Difficulties translating research on forensic interview practices to practitioners:

Finding water, leading horses, but can we get them to drink?

Michael E Lamb

University of Cambridge

Abstract

Over the last three decades, researchers have elucidated the cognitive and motivational conditions that affect the capacity and willingness of young alleged victims to describe their experiences to forensic interviewers. Applied researchers have also studied the contents and features of training programs designed to help interviewers take advantage of the research on developmentally appropriate interviewing. The latter studies have highlighted a knowledge transfer problem—scientists understand best-practice techniques well, many interviewers believe that they both understand and employ those practices, but widespread training has had a limited impact on the actual quality of interviews conducted in the field. There is now clear evidence that improvements in interviewing practice occur reliably only when training courses involve multiple modules, distributed over time, with repeated opportunities for interviewers to consolidate learning and to obtain feedback on the quality of the interviews they do conduct. Barriers to the implementation of such training are discussed.

Difficulties translating research on forensic interview practices to practitioners:

Finding water, leading horses, but can we get them to drink?

A year ago, Lamb (2015) had the opportunity to describe the evolution of a program of research, informed by decades of scholarship by developmental scientists, clinicians, and practitioners, on the most effective ways of eliciting accurate and detailed information from alleged victims of child abuse. Now, in this article, the focus narrows to examine the transfer of the knowledge described above to practitioners, and on one of the more disappointing aspects of this success story—understanding why so many agencies and practitioners have failed to change their practices to align them with evidence-based best practice guidelines. This failure to invest in adequate and appropriate training is significant, and illustrates the difficulty researchers and policy makers face in many domains when attempting to translate robust findings into policies and practices in the field. This failure is not inevitable, because, as shown below, we now know both what interviewers need to change and also how we might change everyday investigative practices by investing in well-studied and validated modes of training.

Especially when viewed in the context of the notorious multi-victim day care cases of the 1980s (see Ceci & Bruck, 1995, for review), developmental scientists can be very proud of the way they have dramatically broadened our understanding of children's memory, linguistic, communicative, and meta-cognitive capacities as well as their social tendencies over the last three decades. Importantly, the efforts of many basic researchers have been complemented by clinical observations and extensive research by a growing army of applied developmental scientists. Together, they have been able both to elucidate the risks associated with the ill-informed interviewing

practices deployed in the McMartin, Kelly Michaels, and Little Rascals cases, as well as to identify superior practices, suitable for eliciting richer and more accurate accounts, even from young victims and witnesses. Notwithstanding the problems discussed below, there is substantial evidence that contemporary forensic interviewers seldom employ the most egregiously harmful practices that characterized those early cases, and that most avoid coercive suggestive practices (e.g., Johnson, Magnussen, Thoresen, Lønnum, Burrell, & Melinder, 2015; Lamb, Malloy, Hershkowitz, & La Rooy, 2015).

Since the early 1990s, in fact, experts have embraced evidence based recommendations that forensic interviewers ought to 1) interview alleged victims as soon as possible after the alleged crimes so as to minimize the adverse effects of forgetting; 2) establish rapport, so that children feel comfortable and trusting enough to talk to unfamiliar adults about personal and intimate experiences; 3) explain the purpose of the interview and its basic ground rules (only describe what really happened, and say if you don't understand a question, don't remember, or don't know the answer to a question); 4) allow the children rather than the interviewers to introduce the topic of abuse; 5) use open questions (e.g., "Tell me what happened.") as much as possible because they elicit information that is most likely to be detailed and accurate; 6) ask simply worded questions using the children's own vocabulary; 7) build on children's answers to more focused questions by asking open questions ("You said it hurt. Tell me about the hurting."); and 8) electronically record interviews so that there is a complete record of what was said, by whom, and in what context. These areas of consensus have been spelled out in documents and guidelines published by professional groups in many countries (e.g., Home Office, 1992, 2011; American Professional Society on the Abuse of Children, 2002, 2012; Justis- og

beredskapsdepartementet, 2015; The State of Michigan Forensic Interviewing Protocol, 2011) and the voluminous research has been summarized in many reviews (including, for example, Lamb et al., 2015, and Lamb, Brown, Hershkowitz, Orbach, & Esplin, in press).

Similarly, experts have long agreed that forensic interviewers should 9) not ask suggestive questions (those, including tag questions, that signal what response is expected), 10) avoid asking Yes/No and other forced choice or 'option-posing' questions, and 11) ensure that interviewers avoid introducing information themselves (Lamb et al., 2015, in press). Another recommended practice was embraced later following systematic research: 12) the admonition that interviewers should allow children to practice providing narrative accounts of neutral experienced events before they are asked to describe any experiences of abuse, so that they are trained to respond informatively (Saywitz & Snyder, 1996; Saywitz, Snyder, & Lamphear, 1996).

Wherever in the world they are based, forensic interviewers (whether psychologists, social workers, or police officers) who trained in the last 25 years will most likely have been taught most or all of these fundamental rules. Until recently, almost all such courses for investigative interviewers were typically short and intensive, completed in a few days (Powell, Wright, & Clark, 2010). The contents of individual courses vary, depending on local standards and policies, but most discuss such issues as the dynamics of abuse, normative development (especially cognitive and language development), and the role that interviewing plays in the broader investigative context, before explaining best practice interviewing strategies. Interviewers are then often given the opportunity to practice implementing their skills in mock interviews that are monitored and evaluated by the instructors. Only more

recently has there been extensive examination of the affective factors that investigative interviewers must also address, as discussed more fully later in this paper.

