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The Use of Supplementary Techniques in Forensic Interviews with Children

DEIRDRE A. BROWN

Key Points

- Interviewers may use supplementary techniques (e.g., introducing props, toys, photographs, dolls, context reinstatement or drawing exercises, truth induction strategies) to assist children in providing more detailed accounts of their experiences.
- These communication aids may serve a variety of purposes (e.g., facilitate rapport between the interviewer and child, reduce the social and emotional demands of the interview, provide retrieval cues to assist in recalling further information, overcome linguistic deficits, or provide a non-verbal response option).
- Research indicates that the various aids that have been employed differ in their effectiveness at supporting children's recall and reporting. Consideration must be given to what aids are used, the timing and manner in which they are introduced into the interview, and the developmental capacities of the children.
- Although supplementary techniques introduced in the substantive portion of the interview may lead to new details being reported

the accuracy or reliability of this information tends to be lower than for information spontaneously reported, especially with younger children.
- Techniques that allow children to provide their own retrieval cues (rather than being provided by the interviewer) tend to have better support from research studies.
- Caution must be used to ensure children's direct interactions with aids (e.g., the content of their drawings, play or exploration with props or toys) is not interpreted as communication of their experiences.

It is now generally accepted that the amount and reliability of information reported by children in forensic interviews will reflect the interaction of a number of variables pertaining to the child (e.g., developmental level, communicative ability), the event in question (e.g., how many times it occurred, how long ago it was), and, importantly, how the children are interviewed (for reviews see Brown, Lamb, Pipe, & Orbach, 2008; Pipe, Lamb, Orbach, & Esplin, 2004). While factors relating to the child and the event are typically unable to be modified when pursuing an allegation, how children are interviewed is able to be controlled and has been the focus of extensive research attention over the past three decades (for reviews see Brown & Lamb, 2009; Lamb, Hershkowitz, Orbach, & Esplin, 2008). This research has consistently demonstrated that the amount of information *spontaneously* reported by children (especially those under 5 years), although typically very accurate, is often insufficiently detailed to be of use to investigators seeking to determine whether there is a case to answer. As such an important question has been how best to support children in providing as much detail as possible about the event to assist with establishing the specific details of an incident required for successful prosecution, without inadvertently compromising the truthfulness of their accounts (e.g., via provision of misleading information or use of suggestive techniques). The impact of introducing prop items (e.g., real items, toys, models, photographs, drawings, dolls) on children's testimony has been thought to provide a means of addressing some of the developmental limitations children bring to the interview context. Early research indicated that such techniques were common in interviews conducted by professionals from a range of backgrounds (e.g, social work, mental health, law, policing), with a survey of American interviewers indicating 92% included anatomically detailed dolls in interviews, 66% used anatomically detailed drawings, 87% used free drawings, and 47% used puppets or other toys (Conte, Sorenson, Fogarty, & Rosa, 1991). A more recent survey of professionals conducting investigations of child sexual abuse in the context of child custody cases indicated 67.5% included

projective drawing tests in their evaluations, 54% used timelines, 44% used anatomical drawings, 21% used anatomical dolls, and 34% used puppets or other toys (e.g., dolls' houses) (Bow, Quinnell, Zaroff, & Assemany, 2002). It is difficult to establish the extent to which supplementary techniques are included in contemporary practice; however, recent professional protocols and consultation documents suggest that dolls and body diagrams remain part of an interviewer's repertoire of techniques, and may even be utilized in the courtroom (e.g., APRI, 2003; APSAC, 2002; Home Office, 2002; Plotnikoff & Woolfson, 2009a,b).

RATIONALE FOR USING SUPPLEMENTARY TECHNIQUES IN INTERVIEWS WITH CHILDREN

The interview context itself is a novel and unfamiliar one for children, with a variety of implicit expectations and assumptions that differ from children's typical interactions with adults (for a review see Lamb & Brown, 2006), which may lead to minimal responding from children. For example, investigative interviews require that children engage with unfamiliar adults, often on their own, in an unfamiliar place. 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. The forensic interview context is also novel in that children typically interact with adults in contexts where the adult knows more than them. In an interview, however, the alleged victims of abuse are often the 'experts' – the sole sources of information about the suspected events. As such, developing rapport with the children, establishing their communicative level and relevant idiosyncratic vocabulary, and providing information about the purpose and ground rules of the interview is an important part of the forensic interview process. Providing toys for the children to play with or asking the children to engage in a drawing task prior to introducing the interview proper may help to put children at their ease, meaning they are more productive during the substantive part of the interview.

Normal conversational expectations mean 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 *et al*., 2002). Young children, in particular, typically respond to such questions with even greater brevity (e.g., 'I played'). 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 elaborate on their spontaneous disclosures without compromising the accuracy of the information elicited. Providing props in an interview has been proposed as one way of encouraging children to be more responsive – possibly as a result of the props helping children to recall more information about their experience, or by encouraging them to report details they may not otherwise have included.

The forensic interview also differs from typical adult–child communication via the goal of the interaction. The purpose is to establish the credibility of allegations, assess the safeness of children's living arrangements, and evaluate 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 and may have far-reaching consequences (e.g., disruption of the family). The extent to which children are aware of the purpose of the interview and its possible outcomes may affect their willingness to disclose and discuss their experiences. In contrast to everyday conversations, forensic interviews also require children to talk about subjects that may be embarrassing and/or traumatic, which may adversely affect their willingness to converse with interviewers. It is important to note, however, that children are not necessarily unduly emotional when recounting experiences of maltreatment. Indeed, a recent study of children's emotional expression when talking about experiences of abuse demonstrated the majority (75%) did not display any negative emotional expression when disclosing abuse (Sayfan, Mitchell, Goodman, Eisen, & Qin, 2008). Further, children (especially very young children) may lack the knowledge and vocabulary to communicate adequately what happened to them, or may use idiosyncratic language to describe, for example, body parts or actions that took place. The task of forensic interviewers is thus to create an atmosphere in which children are willing to discuss topics that are not normally sanctioned, and may not be well understood, and provision of non-verbal methods of communication (e.g., by pointing, showing or re-enacting) may assist with this. Table 12.1 summarizes the research evaluating various supplementary techniques, which are described in detail below.

