recommendations into operational guidelines in order to enhance the retrieval of informative, complete, and accurate accounts of alleged incidents of abuse by young victim/witnesses. This is accomplished by creating a supportive interview environment (before substantive rapport building), adapting interview practices to children's developmental levels and capabilities (e.g. minimizing linguistic complexity and avoiding interruptions), preparing children for their tasks as information providers (by clarifying the rules of communication and training children to report event-specific episodic memories), and maximizing the interviewers' reliance on utterance types (e.g. invitations) that tap children's free recall. When following the protocol, interviewers maximize the use of open-ended questions and probes, pose focused questions only after exhausting open-ended questioning modes, use option-posing questions (including *yes/no* questions) only to obtain essential information later in the interview, and eliminate suggestive practices. Interviewers are also encouraged to use information provided by the children themselves as cues to promote further free-recall retrieval. In essence, the protocol is thus designed to maximize the amount of information elicited using recall prompts because information elicited in this way is probably more accurate. In addition, the structured interview protocol minimizes contamination of children's accounts.

Research with the NICHD protocol

Field studies with the protocol have compared interviews conducted by investigators pre- and post training and feedback in the use of the protocol. Analyses show that following the protocol leads to improvements in the overall effectiveness of the interview in two ways. First, interviewers using the protocol adhere more closely to recommended practices, thereby improving the quality of the interviews they conduct and the ability of the children they are interviewing to actively participate in the

interviews. Thus, for example, Israeli youth investigators using the protocol offered more than 5 times as many open-ended invitations as they did in comparable interviews conducted before the structured protocol was introduced (Orbach *et al.*, 2000). The number of option-posing questions also dropped by almost 50%, and much more of the information reported by children (operationally quantified in terms of the number of new details about the alleged incident or event) was obtained using free recall rather than investigator-directed recognition probes in the protocol-guided interviews (Orbach *et al.*, 2000).

Similar results were obtained in a study of investigative interviews conducted by police officers in the western United States (Sternberg *et al.*, 2002; Sternberg, Lamb, Orbach, Esplin, & Mitchell, 2001). The proportion of invitations increased from 10% to approximately one third, and directive, option-posing and suggestive prompts decreased from 41% to 24%. The total amount of information (again, quantified by the number of new details) elicited from free-recall memory also increased dramatically; whereas only 16% of the information was elicited using free-recall prompts in the pre-protocol interviews, about half of the information was obtained using free recall in the protocol interviews. Furthermore, this pattern of results was similar regardless of the children's ages (Lamb *et al.*, 2003; Sternberg, Lamb, Orbach *et al.*, 2001), even though many professionals believe that very young children require more support or scaffolding than older children when being interviewed, and that more direct interviewing strategies should therefore be used. Although younger children provided shorter and less detailed responses than did older children, analyses of interviews with 4- to 8-year-old children revealed that interviewers who relied heavily on invitations succeeded in eliciting a substantial amount of information (about half of the total number of new details) using free-recall prompts from children as young as 4 years of age (Lamb *et al.*, 2003). Because these studies were conducted in the field where the actual incidents were unknown, the accuracy of the children's responses could not be established, but researchers have consistently demonstrated that responses to open-ended questions are probably more accurate, in both field and laboratory contexts (see reviews by Lamb *et al.*, 1999; Pipe *et al.*, 2004).

Ongoing research regarding the effectiveness of the NICHD protocol is designed to explore its utility in helping children with learning disabilities become competent informants about their experiences. Lawyers, forensic interviewers, and psychologists (e.g. Kebbell & Davies, 2003; O'Kelly, Kebbell, Hatton, & Johnston, 2003; Stobbs & Kebbell, 2003) are increasingly calling for research exploring the abilities and vulnerabilities of witnesses with learning disabilities who appear to be at greater risk of being either victims or witnesses of crimes and yet, as a result of their learning disabilities, have less access to a criminal justice system that is often insensitive to their capacities and limitations (Cederborg & Lamb, in press; Westcott & Jones, 1999). From a conversational perspective, we might expect children with learning disabilities to be even more reliant on their adult interlocutors to provide structure and support to enable them to participate than their typically developing counterparts. However, relatively few studies have explored the ability of children with learning disabilities to provide complete and accurate accounts of personally experienced events. Researchers have suggested that when interviewed using the kinds of questions advocated for non-learning disabled children, children with learning disabilities are able to give reliable accounts of brief witnessed or experienced interactions, although their performance relative to chronologically age-matched and mental age-matched controls has varied across studies (Agnew & Powell, 2004; Dent, 1986; Gordon, Jens, Hollings,

& Watson, 1994; Henry & Gudjonsson, 1999, 2003; Michel, Gordon, Ornstein, & Simpson, 2000; Milne & Bull, 1996). We therefore know little about optimal strategies for interviewing children with learning disabilities of varying ages about personally experienced events, particularly when there has been a significant delay between the events and the interviews.