Traditional Intensive Classroom Training Models

There is persuasive evidence that interviewers, apparently regardless of disciplinary background, benefit from these courses, learn the basic rules they are taught, and become capable of reciting and even applying them in the course of mock interviews (Aldridge & Cameron, 1999; Freeman & Morris, 1999; Stevenson, Leung, & Cheung, 1992; Warren, Woodall, Thomas, Nunno, Keeney, Larson, & Stadfeld, 1999; Yii, Powell, & Guadagno, 2014). However, there is also evidence that these interviewers often have difficulty applying the lessons they have learned when conducting interviews in the field with suspected victims of abuse (e.g., Johnson et al., 2015; Lamb, Hershkowitz, Sternberg, Esplin, Hovav, Manor, & Yudilevitch et al., 1996 and below). Further, Smith, Powell, and Lum (2009) showed that, within one month after training, even interviewers who used more open questions in immediate post-training assessments began to look like untrained interviewers. These findings suggest that such courses may have limited effect on actual forensic interviewing practices.

Some of the first studies conducted by my colleagues and I confirmed that training did not appear to have the desired effects on performance in the field. For instance, field studies of transcribed forensic interviews showed that the quality of interviews conducted even after multi-day training courses was consistently poor, with some studies reporting that as few as 2% of all substantive questions asked were open (Lamb, Hershkowitz, Sternberg, Esplin, Hovav, Manor, & Yudilevitch et al., 1996). These interviewers instead relied on option posing (either "Was it X or Y?" or

Yes/No questions) and suggestive questions, and the interviews themselves were poorly structured. Disappointingly, the same pattern was evident in countries as diverse as Britain (Aldridge & Cameron, 1999; Sternberg, Lamb, Davies & Westcott, 2001), Finland (Korkman, Santilla, & Sandknabba, 2006), Sweden (Cederborg, Orbach, Sternberg & Lamb, 2000), Israel (Lamb et al., 1996), New Zealand (Wolfman, Brown, & Jose, 2016), and the USA (Sternberg, Lamb, Hershkowitz, Esplin, Redlich, & Sunshine, 1996; Warren et al., 1999) and my personal chagrin and embarrassment were amplified by the fact that interviewers personally trained by our team did not perform any better!

Mastering the use of open prompts was evidently difficult for interviewers whose natural tendency was to ask the focused questions that predominate in everyday discourse, especially when one person is questioning another (Powell, 2000). Indeed, even when interviewers succeeded in asking open questions in the pre-substantive phase of their interviews and were rewarded because these questions elicited longer and more detailed responses from the children, they still reverted to focused questions when the interviewers shifted to exploring the possibility of abuse (Sternberg, Lamb, Hershkowitz, Yudilevitch, Orbach, Esplin, & Hovav, 1997).

One might have expected that the widespread provision of training courses to forensic interviewers would yield a gradual improvement in the quality of their interviews, but that does not appear to have been the case. In a particularly compelling pair of studies, a team of researchers systematically examined forensic interviews conducted in Norway in two eras—between 1990 and 2002 (Thoresen, Lønnum, Melinder, & Magnussen, 2009; Thoresen, Lønnum, Melinder, Stridbeck, & Magnussen, 2006) and between 2002 and 2012 (Johnson et al., 2015). In the first era, there were small declines in the numbers of suggestive and Yes/No questions

asked, but little change in the numbers of open questions—they remained rare throughout the period. In the second era, there were no significant changes over time in the types of questions asked by the police interviewers — neither the use of (undesirable) suggestive questions nor the use of (recommended) open questions changed significantly over the 22-year period covered by the two studies, despite extensive investment in the training of forensic interviewers nationwide. Only about 2% of the questions asked in these interviews were open, whereas a fairly consistent 13% were suggestive.   Only increases in the use of directive questions –relatively focused recall-based questions (e.g., "Where were you?") —and decreases in the use of Yes/No questions could be considered positive trends.

In all, there is persuasive, if disappointing, evidence that traditional intensive training courses do not enhance the quality of investigative interviews. Unfortunately, they remain the dominant mode of training, perhaps because they allow agencies to classify large numbers of interviewers as 'trained' and thus appear cost-effective. As indicated here, such designations are misleading and may even be counter-productive to the extent that they create an illusion of expertise (i.e., interviewers are perceived by themselves and others as experts because they've been trained).

Intensive training with on-going intensive feedback

Further research has documented that effective generalization from training contexts to the real world field context is hindered by the absence of opportunities to receive detailed and high quality feedback from supervisors, trainers, and colleagues (e.g., Lamb, Sternberg, Orbach, Hershkowitz, Horowitz, & Esplin, 2002b). By contrast, training programs that involve spaced or distributed training and include continuing guidance as part of the course are associated with continuing improvements in the quality of interviewing (i.e., increased use of open questions and

reduced use of suggestive questions; Lamb, Sternberg, Orbach, Hershkowitz, Horowitz, & Esplin, 2002b) and the better timed provision of emotional support to youngsters who are particularly reluctant or uncooperative (Hershkowitz, Lamb, Katz, & Malloy, 2015).