ANATOMICALLY DETAILED DOLLS

The use of anatomically detailed (AD) dolls was initially thought to provide children with a means of communicating their experiences when developmental, cognitive, or motivational challenges might provide a barrier, by allowing them to show rather than tell what had occurred.

Table 12.1 Summary of research evaluating supplementary techniques to facilitate children's recall and reporting of their experiences

Technique	Empirical support	Age groups studied	Positive benefits	Risks	Use
Anatomically detailed dolls	Laboratory and field studies Contradictory evidence – results range from positive, negative, and no effects	Preschool and school age	May increase information reported	May invite play/exploration May increase errors and decrease overall accuracy	Eliciting child's vocabulary for body parts Clarify verbal accounts Elicit new information Limit direct interaction; play should *not* be interpreted
Body diagrams	Laboratory and field studies Field study showed increased detail Laboratory studies show increase errors	School age	May increase information reported	May increase errors especially regarding genital touch Decreases accuracy Omission of details common	Elicit child's vocabulary for body parts Clarify verbal accounts Use open-ended questions to elicit elaborative details of any touch indicated Avoid yes/no questions Best support is for clarifying location of touch rather than actions associated with it

(Continued)

Table 12.1 (*Continued*)

Technique	Empirical support	Age groups studied	Positive benefits	Risks	Use
Real items	Laboratory studies	3–10 years	Increase in detail without affecting overall accuracy	Increase in plausible errors Accuracy decreases if distracter items included and over repeated interviews	Have items visible but limit direct interaction
Toys and scale models	Laboratory studies	2.5–6 years	Increase in correct information reported	Increase in errors, with overall decrease in accuracy	Better outcome if uniquely associated with event and not a strong identity as a toy Unlikely to achieve this, presence may be suggestive Children need to interact with items for benefit to emerge
Photographs	Laboratory studies	3–11 years	Increase in information reported	May trigger false reports across repeated interviews	Over long delays require activity-based content to be useful

Technique	Study type	Age group	Effect	Limitations	Notes
Picture cue cards	Laboratory studies	Preschool and school age	Increase in information reported	None identified	Effect apparent when cards introduced (no effect on free recall) Verbal prompting for categories just as effective Cards without preparation/ training not effective
Physical context reinstatement	Laboratory and field studies Mixed results – no effects and positive effects	School age	May elicit increase in information reported	May elicit errors if context not uniquely associated with event	Can only use once child has disclosed location – may interrupt recall process to travel to location
Mental context reinstatement	Laboratory and field studies	Preschool and school age	Increase in information reported	None identified	Instructions to recreate context given prior to interview
Drawing and talk	Laboratory and field studies	Preschool and school age	Increase in information reported Longer interviews	Increase in false reports if suggestive questions used Accuracy may decrease over long delays	Content of drawings not analysed Less useful with preschool children

Table 12.1 (*Continued*)

Technique	Empirical support	Age groups studied	Positive benefits	Risks	Use
Projective drawings	No methodologically sound empirical studies	School age	May indicate psychological distress	No reliable signs identified as accurate indicators of maltreatment No normative data Rater bias in interpretation May reflect psychopathology arising from other causes than maltreatment May reflect play/imagination Coding manuals contradictory	Not supported
Truth induction					
Reassurance	Laboratory studies with maltreated children	Preschool and school age	Increase in truth telling with oath competent children	May elicit false reports if children do not have understanding of truth/lies	Prior to interview, following a competency assessment (understanding and consequences of truth/lies)
Oath/promises to tell truth	Laboratory studies	School age	Increase in truth telling (even with oath incompetent children)	Increase false reports if highly suggestive questioning used (i.e., does not protect from effects)	Avoid highly suggestive questions
Discussions of truth/lies			Increase in truth telling	None	

AD dolls have attracted significant controversy, however, because of a number of concerns identified in research and raised by the courts (Ceci & Bruck, 1995; Dickinson, Poole, & Bruck, 2005). One issue relates to the possibility that the dolls themselves are inherently suggestive, implicitly indicating that the children are expected to use them in some way, or inviting exploratory play because of the novelty of the anatomical detail, which may be interpreted as actual experience. Given that there are no supported 'signs' of children's play or behaviour with AD dolls that reliably diagnose abuse (i.e., children's play cannot distinguish children who have experienced abuse from those who have not; see Murrie, Martindale, & Epstein, 2009) critics of including AD dolls in forensic interviews have proposed that the risk of inaccurate conclusions being drawn from observations of children's interactions with AD dolls is too high to support their use.

A second concern relates to children's developing cognitive capacities. The use of AD dolls as a means for children to demonstrate their experience requires that they appreciate that the doll has a dual identity – on the one hand its typical identity as a doll and plaything and on the other hand its identity as a symbol for the child (DeLoache, 2000, 2004; DeLoache & Marzolf, 1995). While young children may be able to appreciate that a doll can represent a person, being able to use them in that way while simultaneously recalling and reporting their experiences (i.e., under a high cognitive load) seems to exceed their abilities. Despite these concerns, AD dolls are still recommended in some professional guidelines, albeit in the context of specific uses and protocols (Everson & Boat, 2002). These uses include eliciting children's names for body parts, assessing sexual knowledge and knowledge of bodily functions, providing a means for the child to demonstrate where touch occurred, providing a visual retrieval cue for prompting recall of specific details relating to the allegation, and screening of possible abuse (i.e., the child is allowed to interact freely with the doll and then the interviewer poses questions based on what they have observed).