Summary
Despite consensus amongst professional groups and experts about 'best practices', interviewers typically have difficulty implementing these guidelines even when they are aware of best practice recommendations. Research has shown that the reliability of children's testimony is multiply determined, and that both the interviewer and the child play important roles in determining how effectively information about the child's experiences is communicated.

To help investigators conduct forensic interviews that enhance children's ability to provide complete and accurate accounts of their experiences, Lamb and his colleagues developed the NICHD interview protocol, which provides a structure for interviewers to follow, and a set of operational guidelines showing how to elicit elaborative reports from children about their experiences without contaminating the information elicited with leading or misleading questions. Studies evaluating the NICHD protocol in field interviews have shown improvements in both interviewer behaviour and the amount and quality of information elicited from children. Interviewers using the protocol help children take fullest advantage of their abilities instead of inadvertently underestimating their capacities, adopting an open-ended questioning style that invites elaborative and exhaustive reporting of information that is more likely to be accurate. Interviewers using the protocol are also less likely to use closed, leading, or misleading questions, which may lead to children incorporating erroneous information into their reports. Children who are interviewed using the protocol provide more detailed reports, particularly in response to open-ended questions. Information reported in response to these questions is most likely to be accurate and therefore of greater value to the forensic investigation.

Conclusion

The forensic interview is a unique conversational context for children, requiring them to take on the role of expert informant about their knowledge and experience. Although children may require support from adult interviewers when retrieving, structuring and reporting their experiences in an elaborative manner, they are able to provide reliable testimony. The quality of their testimony may be influenced by a number of factors pertaining to the children themselves, the events they have experienced, and importantly, the ways in which their conversational partners (the adult interviewers) attempt to elicit information. Young children can be valuable informants when conversing with interviewers who recognize their limitations and strengths and adapt their interviewing practices accordingly.

This conclusion has application beyond the forensic context, of course. Because the techniques deployed by interviewers using the NICHD protocol were informed by basic research on memory, communicative, and social development, they are readily applicable in any situations wherein children might be viewed as informants (e.g. research and/or clinical interviews). Interviews with children form the basis of many experimental paradigms assessing children's knowledge, beliefs, and cognitive abilities.

Such 'interviews' seldom utilize the kinds of techniques (e.g. open-ended style of rapport development, a practice interview, reliance on open-ended questioning) discussed here, however. Given the vast literature demonstrating the particular difficulties children may have with specific, and particularly *yes/no* questions, it can be questioned whether the findings obtained in such studies accurately reflect children's capacities rather than the ways in which experimenters have attempted to assess their abilities. These findings are also relevant in educational settings, where adults typically communicate with children either to impart knowledge or to test children's acquisition of knowledge. Encouraging teachers to both foster and assess children's progress using verbal techniques that elicit elaborative responses (drawing from free recall) rather than brief responses (drawing from recognition memory) may provide more scope for assessing children's knowledge and comprehension, their reasons for responding as they do, and thus selecting remedial materials that would be most helpful. For example, by asking children to provide fuller answers, we may gain insight into the thought processes and knowledge base (or lack thereof) from which their answers were derived.

The research reviewed here illustrates how adults' conversational styles directly affect children's ability and willingness to actively participate in conversations in a manner that is child- rather than adult-driven. Even when they are aware of its negative impact on children, adults typically utilize an interrogatory style dependent on directive questions that test knowledge rather than elicit elaborative information. The techniques and operational guidelines included in the NICHD protocol represent an important tool for helping adult interviewers to use effective strategies for developing rapport, preparing children for the task at hand, and overcoming their tendencies to control the dynamics of the interview. Indeed, the strategies involved may be especially helpful as tools for empowering children to make fuller use of their own knowledge (recall) rather than being dependent on cues provided by adult questioners. Such changes in the nature of conversational interactions could thus radically and positively transform the dynamics and formative influence of the everyday conversations between children and parents, teachers, and other adults.

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