In one study, for example, we compared forensic interviews conducted by interviewers who attended various types of training sessions. Improvements in the types of questions asked were not evident after intensive lecture-style workshops, even when those included opportunities to conduct mock interviews, but they were evident when the interviewers continued to meet on a regular basis with experts and colleagues to review their interviews (Lamb et al., 2002b). Interestingly, improvements were evident even when those meetings focused on interviews conducted by *other interviewers* rather than the interviewers being assessed.

By contrast, research in a different jurisdiction showed that improvements that had been achieved following comparable intensive training complemented by regular review sessions quickly declined when the interviewers ceased being asked to review the quality of their own and others' interviews (Lamb, Sternberg, Orbach, Esplin, & Mitchell, 2002a). Such studies thus established the importance of extended opportunities to practice the implementation of skills and receive timely feedback on the quality of those interviews. However, researchers have not yet established how much feedback and guidance is needed to ensure that good practical skills are ingrained. For example, when training began with an intensive multi-day course, declines in interview quality resulted when guidance was provided roughly monthly for the next 6 months, suggesting that more extended and intensive guidance was necessary to ensure that skills are consolidated (Lamb et al., 2002a).

The evidence that it is valuable to practice interviewing skills in a context designed to ensure that expert feedback can be provided has informed the design of most training programs, many of which include mock interviews, which allow trainees to make mistakes without compromising actual investigations. Mock interviews allow interviewers to practice asking open questions, of course, but fellow trainees or adult actors playing the role of abused children may provide unrepresentatively detailed answers to narrow questions that reflect the greater memory, linguistic, and meta-cognitive understanding of both abuse and forensic interviewing (Powell, 2002). In a similar vein, real children recalling innocuous events may lack the reticence and reluctance that often characterizes abused children in forensic interview contexts (Nicol, La Rooy, & Lamb, in press). In both cases, the mock interviewees would thus not provide realistic responses that actually represent the challenges faced when interviewing allegedly abused children.

Powell, Cavezzaa, Hughes-Scholes, and Stoove (2010) compared interviewers' performance in 1) mock interviews with adult actors playing the role of children and 2) with real children recalling innocuous events as well as 3) in actual interviews with abused children. Inappropriate strategies employed in any of these contexts tended to be evident in the other contexts, too, though the field interviews better reflected the strategies adopted when the interviewers were interviewing adult actors rather than children describing innocuous events.

The value of practice interviews with adult actors can be enhanced by training actors to respond like abused children and to reward interviewers asking open questions by reporting more event-related details in response (Powell, Fisher, & Hughes-Scholes, 2008). Powell et al. (2008) showed that trainees who had practiced skills by interviewing trained actors used more open questions both immediately after

training and 12 weeks later than colleagues who had practiced with untrained actors. Similarly, Powell, Feltis, and Hughes-Scholes (2010) showed that training actors to reinforce the use of open questions allowed them to elicit more coherent and compelling accounts.

Building on research showing the importance of opportunities to both practice interviewing skills and receive individualised feedback, Cederborg and her colleagues (2013; Lindholm, Cederborg & Winerdal, 2016) developed training courses at the Swedish police academy for police officers who investigate crimes against children. This program emphasized key concepts: the explanation of ground rules, rapport building, the elicitation of open narratives about experienced events, and the extensive use of open prompts. Like many of the other programs discussed here, the course included systematic and extensive practice, feedback, and evaluation of actual forensic interviews over a five-month period, and trainees were required to demonstrate that their interviews were of an acceptable standard before they passed the course.

In their first study, Cederborg et al. (2013) compared interviews conducted by the trainees before the course started and after it ended. In the post-training interviews, the officers asked three times as many open questions and used two-thirds fewer option-posing questions than they had at the beginning, suggesting that the course had been effective. The question, of course, was whether these improvements were maintained after the course ended. In a later study, therefore, Lindholm, Cederborg and Winerdal (2016) examined interviews conducted both immediately after the course ended as well as at least two months later. As in the previous study, the use of open questions increased and the use of option-posing questions declined. Importantly, these differences were still evident in interviews conducted at least 2

months after the end of the course, suggesting that some skills can be maintained for at least two months following the end of intensive training. The researchers are currently conducting studies to determine whether skills can be maintained over even longer periods of time.

Computer-Assisted Technology Training

Recent research makes clear that training does not need to be conducted in classroom formats, and can be delivered over a longer period of time using computer-assisted technologies, which have become increasingly important in a number of economic sectors (education, health care, manufacturing, etc.) because of their financial and practical advantages. In the first such study, Powell, Guadagno, and Benson (2014) provided trainee interviewers with remote access to computer-based activities over a period of several months, avoiding the need for interviewers (especially those working in large and geographically remote locations), to meet in-person. The material to be learned was organized into 12 modules, each of which took about 3 hours to master, with regular quizzes and practices facilitating the acquisition and mastery of the material.   The modules examined the nature of 'best practice' guidelines, defined question types, and then described memory and language development, the choice of open-ended questions and the use of appropriate questions in the context of interviews, the non-suggestive shift of focus to the topic of concern, the specific interview protocol, self-assessment tools, the exploration of repeated incidents, evidentiary requirements, the value of narrative accounts, cross-cultural issues, and the special circumstances surrounding interviews with children who have communication difficulties. An evaluation showed that there were significant improvements in the quality of interviews with mock victims performed after training, and that these improvements were maintained over a 6-month period.