Research investigating the effectiveness of AD dolls has demonstrated that benefits in terms of eliciting increased information are typically accompanied by decreased accuracy (Pipe & Salmon, 2009; Salmon, 2001). The majority of research has explored recall in children under 5 years, presumably because they are the children most likely to require additional support because of their cognitive and communicative immaturity. While some studies have shown that children's free recall of events involving touch are more complete when they are interviewed with AD dolls (e.g., Goodman, Quas, Batterman-Faunce, Riddlesberger, & Kuhn, 1997), others have demonstrated reduced reporting (e.g., Goodman & Aman, 1990). When accompanied by verbal

questions, especially those that are suggestive (leading or misleading) then the presence of AD dolls does not help children to be more accurate, and in some studies has increased error rates or inflated their susceptibility to suggestion (e.g., Bruck, Ceci, Francouer, & Renick, 1995). When introduced to elicit new information (i.e., previously unreported details), accuracy is compromised, although the design of the studies has meant it is difficult to separate out the influence of the dolls from the questions asked. The pattern is much the same in the few studies conducted with older children (e.g., Saywitz, Goodman, Nicholas, & Moan, 1991). That is, including AD dolls may lead to increased reporting of information, including that about genital touch; however, when accompanied by leading questions error rates increase as do false reports of touch from children who did not experience any. Field studies examining the effects of inclusion of AD dolls in actual investigative interviews have shown either no or a negative effect of the dolls (e.g., Lamb, Hershkowitz, Sternberg, Boat, & Everson, 1996; Thierry, Lamb, Orbach, & Pipe, 2005). In these studies, however, the interviewers did not follow the relevant professional guidelines (APSAC, 2002), presenting the dolls alongside other toys, allowing the children to interact directly with the dolls and introducing them with some children before any abuse-related information had been disclosed. As such it is difficult to isolate the effect of the dolls themselves from these other factors.

In summary, then, AD dolls may be useful for eliciting children's own vocabulary for various body parts, to aid the interviewer in clarifying and understanding what they report, and for clarifying the location of touch that the children have spontaneously reported. However, there is limited evidence that they provide any benefits over and above careful verbal interviewing techniques, in terms of eliciting new details or additional information. The risk of eliciting inaccurate statements increases if the dolls are presented in the context of suggestive questioning techniques, if children are allowed to play with or interact with the dolls directly, and if they are presented alongside other toys or props. There is no evidence that the content of children's interactions or play with dolls provides a reliable diagnostic indicator of abuse. AD dolls should not be used with very young (pre-school) children.

BODY DIAGRAMS

Body diagrams are also referred to as anatomically detailed (AD) drawings, human figure diagrams or drawings, and body maps. They vary across practitioners and research studies in terms of how they are presented – some are gender-specific and anatomically detailed, some

are gender-neutral (no genital detail included), some clothed, some un-clothed, some are realistic line drawings, others still are presented as cartoon or 'gingerbread' figures. The various pros and cons and relative efficacy associated with each have not been systematically examined. Body diagrams are thought to offer a safer alternative to AD dolls for a variety of reasons. Given their two-dimensional nature, body diagrams offer less opportunity for children to explore and interact with them directly and are therefore less inherently suggestive. However, as with AD dolls, the criticism still remains that the presence of diagrams in an interview may communicate to the child that they ought to use them. Body diagrams provide a more concrete symbolic representation of a person than dolls by virtue of avoiding the problem of dual identity, meaning they may pose less of a cognitive load for children. They also do not have the same strong association with play that dolls do. As with AD dolls, body diagrams are recommended for assisting to establish children's own labels for various body parts and for demonstrating the location of any touch the child has spontaneously reported.

There is limited research evaluating the usefulness of body diagrams for helping children to talk about touch they have experienced. Eight studies (Aldridge *et al*., 2004; Brown, Pipe, Lewis, Lamb, & Orbach, 2007, unpublished manuscript; Bruck, 2009; Steward *et al*., 1996; Teoh, Yang, Lamb, & Larsson, 2010; Wilcock, Morgan, & Hayne, 2006; P.J. Yang, Y.S. Teoh, & M.E. Lamb, unpublished manuscript) have explored different types of body diagrams in the context of staged or naturally occurring events, and one field study. Irrespective of the delay used in the studies the researchers found that although body diagrams were associated with reporting of new information, they also elicited false information about touch, particularly when paired with direct (yes/no) questions about touch to different parts of the body. All of the studies showed that children's reporting of touch was typically incomplete, and this did not improve when children were provided with brief training in how to use a body diagram to report touch immediately prior to the interview. That is, they were more likely to leave out incidences of touch than to include touch that did not occur. Body diagrams did elicit false reports of genital touch in all of the studies, although this was typically clarified as innocuous with further questioning (Brown *et al*., 2007, unpublished manuscript). It is important to note that all of the laboratory studies presented the body diagrams following a verbal interview with the aim of *eliciting new information* about touch, rather than clarifying previously reported information. Although given the opportunity to report touch in the free-recall sections of the interviews, children typically did not do so. One field study has examined

whether presenting gender neutral body diagrams to children to elicit elaboration about touch reported in the verbal part of the interview was effective (Aldridge *et al*., 2004). Children (4–13 years) presented with the diagrams after an exhaustive verbal interview consistent with best-practice guidelines to clarify previously reported touch reported many new forensically relevant details, and this was particularly the case for the youngest children. The diagrams were also associated with an increased use of direct and yes/no questions, however, which are typically associated with decreased accuracy, and so the usefulness of the diagrams could not be separated from the type of question that accompanied them, nor could the accuracy of the details elicited be established. Follow-up studies using this data set examined the type and clarity of detail reported about touch (Teoh *et al.,* 2010), and the clarity of details reported about the identity of the body parts identified or actions associated with touch (Yang *et al*., unpublished manuscript). Teoh *et al*. demonstrated that while children of all ages reported new information about touch in response to the diagrams, they elicited more elaboration about body parts and the nature of the touch experienced than new information. The youngest children were less likely to provide clear accounts of touch than the older children, especially about the nature of the touch experienced. Yang *et al*. demonstrated an increase in the clarity of details reported about body parts (i.e., the location of the touch) but not actions associated with it for all children, irrespective of age. As in the original Aldridge study, in both of these studies the accuracy of the children's statements could not be assessed. Taken together these studies suggest the most likely benefit of introducing body diagrams into interviews is to clarify the location of touch that has been spontaneously reported during the verbal part of an interview rather than eliciting elaborative detail or new accounts of touch.

The research examining the usefulness and safety of including body diagrams in forensic interviews with young children has yet to address several key questions, such as whether they support children to clarify information they have already reported, what form the diagrams should take, and when in the interview they should be introduced. The existing research suggests that children may not understand the concept of touch well, at least when it occurs as part of a wider event (i.e., the touch itself does not define the event). Introducing body diagrams may lead to small increases in the level of details reported, but they are also likely to elicit ambiguous, inaccurate, and possibly forensically relevant (and misleading) information. As such their use is not strongly supported by empirical evidence, and they have certainly not been established as more effective than verbal questioning techniques on their own. Any information reported in response to the presentation of a body diagram

should be explored using open-ended questioning to elicit further detail and context to clarify the child's communication.