Benson and Powell (2015) conducted a second study documenting the value of training conducted remotely using computer-assisted technology. There were 15 substantive modules covering the topics outlined above, and trainees were advised to complete a maximum of one module per week. The remote delivery model allowed Benson and Powell to provide more detailed conceptual training and the pacing ensured that information was provided in manageable units. Intermediate tests ensured that trainees acquired and implemented fundamental interviewing skills before progressing to more advanced modules. All trainees participated in numerous mock interviews, which were conducted by telephone or Skype with actors trained to play the role of abused children, and detailed, individualized, expert feedback was provided immediately after each of these practice interviews. The fact that this well-organized and carefully delivered training program facilitated the acquisition of skills is not surprising: there is considerable evidence that learning is superior when opportunities to acquire knowledge, practice skills, and consolidate learning are distributed over time (Son & Simon, 2012).

In the first of two studies, Benson and Powell (2015) showed that trainees who completed the 15-modular training sessions conducted better interviews with actors portraying children after they completed the course. The post-training mock interviews included more open questions, were briefer, yielded more of the evidentially important information, and were more compliant with the interview guidance that had been communicated in the modules. Assessments were made shortly after the training was completed, but continued improvement was evident on at least some dimensions as much as 12 months after the training ended, albeit only in mock interviews, rather than forensic interviews with suspected victims of abuse. As noted earlier, performance in mock interviews does not reliably reflect the quality of

interviewing in actual forensic interviews.

In their second study, Benson and Powell (2015) evaluated the quality of forensic interviews conducted by the trainees both before and after they completed the computer-assisted course described above. As in the first study, there were clear improvements in the quality of the interviews and there was some evidence that these improvements were maintained after the training ended and the interviewers proceeded to conduct interviews regularly as part of their professional work.

Summary

There is thus extensive evidence that training is most effective when substantive information is presented in multiple discrete sessions, with extensive opportunities for trainees to demonstrate their mastery of the material and to practice implementing their nascent skills in contexts that allow them to benefit from prompt feedback from other interviewers, including experts. That practice can involve both mock interviews and actual interviews in the field, although advanced skills are unlikely to develop without the opportunity to get feedback on forensic interviews with alleged victims. Importantly, it seems that computer-assisted training can be effective, although further research on its effectiveness, advantages, and disadvantages remains necessary.

Training to Conduct Emotionally Supportive Interviews

Most of the initial research on developmentally appropriate forensic interviewing focused on ways to create the most cognitively conducive circumstances in which alleged victims could retrieve and report information about experienced events. In addition, however, interviewers must often address motivational factors that make some children less willing to talk to unfamiliar officials. Such issues are especially important in the face of embarrassment about experiences or fears to

disclose because disclosure might have adverse implications for themselves or those on whom they are dependent (Pipe, Lamb, Orbach, & Cederborg, 2007). On the other hand, there is extensive evidence that the adoption of empathic clinical interviewing styles can be problematic, because the supportiveness can easily be seen as suggestive, thereby undermining the perceived value of the testimony elicited (Saywitz, Larson, Hobbs, & Wells, 2015). In fact, of course, support and empathy would only be suggestive if they were linked to the content of children's utterances, rather than to the children's efforts to be cooperative.

Many child abuse victims do not disclose maltreatment when interviewed, especially when the perpetrators are members of their families (London, Bruck, Wright, & Ceci, 2008). Motivational factors make more than a third of suspected victims, more than half of alleged intra-familial victims, and unknown numbers of unidentified victims reluctant to disclose abuse (Hershkowitz, Horowitz, & Lamb, 2005). It seems likely that skillful management of children's reluctance by providing social support may help reduce these barriers. Analog studies in the laboratory have shown that non-suggestive support increased the accuracy of children's accounts (Greenstock & Pipe, 1997, exp. 2), enhanced their resistance to misleading questions (Carter, Bottoms, & Levine, 1996; Davis & Bottoms, 2002; Imhoff & Baker-Ward, 1999), and reduced their suggestibility (Greenstock & Pipe, 1996, 1997; Quas, Wallin, Papini, Lench, & Scullin, 2005).

Studies examining child forensic interviews have shown that enhanced interviewer support not contingent on specific responses indeed both increased the likelihood of disclosure by abused children (Hershkowitz, Lamb, & Katz, 2014; Hershkowitz et al., 2006) and enhanced their informativeness (Hershkowitz, 2009; Lewy, Cyr, & Dion, 2015; Ruddock, 2006). By contrast, interviewers not trained to be

supportive often provided less support and behaved more coercively in response to reluctance, which in turn intensified uncooperativeness (Hershkowitz et al., 2006) and tended to elicit abbreviated accounts of abuse (Orbach, Shiloach, & Lamb, 2007). Offering children non-suggestive social support during forensic interviews may not only promote their sense of well-being but also enhance the richness and accuracy of their testimony.

Accordingly, Hershkowitz, Ahern, Lamb, Blasbalg, Karni-Visel, and Breitman (under review) investigated the effectiveness of training interviewers to sensitively respond to reluctance using non-suggestive support when questioning alleged victims of within-family abuse, who were expected to be reluctant interviewees. Reluctance was defined by the children's unwillingness to engage and/or manifest discomfort while being interviewed.

The training program was not delivered directly to interviewees. Instead, their supervisors were shown how to provide training in modular form around eight key issues related to the motivation and reluctance of suspected victims of abuse. All of the interviewer trainees were experienced, and had previously used the NICHD Investigative Interview Protocol (Lamb, Hershkowitz, Orbach, & Esplin, 2008), which had been mandated nationally two decades earlier. Because all had benefited from regular supervision, as described above, their interviews were already good with respect to the extensive use of open questions and the avoidance of risky questions, and the focus of the new training program was on motivational factors, especially those that make children reluctant to report abuse.