PROPS: REAL ITEMS, TOYS, AND PHOTOGRAPHS

Introducing props into an interview is, like dolls, thought to provide a means by which children may overcome communication difficulties (e.g., limited vocabulary, poor comprehension of the event) by enabling re-enactment or demonstration using the items provided. In addition the provision of props is based on the premise that they will increase the similarity between the context of the event in question and the interview, thereby encouraging additional retrieval and reporting of information. Concerns relate to the extent to which children may become distracted by the items from the task of reporting an actual experience and engage in play or exploration with them. Additionally, children may interpret the presence of the props in the interview as an expectation that they are relevant and should be referred to in some way. Various types of props have been explored in laboratory- or analogue-based studies (for reviews see Pipe & Salmon, 2009; Salmon, 2001); however, there has been limited examination of their inclusion in actual forensic interviews. The evidence relating to the various types of props is summarized below.

Real Props

Real props include actual items from the event the children experienced (e.g., pieces of a costume the child wore). Laboratory studies examining their effectiveness have generally demonstrated increased reporting of correct information, even across long delays, for children aged 3–10 years. Although an increase in errors is also often observed, the overall accuracy (proportion of correct to total information reported) remains stable. Any errors reported are of concern, of course, and it appears that the errors children tend to report are consistent with the general theme of the event, and therefore may seem highly plausible. Errors are particularly likely to occur (and accuracy decrease) when children are allowed to interact with the props, if distracter items are included, and if they are exposed to multiple interviews over a delay. Merely having the props visible can also increase the amount of correct information children report (although to a lesser extent than when children are able to interact with them), and is much less likely to degrade accuracy even if distracter items are included. The effectiveness of providing real items in interviews with older children has not been established, nor

have any field studies been conducted to explore the effect of introducing real props (which may serve as corroborating evidence) on children's responses. Of course, simply having these items present may also serve a suggestive purpose, implying that the children ought to reference them in their accounts, meaning their evidence may face challenge in court. Issues also arise when considering what items can/should be present in an interview (e.g., some items may have a generic familiarity to children, whereas others may be uniquely associated with an instance of abuse) and who decides what to include.

Toys and Scale Models

The use of toys and models have been examined in younger (2.5–6 years) children. Similar effects as real items have been observed in increasing correct information; however, they also elicit a disproportionate amount of incorrect information, leading to a decrease in overall accuracy. Accuracy is higher when the items are more similar to those from the event – that is, scale models or objects are superior to toys. Simply having the toys present or visible achieves little in the way of enhancing reporting; increases in information have been demonstrated in studies that allow children to use them for re-enactment. In an extensive review of the use of props in interviews with children, Salmon (2001) concludes 'optimal performance is obtained with scale models that convey highly specific information about the event, that do not have a strong identity as toys, and that are not easily manipulated as objects of play' (p. 287). However, in a field setting, it may be highly suggestive to do this, implying that children ought to respond to these items in their accounts. Given that it is unlikely that forensic interviewers will be able to meet these conditions, when identification of items from the event and exclusion of distracter items is likely to be difficult, the inclusion of toys and scales models is likely to compromise rather than enhance the reliability of children's reports.

Photographs

Photographs may reduce some of the challenges associated with other props. Unlike toys and dolls, photographs are defined by being representations of other things (i.e., there is no dual representation) and thus may facilitate recall of information by reminding children of details they may not otherwise spontaneously report. There is limited research, however, on the efficacy of photographs as aids for supporting children's reporting of their experiences. Two published studies (Ascherman, Danneberg, & Schultz, 1998; Hudson & Fivush, 1991) have examined the effect of presenting children (3–7 years) with

photographs from an event on their verbal reports. Both showed an increase in the amount of information children reported; however, over very long delays the children required presentation of highly specific activity-based photographs to provide additional details, which are unlikely to be available to forensic interviewers. Further research is needed to establish the conditions under which photographs (especially generic or scene-based as opposed to activity-based) pictures assist children in recounting their experiences. With the advent of the digital age, photographs no longer hold the same level of infallibility as representations of true events as in earlier times. Photographs can be easily manipulated to demonstrate or imply false details of an event, and research has demonstrated that they can serve as powerful triggers for the formation of entirely false memories (e.g., Lindsay, Hagen, Read, Wade, & Garry, 2004; Wade, Garry, Read, & Lindsay, 2002). A study with children not only replicated this effect but demonstrated that, following repeated interviewing, children would confidently narrate 'memories' of both plausible (e.g., a hot-air balloon ride) and implausible (having a cup of tea with Prince Charles) events (Strange, Sutherland, & Garry, 2006). A recent study also demonstrated the powerful effect of presenting a photograph as a memory cue. Strange, Hayne, and Garry (2008) asked children to talk about three events across three interviews, within 1 week. One of the events was false. Some of the children saw a doctored photograph of them participating in the false event, others simply saw a photo of the false event (without them present). The remaining events were true, and children were also shown photos of these (in one they were present, in the other they were not). Irrespective of the child's presence in the false event photo, some children reported details suggestive of an episodic memory by the final interview, although this was more likely if the child featured in the photo (overall rates were 47% for child present, and 18% for child absent). Adult raters were unable to distinguish reliably between true accounts and false ones. It is worth noting, however, that even in the strongly suggestive condition (child present in photo) less than 30% of children reported false memories in the final interview. Nevertheless, these findings highlight the risks of using photographs as cues to prompt recall – they may in fact elicit false recall that appears valid.

Cue Cards for Forensically Relevant Categories of Information

Saywitz and her colleagues developed an innovative interviewing technique, Narrative Elaboration Training (NET), to explore the effectiveness of pre-interview training and practice in talking about the past, and providing generic pictorial cues for prompting children to talk about forensically relevant categories of information (people,

setting, actions, conversation, and affect; Saywitz & Snyder, 1993, 1996). Research has demonstrated that the NET helps children, including preschoolers, to report events more completely, without compromising accuracy (e.g., Brown & Pipe, 2003b; Dorado & Saywitz, 2001; Saywitz & Snyder, 1996) and does not prompt false event reports (Camparo, Wagner, & Saywitz, 2001). The benefits are particularly apparent on introduction of the cue cards (i.e., the children do not provide more complete free-recall accounts). Verbal prompting for categories of information, without training, can be just as effective as the NET (e.g., Brown & Pipe, 2003a; Elischberger & Roebers, 2001). The effect of training alone (without pictorial or verbal prompts for categories of information) has not been examined, and the NET has yet to be evaluated in the context of more ecologically valid events, in field studies, and across repeated interviews.

Summary

In summary, although having props (real items, toys, models, and photographs) present in an interview may elicit additional information, there is also the risk of eliciting inaccurate information, thus compromising the reliability of the children's accounts. This is particularly likely if children are allowed to interact with the props and if non-relevant props are included. Given that it is unlikely that forensic interviewers will be able to establish just what is relevant to the event, their use is hazardous. Furthermore, errors that are reported tend to be those relating to general knowledge of events or the items presented – this may be a concern in forensic interviews given that the information may seem plausible in the context of the allegation and thus indistinguishable from accurate information. This may be particularly the case if children have experienced or witnessed multiple instances of abuse and thus developed a 'script' of what generally happens, and therefore have a detrimental effect on interviewer's ability to ascertain what happened during a specific incident. Providing generic pictorial or verbal prompts for general categories of information (e.g., people, place, actions, conversations) may assist children in giving more detailed accounts, even in the absence of prior training with the prompts, without compromising accuracy.

REINSTATEMENT OF CONTEXT

Drawing from theories of memory and information processing, researchers have also explored the impact of reinstating the context of the event on children's ability to report what occurred. Reinstatement of

context increases the similarity of the conditions between the event and those at recall, which should make information more accessible for reporting (Tulving & Thomson, 1973). Context reinstatement also allows for re-enactment of events, addressing communication difficulties that may arise as a result of children's developmental stage or motivation. Researchers have speculated that is more likely to be effective with older children who may have integrated contextual details into their experience (meaning they are more likely to serve as retrieval cues). To the extent that the event context is unique or defines the event and the activities therein, however, context reinstatement may also benefit younger children. There have been a limited number of studies exploring the utility of reinstating the physical context of the event that children experienced, and the findings have been mixed. One study showed no effect of context reinstatement alone relative to a verbal interview (Pipe & Wilson, 1994) (although context reinstatement in conjunction with the presence of real items from the event was associated with increased recall), whereas another showed children who returned to the place where the event occurred reported more information (Wilkinson, 1988). A field study examined the effectiveness of re-interviewing children at the alleged scene of abuse, following an exhaustive verbal interview. Children reported additional details at the scene, although whether this was due to a further (repeated) opportunity for recall or being in context was unable to be determined (Hershkowitz *et al*., 1998). A follow-up study separated out the possible confounding effects of a repeated interview by interviewing children either in the interviewer's office or at the scene once a location was disclosed. This study did not demonstrate any advantage of being in context, although the authors speculated this may have been because children's initial recall and reporting was interrupted to travel to the scene (Orbach, Hershkowitz, Lamb, Sternberg, & Horowitz, 2000). Further research is needed to establish the conditions under which context reinstatement is effective and can be utilized in a way that is relevant for the forensic context. It is possible that the effects will vary to the extent that the context is familiar vs. uniquely associated with the child's experience.

Studies of mentally (as opposed to physically) reinstating the context of a child's experience indicate that this can be a useful technique for helping children to retrieve as much information as possible (Brown, Lamb, Pipe, & Orbach, 2008). Children are instructed to think about different sensory features of the event (e.g., what they could hear, see, smell) and different aspects of the event (e.g., what the place looked like) to reconstruct the scene before beginning to recount verbally what they remember. Consistent with the expectation that mental reinstatement of context will help witnesses to travel back mentally in time and

'relive' the experience, mental context reinstatement (MCR) 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. One advantage of MCR is that it does not require that the interviewer have knowledge of the event in question, and the child, rather than the interviewer, generates the retrieval cues.

MCR 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 has also been used successfully with children (e.g., 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 abilities of children under 8 years of age. Significant gains have been demonstrated with young children when using only the MCR and instructions-to-tell-everything components of the Cognitive Interview (Hayes & Delamothe, 1997). In addition, a field study (Hershkowitz, Orbach, Lamb, Sternberg, & Horowitz, 2001) demonstrated that, while not increasing the overall amount of information reported, MCR assisted 4- to 13-year-old children (especially the youngest children) in providing more detailed accounts earlier in the interviews (i.e., in response to open-ended or free-recall questions). Finally, a field study comparing the relative effectiveness of physical context reinstatement with MCR and with a control interview also demonstrated increased details reported in response to the main invitation, in the children's first narrative and in response to subsequent open-ended (free-recall) prompts by children given MCR instructions relative to those interviewed in context or with a control interview (who did not differ; Hershkowitz, Orbach, Lamb, Sternberg, & Horowitz, 2002). A substantial body of evidence has demonstrated the superiority of the quality of information reported to these kinds of prompts (see Chapter 8) and more detailed responses earlier in the interview reduces the need for further interviewer-led questioning and possible introduction of leading questions.

The evidence for the utility of physically reinstating the context of an event is equivocal. Furthermore, abuse frequently occurs in well-known situations or contexts that are familiar or associated with other events or experiences. As such, establishing the actual psychological context (over and above the physical context) may be hard to capture, thereby reducing the effectiveness of the location as a retrieval cue. In contrast, MCR appears to benefit children in providing more detailed reports without increasing errors or affecting overall accuracy. MCR has the advantage of being child-led and does not require any

information from the interviewer, thus avoiding the possibility of contaminating children's evidence or leading the child by introducing information they have not already reported.

DRAWINGS

Drawings have been used in two distinct ways in assessing children's experiences. One approach, the draw-and-talk method, provides children with the opportunity to draw while recounting their experiences, with only their verbal responses being of interest (i.e., the content of the drawing is not evaluated). The facilitative effects of allowing children to draw while talking are thought to be derived from a number of possible mechanisms. Drawing allows children to generate their own retrieval cues, much in the same way as MCR, by reminding them of additional event-related details as they construct their drawings. Drawing may also serve to make the interview context more comfortable by giving the children a focus other than the interviewer. Finally, interviews that include drawings tend to be longer than verbal interviews alone, which may extend the opportunity for recall and reporting.