Day-long sessions for the trainers involved teaching the theory and research behind specific supportive interventions, practicing the interventions to be taught, learning how to identify and code instances of reluctance and support, reviewing

analyses of recently conducted interviews, and learning to lead exercises in which interviewers could participate during and after each training session. The subsequent group sessions conducted by the supervisors also extended over a full day and were followed by individual sessions involving the supervisor and each of his/her interviewers, each lasting approximately 2 hours. In these individual sessions, one of the interviewer's recent interviews was coded and analyzed by the interviewer, supervisor and a research team member, thereby permitting supervising trainers and trainees to discuss both the favorable and unfavorable practices employed as well as the correct coding of each question asked or statement made by the interviewer. The first session discussed the rationale for the recommended supportive interventions, modelled supportive statements, and taught the coding scheme; the next three sessions focused on creating, enhancing, and maintaining rapport during each phase of the interview; the next two sessions explained how to plan and conduct repeated interviews when children were unwilling to disclose possible abuse and might need to be interviewed again; and the last two focused on identifying non-verbal indicators of reluctance and on how to conduct an integrative analysis of a completed investigation. The training extended over an entire year.

The supportiveness of these experienced interviewers was assessed in interviews with alleged victims, each conducted during the course of training to use the Revised Protocol (RP), which focused on managing children's immediate comfort. The use of appropriate support increased over time, whereas insensitivity to children's reluctance became less common. Younger children received proportionally more support, including inadequate support, than older children. Importantly, however, the training did not affect the extensive use of free recall-based questions, meaning that the interviewers continued to use open questions extensively (on

average, a third of their questions were open throughout the period over which they were monitored), and did not substitute more suggestive or focused questions in response to the children's reluctance. An earlier study, involving a less elaborate training program, was associated with increases in abuse disclosure by children whose maltreatment was independently verified (Hershkowitz, Lamb, & Katz, 2014) and ongoing research is examining the benefits associated with the more extensive training process described here.

Taking Stock: Where We Stand Today

Recent studies using both in-person and computer-assisted delivery mechanisms to provide information in modular fashion over an extended period of time have shown that training can enhance the acquisition of complex interviewing skills, making it possible for interviewers to create conditions that motivate and guide alleged victims to provide richly detailed accounts of experienced events. These studies add to the growing body of evidence that interview quality *can* be improved, but only when the training moves beyond the classroom, is spaced over time, and involves extensive opportunities to consolidate learning and practice skills in contexts that ensure prompt feedback and guidance. Previous research has shown that improvements in interview quality are associated with increases in the number of allegations that lead to charges being filed and convictions being obtained (Pipe, Orbach, Lamb, Abbott & Stewart, 2013), and we can only assume that even greater improvements in the ability to recognize valid allegations of abuse would follow implementation of the more intensive, and effective, training programs described by Benson and Powell (2015) and Hershkowitz et al. (2016). In the absence of such improvements, it is likely that investigative agencies will continue to have difficulty

identifying children who are likely to have been abused without misidentifying both non-abused children as abused and abused children as non-abused.

Unfortunately, such courses are not yet widely available. Instead, most social service agencies and police forces still rely on traditional classroom teaching, with courses that we know have very limited effects on interviewing behavior. As the Norwegian studies show most clearly, continued reliance on such training has had no significant effect of practice, and may even have harmful effects because they create an illusion of expertise and competence. Continued reliance on such training likely reflects aversion to change, even in the forms of training offered, and concerns about the supposed costs of more intensive training, especially when that involves distributed or spaced learning, with training thus spread out over months or years. Perhaps recent evidence regarding the effectiveness of computer-assisted learning will assuage concerns about the costs of extended training. In addition, of course, many agencies and police forces reassign workers from one line of work to another with some frequency, thereby not only making it difficult for individuals to develop and hone specialized skills but also vastly inflating the numbers of individuals who are given modest (and often ineffective) training. As suggested above, expert interviewing skills need to be developed and enhanced through both practice and regular guidance; investigators who do not interview frequently enough are unlikely to develop expert skills, making it especially desirable to focus training on those who undertake many interviews and are committed to the development of expertise.

A further puzzle remains: Why have the consumers of investigative interviews—police agencies, social service agencies, prosecutors, and judges—not drawn attention to the generally poor quality of investigative interviews with children? Why is the public not concerned that most alleged incidents of abuse are

not prosecuted, often because the children's testimony is not sufficiently convincing? Criticisms by these professionals may be constrained because they do not know just how much information children can provide in well-conducted interviews, and still do not understand that the quality of children's testimony is heavily influenced by the quality of the interviews in which it is elicited. Only when that fact is widely recognized will pressure from judges and prosecutors force improvements in the quality of forensic interviewing. In other words, there are two forms of training needed: Training of forensic interviewers so that they actually learn and utilize best practice interviewing strategies, and training of other professionals in the criminal justice arena, so that they recognize instances of poor practice and insist that standards be improved. Perhaps the recent call by the Lord President of the Scottish Judiciary for improvements to the ways in which children's testimony is obtained and tested (Carloway, 2016) will mark a turning point for criminal justice systems there and elsewhere. Without reforms of the type his report endorsed, three decades of research on children's testimony and on training regimes will have been in vain. Further, experts must continue seeking to ensure that all professionals involved in the investigation of suspected abuse and the design of interventions understand the importance of developmentally appropriate forensic interviewing, realize that young witnesses are quite capable, and recognize that the performance of young witnesses is profoundly determined by how well interviewers and questioners perform.

References

Aldridge, J., & Cameron, S. (1999). Interviewing child witnesses: Questioning techniques and the role of training. *Applied Developmental Science*, *3*(2), 136-147. doi**:** 10.1207/s1532480xads0302_7.

American Professional Society on the Abuse of Children. (2002). *Guidelines for psychosocial evaluation of suspected sexual abuse in young children* (Rev. ed.). Chicago: Author.

American Professional Society on the Abuse of Children. (2012). *Practice guidelines: Investigative interviewing in cases of alleged child abuse.* Chicago, IL: Author.

Benson, M. S., & Powell, M. B. (2015). Evaluation of a comprehensive interactive training system for investigative interviewers of children. *Psychology, Public Policy, and Law*, 21(3), 309-322. http://dx.doi.org/10.1037/law0000052

Carloway, Lord (Colin Sutherland) (2016). *Evidence and Procedure Review: Next Steps*. Scottish courts and Tribunals Service. Retrieved from https://www.scotcourts.gov.uk/docs/default-source/SCS-Communications/evidence-and-procedure-report---next-steps---february-2016.pdf?sfvrsn=2.

Carter, C. A, Bottoms, B. L., & Levine, M. (1996). Linguistic and socioemotional influences on the accuracy of children's reports. *Law and Human Behavior*, *20*, 335–358. doi: 0147-7307/96/0-035509.50/1

Ceci, S. J., & Bruck, M. (1995). *Jeopardy in the courtroom: A scientific analysis of children's testimony*. Washington, DC: American Psychological Association.

Cederborg, A.-C., Orbach, Y., Sternberg, K. J. & Lamb, M. E. (2000) Investigative interviews of child witnesses in Sweden. *Child Abuse & Neglect, 24*, 1355–1361. doi: S0145-2134(00)00183-6

Cederborg, A-C., Alm, C., Lima da Silva Nises, D., & Lamb, M. E. (2013). Investigative

interviewing of alleged child abuse victims: An evaluation of a new training programme for investigative interviewers. *Police Practice and Research*, *14*, 242-254. doi**:** 10.1080/15614263.2012.712292.

Davis, S. L., & Bottoms, B. L. (2002). Effects of social support on children' s Eyewitness reports : A test of the underlying mechanism. *Law and Human Behavior*, *26*(2), 185–215. http://dx.doi.org/10.1023/A:1014692009941

Freeman, K. A., & Morris, T. L. (1999). Investigative interviewing with children: Evaluation of the effectiveness of a training program for child protective service workers. *Child Abuse & Neglect, 23*, 701–713. doi:10.1016/S0145-2134(99)00042-3.

Greenstock, J., & Pipe, M.-E. (1996). Interviewing children about past events: The influence of peer support and misleading questions. *Child Abuse & Neglect*, *20*(I), 69–80. doi: 0145-2134(95)00117-4

Greenstock, J., & Pipe, M.-E. (1997). Are Two Heads Better Than One ? Peer Support and Children ' s Eyewitness Reports. *Applied Cognitive Psychology*, *11*, 461–483. doi: 0888-4080/97/060461-23

Hershkowitz, I. (2009). Socioemotional factors in child sexual abuse investigations. *Child Maltreatment*, *14*(2), 172–81. doi:10.1177/1077559508326224.

Hershkowitz, I., Ahern, E. C., Lamb, M. E., Blasbalg, U., Karni-Visel, Y., & Breitman, M. (Under Review). Changes in interviewers' use of supportive techniques during the Revised Protocol training.

Hershkowitz, I., Horowitz, D., & Lamb, M. E. (2005). Trends in children's disclosure of abuse in Israel: A national study. *Child Abuse Neglect*, *29*(11), 1203–1214. doi:10.1016/j.chiabu.2005.04.008.

Hershkowitz, I., Lamb, M. E., & Katz, C. (2014). Allegation rates in forensic child abuse investigations: Comparing the revised and standard NICHD protocols. *Psychology,*

Public Policy, and Law, *20*(3), 336–344. doi:10.1037/a0037391.

Hershkowitz, I., Orbach, Y., Lamb, M. E., Sternberg, K. J., & Horowitz, D. (2006).
Dynamics of forensic interviews with suspected abuse victims who do not disclose
abuse. *Child Abuse Neglect The International Journal*, *30*(7), 753–769.
doi:10.1016/j.chiabu.2005.10.016

Home Office. (1992). *Memorandum of good practice on video recorded interviews
with child witnesses for criminal proceedings.* London: Author.

Home Office. (2011). *Achieving Best Evidence in Criminal Proceedings: Guidance
for Vulnerable or intimidated witnesses, including children*. London, UK: Author.

Imhoff, M. C., & Baker-Ward, L. (1999). Preschoolers ' suggestibility : Effects of
developmentally appropriate language and interviewer supportiveness, *20*, 407–429.
doi: 10.1016/S0193-3973(99)00022-2

Johnson, M., Magnussen, S., Thoresen, C., Lønnum, K., Burrell, L.V., & Melinder, A.
(2015). Best practice recommendations still fail to result in action: A national 10-year
follow-up study of investigative interviews in CSA cases. *Applied Cognitive
Psychology, 29,* 661-668. doi:10.1002.acp.3147.