Studies examining the use of drawings to enhance children's reports of personally experienced events have shown that, under ideal circumstances (i.e., when asking children about true events using nonsuggestive questioning), drawing while talking yields an increase in the amount of information recalled, without compromising accuracy (e.g., Gross & Hayne, 1998; Salmon, Roncolato, & Gleitzman, 2003; Wesson & Salmon, 2001). A recent field study demonstrated increases in information reported about alleged abuse when children were given the opportunity to draw a picture of their experience after an exhaustive verbal interview (Katz & Hershkowitz, 2010). When children were asked to recount their experience again, with the drawing present, they reported more information than those who had not drawn, although the accuracy of this information could not be established. However, increases in information reported have not been demonstrated with very young (3- to 4-year old) children (Butler, Gross, & Hayne, 1995). Only two studies have examined the effectiveness of including drawing in an interview after a long delay, with one showing drawing decreasing the accuracy of children's accounts (Salmon & Pipe, 2000), while the other showed increased reporting relative to a verbal condition with no effect on accuracy (Gross & Hayne, 1999). Several studies have also demonstrated that in addition to encouraging more complete recall of true events, drawing may also encourage children to report information about events that never occurred (e.g., Bruck, Melnyk, &

Ceci, 2000; Gross, Hayne, & Poole, 2006; Strange, Garry, & Sutherland, 2003). Taken together, these studies suggest that drawing and talking may generally increase children's responsiveness – about both true and false events. Thus, as with other supplementary techniques, the context in which children are asked to draw is a paramount consideration – when used with school-aged children and in conjunction with appropriate verbal questioning (i.e., open-ended prompting) drawing appears to aid children in recalling and reporting their experiences. When accompanied by misleading information or suggestive questioning, however, the additional information elicited is likely to be highly unreliable.

A second way in which drawing may be utilized in assessments with children is in the use of projective drawing tests, which are based on the premise that global impressions formed about the drawings or the presence of specific features in a drawing can be used to evaluate the likelihood of abuse experiences, assess emotional functioning, or identify psychopathology associated with abuse. Such techniques include Draw-A-Person, House–Tree–Person, and Kinetic Family Drawings (for reviews see Lally, 2001; Murrie *et al*., 2009). A number of criticisms have been levelled at the use of projective drawing techniques for screening or identifying maltreatment in children. The most widely reported challenge to the validity of these techniques is the lack of scientific evidence for a set of behaviours, symptoms, or indicators (signs) in drawings that accurately identify children who have been abused and reliably discriminate them from children who are not suspected of having experienced maltreatment (Gurley, Kuehnle, & Kirkpatrick, 2009; Murrie *et al*., 2009; Poole & Wolfe, 2009). Thus, although some symptoms may be frequently observed in children who are maltreated, they also occur in non-maltreated children (e.g., those with psychopathology arising from other factors). Projective drawing techniques have also been criticized due to poor test–retest reliability. That is, across a series of drawings the presence or absence of critical signs and the quality of drawings may vary so much as to produce significantly different conclusions. It has been suggested that, rather than necessarily reflecting children's direct experiences, the content of the drawings could just as easily be interpreted as representing other processes (e.g., perception of self, what the child would like to be, perceptions of impairment, or compensation). Given the strong association that drawing has with play activity, the content of the drawings may also simply reflect the child's creative process, including imaginative or fantastic elements, rather than reality.

The reliability of conclusions derived from projective drawings has also been challenged on the basis of how they have been scored or interpreted. Some evaluators form a global impression, based on clinical experience, and some use the presence or absence of signs or features in the drawing. Neither approach has good support in the literature in

terms of reliability across different raters, and associations with other measures. Identification of signs also often requires subjective judgements of the relative size, placement, and style of items in the drawing, and the manuals often include contradictory indicators as being equally representative of concern (e.g., lack of details but also excessive details included in the drawing). Given the subjective nature of many of the items scored, concern has also been expressed that evaluators may fall prey to rater bias (i.e., identifying features because of a pre-conceived notion about the child's status) or project their own issues when scoring. Finally, no normative data exists from which to identify extreme or unusual scores which may be indicative of maltreatment.

By far the most major criticism of projective drawing techniques, however, is that they lack adequate empirical support from well-conducted scientific studies. The quality of studies conducted to examine differences in children's responses to projective drawing techniques according to suspected maltreatment status have varied considerably. Many lack a suitable control group, are based on single case studies, small samples, or do not control for comorbid psychopathology, which in itself may account for the children's responses. The general consensus in the scientific literature is that there is no empirical validation for the use of projective drawing techniques, and those studies purporting to show their ability to discriminate abused children from those who have not been abused are plagued by methodological issues that affect the conclusions reached (Gurley *et al.*, 2009; Murrie *et al.*, 2009; Poole & Wolfe, 2009).

In summary, drawing techniques have been used in different ways in investigative interviews with children. The draw-and-talk technique seems to support children in talking about their experiences when interviewed a short time after the event without compromising accuracy, if presented in the context of appropriate verbal questioning. When presented after a delay, or when used with very young children, the evidence for their effectiveness is less clear. When associated with misleading or suggestive questioning children are prone to making more errors or recounting entirely false events at a higher rate than children interviewed without drawing. Projective drawing techniques should not be used in forensic interviews with children, because of a lack of scientific evidence supporting their reliability.

TRUTH INDUCTION

Truth induction refers to strategies employed to overcome children's tendency to deny or minimize their own or other's transgressions. These include emphasizing the necessity of telling the truth (e.g.,

child-friendly versions of the oath, promises to tell the truth), and minimizing the negative consequences of disclosure (or highlighting the negative consequences of *non*-disclosure; e.g., via discussion or provision of examples or vignettes). Children's knowledge about truth and lies (both the meaning of these concepts and their consequences) may not parallel or predict their behaviour during an interview. Studies have shown truth telling may be increased by eliciting promises to tell the truth or including a discussion of the morality of truth and lies prior to interviewing them (e.g., Talwar, Lee, Bala, & Lindsay, 2002). Studies of the effectiveness of highlighting the negative consequences of non-disclosure have focused on emphasizing the need to tell the truth. Indeed, many interview protocol and professional guidelines recommend the inclusion of a 'truth–lie ceremony' (e.g., NICHD protocol, see Lamb *et al*., 2008 for summary of research with the protocol; *Achieving Best Evidence*, Home Office, 2002), which includes emphasizing the importance of telling the truth and practising the difference between the truth and a lie. Some version of oath taking or promising to tell the truth is a feature of the judicial process in many countries (e.g., UK, USA, Canada, New Zealand, Australia). Lyon and Dorado (2008) recently examined the effects of reassurance or minimizing negative consequences compared with a child-friendly version of the oath and with no special instructions or preparation on 6- to 7-year-old children's truth telling or disclosure of their own and an adult confederate's minor transgression (play that the confederate warned 'might get [them] in trouble'). The children had all experienced substantiated maltreatment and had passed a basic competency assessment required by US law for children to be able to give evidence (assessing meaning and consequences of truth and lies). Both reassurance and oath taking increased truthfulness. A second study examined these strategies with children (5–7 years) who had not passed the initial competency test and also assessed whether children who had not actually transgressed would be induced to falsely assent to direct (yes/no) and suggestive (tag) questions. Results showed no evidence that the oath had any negative effects, even in conjunction with suggestive questions and when children had not achieved a basic understanding of the meaning and consequences of truth and lies. Reassurance, although effective with children who had passed the competency test, was associated with acquiescence to both yes/no and more suggestive questions in children who did not pass the competency test. Lyon, Malloy, Quas, and Talwar (2008) examined the effects of the two truth induction strategies on the accuracy of maltreated 4- to 7-year-old children's reports when they had been coached to provide a false report (either denying play that had occurred or affirming play that had not occurred), and examined whether

reassurance was effective when it was general (rather than about a specific behaviour as in the previous studies). The oath had positive effects in overcoming the coaching to provide false accounts for all children, especially for those coached to deny play that had occurred. Reassurance was less effective than in the previous studies, neither eliciting false reports or increasing the children's accuracy. Neither strategy was effective in ameliorating the effects of highly suggestive questioning.

In summary, then, providing reassurance to children to encourage truth telling may be effective with children who have a basic understanding of the meaning and consequences of telling the truth or lies but it is less effective with children who lack this understanding and when it is generic rather than specific to the event in question. Administering a child-friendly oath to children exerts a positive effect on accuracy and truth telling, irrespective of children's understanding of truth and lies, even when they have been extensively coached to provide a false account. Future research is needed to explore the effectiveness of these strategies with non-maltreated children, those with developmental disabilities, and with older children and adolescents. It will also be important to explore their effectiveness when there is a strong relationship between the child and the adult confederate (thus more closely mimicking situations where the alleged perpetrator of abuse is familiar to the child).

LEGAL ISSUES

There are a number of issues that arise when applying the research on supplementary interview techniques to the consideration of a particular case before the courts. The first relates to the ecological validity of the studies conducted. That is, how well do the studies match real life contexts in which their findings are to be applied to? Studies of children's eyewitness testimony have used a variety of stimulus or target events, ranging from naturally occurring events (e.g., medical procedures, natural disasters), staged events (e.g., a trip to the pirate), and witnessed events (e.g., interactions occurring at the front of the class, short video clips). Studies have further varied as to the level of the participation required from the child – some events are individually experienced, some experienced as a class, and in some the child observes an interaction – and how many times the child experiences an event. Events tend to be very unique or novel, so as naturally occurring events in the child's life do not contaminate memory for the event in the interim between staging it and the child being interviewed. Ethical considerations preclude reconstructing analogues to maltreatment, and so the

question is often asked how well can findings from analogue studies using unique occurrences of pleasant, novel events be generalized to the real world context to which they are meant to apply? Early analogue studies produced inconsistent findings with respect to the influence of stress on memory, with some studies showing a positive effect and others showing a negative effect or no effect at all (for reviews see Cordón, Pipe, Sayfan, Melinder, & Goodman, 2004; Howe, 1997; Ogle *et al.*, 2008). The inconsistencies may arise, in part, from the degree of stress (or distress) experienced, methodological differences in the definition and measurement of stress across studies, differing delay intervals, and differences in the assessment of memory (e.g., central vs. peripheral information, reliability vs. suggestibility). In general, studies indicate stress may be associated with increased memory and decreased forgetting over time, particularly with respect to central or core information. Nonetheless, studies involving less stressful experiences still make a valid contribution to forensic psychology, because abuse victims may not always perceive their experiences as painful or traumatic, and children's ignorance or misunderstanding of events may decrease their salience (Pipe *et al.*, 2007). Moreover, analogue studies provide a basis for the development of safe and effective forensic interview techniques. Field studies, by contrast, examine interviewer and child contributions to investigative interviews in the actual context. Very few studies are able to compare children's reports with an objective record of what has occurred, however, and as such accuracy can only be inferred from examining the types of prompts used to elicit the information (which in turn is informed by analogue studies), or assessed indirectly by examining the consistency of repeated responses during an interview. It is the convergence of evidence resulting from the two approaches to the study of how best to support children's recall and reporting in investigative interviews that provides the best guidance for forensic interviewers.

The next issue is to what extent findings from group-based studies can be applied to a particular case under investigation. While studies may consistently demonstrate an effect between two different groups (e.g., those interviewed with props and without), *within* each group there will be children who do not fit the general trend. That is, while the majority of children in a group may benefit from the provision of additional support in an interview, some children may not. Or put another way, while some children may report more errors, others may report additional information without including any errors. As such, it is important that when consulting the research, interviewers consider the size or meaningfulness of the difference between groups (often indicated by the inclusion of effect size calculations) and conduct a risk–benefit analysis of their own in considering whether the risks of eliciting highly

unreliable information are outweighed by gaining further detail. Investigators must also consider the context in which the research has been conducted to determine how much they can draw from it (e.g., does the delay match the case under investigation, what style of verbal questioning will be used, etc.). Research provides an important evidence base from which to make this analysis, and where findings are highly contradictory or limited research has been conducted, investigators must be prepared for their decision making around the use of supplementary techniques to be susceptible to challenge in the courts.