Justis- og beredskapsdepartementet (2015). *Forskrift om avhør av barn og andre særlig
sårbare fornærmede og vitner (tilrettelagte avhør).* FOR-2015-09-24-1098.
Accessible at https://lovdata.no/dokument/SF/forskrift/2015-09-24-1098

Korkman, J., Santtila, P., & Sandnabba, N. K. (2006). Dynamics of verbal interaction
between interviewer and child in interviews with alleged victims of child sexual
abuse. *Scandinavian Journal of Psychology, 47*, 109–119.
doi: 10.1111/j.1467-9450.2006.00498.x

Lamb, M. E. (2015) Toward developmentally aware practices in the legal system:

Progress, challenge, and promise. *American Psychologist*, *70*(8), 686-693.

http://dx.doi.org/10.1037/a0039634

Lamb, M. E., Brown, D. A., Hershkowitz, I., Orbach, Y., & Esplin, P. W. (in press). *Tell me what happened* (Second Edition). Chichester and Oxford, UK: Wiley.

Lamb, M. E., Hershkowitz, I., Orbach, Y., & Esplin, P. W. (2008). *Tell me what happened*. Chichester, UK: Wiley.

Lamb, M. E., Hershkowitz, I., Sternberg, K. J., Esplin, P. W., Hovav, M., Manor, T., & Yudilevitch, L. (1996). Effects of investigative utterance types on Israeli children's responses. *International Journal of Behavioral Development, 19*, 627–637. http://dx.doi.org/10.1080/016502596385721

Lamb, M. E., Malloy, L.C., Hershkowitz, I., La Rooy, D. (2015). Children and the law. In M.E. Lamb (Vol. Ed) & R.M. Lerner (Series Ed.), *Handbook of child psychology and developmental science,* vol 3: *Socioemotional processes* (7th Edition) (pp. 464-512). Hoboken, NJ: John Wiley & Sons.

Lamb, M. E., Sternberg, K. J., Orbach, Y., Esplin, P. W., & Mitchell, S. (2002a). Is ongoing feedback necessary to maintain the quality of investigative interviews with allegedly abused children? *Applied Developmental Science, 6*, 35-41. doi: 10.1207/S1532480XADS0601_04.

Lamb, M. E., Sternberg, K. J., Orbach, Y., Hershkowitz, I., Horowitz, D., & Esplin, P. W. (2002b). The effects of intensive training and ongoing supervision on the quality of investigative interviews with alleged sex abuse victims. *Applied Developmental Science, 6*, 114-125. doi: 10.1207/S1532480XADS0603_2.

Lewy, J., Cyr, M., & Dion, J. (2015). Impact of interviewers' supportive comments and children's reluctance to cooperate during sexual abuse disclosure. *Child Abuse and Neglect*, *43*, 112–122. doi:10.1016/j.chiabu.2015.03.002.

Lindholm, J., Cederborg, A.- C., & Winerdal, U. (2016, March). An evaluation of the training programme for investigative interviewers in Sweden. Paper presented to the American Psychology-Law Society Annual conference, Atlanta, GA.

London, K., Bruck, M., Wright, D. B., & Ceci, S. J. (2008). Review of the contemporary literature on how children report sexual abuse to others: Findings, methodological issues, and implications for forensic interviewers. *Memory*, *16*, 29–47. doi:10.1080/09658210701725732.

Nicol, A., La Rooy, D., & Lamb, M.E. (In press). Evidence-based and developmentally appropriate forensic interviewing of children. In L. Dixon, D. Perkins, L. A. Craig & C. Hamilton-Giachritsis (Eds.). *What works in child protection: An evidenced-based approach to assessment and intervention in care proceedings.* Oxford: Wiley-Blackwell.

Orbach, Y., Shiloach, H., & Lamb, M. E. (2007). Reluctant disclosures of child sexual abuse. In M.-E. Pipe, M. E. Lamb, Y. Orbach, & A-C. Cederborg (Eds.), *Child sexual abuse: Disclosure, delay, and denial* (pp. 115–134). Mahwah, NJ: Erlbaum.

Pipe, M.-E., Lamb, M.E., Orbach, Y. & Cederborg, A.-C. (Eds.) (2007). *Child sexual abuse: Disclosure, delay, and denial*. Mahwah, NJ: Erlbaum.

Pipe, M.-E., Orbach, Y., Lamb, M. E., Abbott, C. B., Stewart, H. (2013). Do case outcomes change when investigative interviewing practices change? *Psychology, Public Policy, and Law, 2*, 179-190. doi: 10.1037/a0030312

Powell, M. B. (2000). PRIDE: The essential elements of a forensic interview with an Aboriginal person. *Australian Psychologist, 35*(3)*,* 186-192. doi: http://dx.doi.org/10.1080/00050060008257477

Powell, M. B. (2002). Specialist training in investigative interviewing: Is it having

any effect on the behaviour of professionals in the field? *Psychiatry, Psychology & Law, 9*, 44-55. http://dx.doi.org/ 10.1375/pplt.2002.9.1.44

Powell, M. B., Cavezza, C., Hughes-Scholes, C., & Stoove, M. (2010). Examination of the consistency of interviewer performance across three distinct interview contexts. *Psychology, Crime & Law, 16*, 585–600. doi:10.1080/10683160902971063.