Another issue that arises is the limited amount of research examining the effectiveness of supplementary techniques across delays that are similar to those encountered in the legal process. Most case evaluations in forensic contexts are delayed for at least weeks or months (Hershkowitz, Horowitz, & Lamb, 2005) and several additional months may pass before investigations reach court. A survey of young witnesses in the United Kingdom showed delays averaging 11.6 months (Plotnikoff & Woolfson, 1995), for example, and similarly long delays have been found in the United States (Pipe, Orbach, Lamb, Abbott, & Stewart, 2008). While it can be assumed that any negative effects of techniques demonstrated at short delays might only be exacerbated after longer delays when children's memory is even more fragile as a result of natural forgetting processes, research has not generally documented what happens to any positive effects (i.e., do techniques retain their usefulness or become more hazardous?).

FUTURE RESEARCH

Despite substantial research conducted exploring supportive techniques for use in forensic interviews with children, several important questions still warrant further attention. As highlighted throughout the chapter, many of these techniques have not been examined when substantial delays akin to those observed in the forensic process are incorporated into the study design. The usefulness of these techniques have also typically not been examined with older children and adolescents, who may well derive benefit from them because of their more advanced cognitive development, and yet at the same time may be more susceptible to the implicit social demands that they may present (e.g., that there is more tell).

Another important area for research is the extent to which children with various developmental, behavioural, communicative, or intellectual disabilities may benefit from (or be compromised by) the use of supplementary techniques in interviews (see Chapter 13). Children

with disabilities are a particularly vulnerable group of witnesses. They are both more likely to experience or witness abuse (e.g., Sullivan & Knutson, 1998, 2000) and yet less likely to have their complaints heard and investigated. Furthermore, field studies of interviews that do occur with this group suggest that the children are unlikely to be interviewed in a developmentally appropriate manner (Cederborg & Lamb, 2008), and have their capacities and limitations recognized and provided for in court (Cederborg & Lamb, 2006; Westcott & Jones, 1999). While there may be intuitive appeal to the introduction of aids such as props, drawings, dolls, or toys into interviews to overcome cognitive and language deficits (e.g., with children with intellectual disabilities or receptive or expressive language disorders), the nature of their disabilities may, in fact, render such techniques dangerous. For example, children with intellectual disabilities or autism spectrum disorders (ASD) may have difficulty with the symbolic skills needed to interact with toys, dolls, or props intended to represent aspects of their experience. Children with attention deficit hyperactivity disorder (ADHD) may have difficulty with impulse control and distractibility which may make them more vulnerable to suggestive techniques or play-based interaction with props which is interpreted as representing their experiences. More research is required to document the strengths and vulnerabilities of children with various disabilities and diagnoses, to understand how best to support them in interviews without compromising the reliability of their reports.

Another area of research that has received limited attention is how best to support children to recall temporal information (e.g., sequencing of events (both within and across events), dating events) and indicate numerosity (e.g., frequency of repeated events) (Lyon & Saywitz, 2006). Inclusion (or omission) of such information can affect juror assessments of the credibility of the child's account and this information is also important for the 'particularization', or establishment of salient details of the event which may affect judgements about the worthiness of progressing a case from investigative interview to laying of formal charges, and whether a child will appear in court. Limited research has been conducted in the forensic context regarding children's understanding of and emerging ability to respond to questions relating to these concepts and ways in which they might be supported to do so (e.g., via timelines, personal time intervals (e.g., age, significant events) or landmark events to date their experiences). Recent evidence suggests children have difficulty using such strategies (e.g., Friedman & Lyon, 2005); however, more research is required that approximates the time intervals or delays likely to be relevant in forensic contexts and that uses personally salient, experienced (rather than observed) events.

CONCLUSIONS

The usefulness of introducing supplementary techniques into forensic interviews with children varies according to the type of technique, the age of the child, how the technique is presented, when in the interview it is introduced, the level of interaction the child is allowed (e.g., with props), and, most importantly, the verbal instructions that accompany them. There is limited or equivocal support for their effectiveness with very young (e.g., preschool) children, who are most in need of support to recall and recount what they know. Introducing props and AD dolls into interviews is most likely to result in challenges to the reliability of the child's evidence, especially if children are allowed to interact directly with them. There are no reliable 'signs' of maltreatment in doll play or children's drawings that identify and differentiate children from those who have not experienced abuse or neglect. Body diagrams do not appear to be particularly useful in assisting children to report new information about touch they have experienced; however, their use for clarifying or elaborating on children's spontaneous accounts has not yet been examined. The strongest evidence for supporting children's recall is associated with asking children to draw while talking and for mental reinstatement of context prior to beginning their accounts (although drawing may increase children's general responsiveness and thus elicit inaccurate information if presented in conjunction with misleading information). Both of these techniques have the advantage of being child-led (i.e., the child provides their own retrieval cues), and thus require less input from the interviewer. Providing reassurance to children about the importance of disclosing and minimizing negative consequences associated with it may encourage children who understand the concepts of truth and lies to disclose, but may elicit false accounts from children who do not understand these concepts. Administering a child-friendly version of the oath has been demonstrated to be effective at enhancing disclosures of both the child's and other's actions, without increasing false reports. The usefulness of these techniques across substantial delays, with older children and adolescents, and with those who have developmental disabilities has yet to be well established. As with verbal interviewing techniques, the use of supplementary techniques in interviews with children needs to be carefully considered, taking into account the child's developmental stage, the context of the interview and the nature of the event under investigation. The benefits of eliciting additional detail need to be weighed against the risk of the quality of the information elicited being poor, which may result in the child's testimony being vigorously challenged in court.

In summary, then, research shows:

- Researchers and practitioners have been interested in finding ways of supporting children to provide detailed accounts of their experiences.
- Introducing aids into interviews (e.g., dolls, diagrams, toys, scale models, photographs, cue cards, drawing exercise or exercises to reinstate the context of the event) may assist with helping children to remember additional information, or report it non-verbally.
- Research has demonstrated that most techniques can assist children in reporting additional information, but the accuracy of this information may be poor.
- Should aids be introduced into the interview children should not be allowed to interact with them directly, nor should the content of their interactions or drawings be taken as indicative of their experiences.
- Clarifying any information reported using appropriate verbal interviewing strategies is important.
- The nature of the verbal instructions or questions accompanying the aids is likely to influence how effective they are.
- Administering a developmentally appropriate (child-friendly) oath to children prior to interview may increase accurate disclosure of details.
- Further research is needed to establish the effectiveness of the various techniques when long delays have occurred since the child's experience, to explore their use with older children and adolescents, and with children who have developmental, communicative, behavioural, or intellectual disabilities.

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