Powell, M. B., Fisher, R. P., & Hughes-Scholes, C. H. (2008). The effect of using trained versus untrained adult respondents in simulated practice interviews about child abuse. *Child Abuse & Neglect, 32*, 1007–1016. doi:10.1016/j.chiabu.2008.05.005.

Powell, M. B., Guadagno, B., & Benson, M. (2014). Improving child investigative interviewer performance through computer-based learning activities. *Policing and Society*, 1-10. doi**:** 10.1080/10439463.2014.942850.

Powell, M. B., Wright, R., & Clark, S. (2010). Improving the competency of police officers in conducting investigative interviews with children. *Police Practice and Research, 3*, 211-226, doi: 10.1080/15614260902830070.

Quas, J.A, Wallin, A. R., Papini, S., Lench, H., & Scullin, M. H. (2005). Suggestibility, social support, and memory for a novel experience in young children. *Journal of Experimental Child Psychology*, *91*(4), 315–41. doi:10.1016/j.jecp.2005.03.008.

Ruddock, A. C. (2006). *The relationship of interviewer rapport behaviors to the amount and type of disclosure form children during child abuse investigations*. California School of Professional Psychology.

Saywitz, K. J., Larson, R. P., Hobbs, S. D., & Wells, C. R. (2015). Developing rapport with children in forensic interviews: Systematic review of experimental research. *Behavioral Science and Law, 33*(4), 372-89. doi: 10.1002/bsl.2186. Epub 2015 Jul 21.

Saywitz, K. J., & Snyder, L. (1996). Narrative elaboration: Test of a new procedure

for interviewing children. *Journal of Consulting and Clinical Psychology, 64*, 1347–1357. http://dx.doi.org/10.1037/0022-006X.64.6.1347

Saywitz, K. J., Snyder, L., & Lamphear, V. (1996). Helping children tell what happened: A follow-up study of the narrative elaboration procedure. *Child Maltreatment, 1*, 200–212. doi: 10.1177/1077559596001003003

Smith, R., Powell, M. B., & Lum, J. (2009). The relationship between job status, interviewing experience, gender and police officers' adherence to open-ended questions. *Legal and Criminological Psychology, 14*, 51–63. doi:10.1348/135532507X262360.

Son, L. K., & Simon, D. A. (2012). Distributed learning: Data, metacognition, and educational implications. *Educational Psychology Review, 3*, 379-399. http://dx.doi.org/10.1007/s10648-012-9206-y

State of Michigan Governor's Task Force on Children's Justice and Department of Human Services. (2011). *State of Michigan governor's task force on children's justice and department of human services forensic interviewing protocol 3rd edition.* Retrieved from https://www.michigan.gov/documents/dhs/DHS-PUB-0779_211637_7.pdf.

Sternberg, K. J., Lamb, M. E., Davies, G. A., & Westcott, H. L. (2001). The memorandum of good practice: Theory versus application. *Child Abuse and Neglect, 25*, 669 – 681. http://dx.doi.org/10.1016/S0145-2134(01)00232-0

Sternberg, K. J., Lamb, M. E., Hershkowitz, I., Esplin, P.W., Redlich, A., & Sunshine, N. (1996). The relationship between investigative utterance types and the informativeness of child witnesses. *Journal of Applied Developmental Psychology, 17*, 439 – 451. http://dx.doi.org/10.1016/S0193-3973(96)90036-2

Sternberg, K. J., Lamb, M. E., Hershkowitz, I., Yudilevitch, L., Orbach, Y., Esplin, P.

W., & Hovav, M. (1997). Effects of introductory style on children's abilities to describe experiences of sexual abuse. *Child Abuse & Neglect, 21*, 1133–1146. doi:10.1016/S0145-2134(97)00071-9.

Stevenson, K. M., Leung, P., & Cheung, R. M. (1992). Competency-based evaluation of interviewing skills in child sexual abuse cases. *Social Work Research and Abstracts, 28*, 11–16.

Thoresen, C., Lønnum, K., Melinder, A., & Magnussen, S. (2009). Forensic interviews with children in CSA cases: A large sample study of Norwegian police interviews. *Applied Cognitive Psychology, 23,* 999-1011. http://dx.doi.org/10.1002/acp.1534

Thoresen, C., Lønnum, K., Melinder, A., Stridbeck, U., & Magnussen, S. (2006). Theory and practice in interviewing young children: A study of Norwegian police interviews 1985–2002. *Psychology, Crime, & Law, 12*, 629–640. doi: http://dx.doi.org/10.1080/10683160500350546

Warren, A. R., Woodall, C. E., Thomas, M., Nunno, M., Keeney, J. M., Larson, S. M., & Stadfeld, J. A. (1999). Assessing the effectiveness of a training program for interviewing child witnesses. *Applied Developmental Science, 3*, 128–135. doi:10.1207/s1532480xads0302_6.

Wolfman, M., Brown, D., & Jose, P. (2016). Talking past each other: Interviewer and child verbal exchanges in forensic interviews. *Law and Human Behavior, 40*, 107-117. doi: 10.1080/1068316X.2016.1168426

Yii, S-L.B., Powell, M.B., & Guadagno, B. (2014). The association between investigative interviewers' knowledge of question type and adherence to best-practice interviewing. *Legal and Criminological Psychology, 19*, 270-281. doi: 10.1111/lcrp.12000