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Forensic interviewers' experiences of interviewing children of different ages

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ABSTRACT

Increased knowledge about practitioners' experiences of conducting forensic child interviews may provide valuable insights into the perceived challenges they encounter when questioning children. This mixed-methods study examined Swedish practitioners' views on different interviewing components (ground rules, rapport building, practice narratives, question types), props, strategies for adapting their methods for preschool-aged children, and perceptions of challenges interviewing children of differing ages. Eighty-eight specialized forensic child interviewers responded to a national survey. The data was analyzed using quantitative and qualitative approaches. Attitudes regarding different interviewing components were mainly in line with current research recommendations. Prop use was primarily limited to drawings, photographs, and stress-reduction tools. A variety of strategies were used to adapt the existing protocol for questioning young children, indicating a potential need for additional standardized guidelines for this age group. Furthermore, the perceived barriers for children to disclose and the demands placed on the interviewer varied across age groups. Since all children should have the right to be questioned with age appropriate methods, we need to continue to develop ways of adapting practitioners' interviewing strategies to match children's developmental levels. To reach this aim, researchers may benefit from taking into account the concerns raised by forensic child interviewers.


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During police investigations, forensic interviewers regularly need to interview children as suspected victims or witnesses to crimes. Past research demonstrates that the informativeness and accuracy of children's accounts increase when interviewers follow research-based child interviewing techniques (Saywitz et al., 2018). Across countries, the development and implementation of specialized training programs have been found to increase the use of appropriate questioning strategies (e.g. the use of open-ended questions) and reduce the frequency of inadequate questions (e.g. suggestive questions) when compared to pre-training (Benia et al., 2015). However, although interviewers receive training in

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research-based methods, they do not always adhere to the guidelines and post-training improvements tend to decrease over time without continuous supervision and feedback (Lamb, 2016; Powell, 2008). The present mixed-methods study aimed to explore Swedish practitioners' views on different child interviewing components (including ground rules, rapport building, episodic practice narrative, open-ended questions and leading questions) and prop use (drawings, other types of props). We hypothesized that training and years of experience conducting child interviews would be associated with ratings regarding the importance and usage of research-based interview components. Since concerns have been raised regarding difficulties interviewing the youngest children (e.g. Ernberg et al., 2016), we also explored self-reported strategies for adapting methods for pre-school-aged children. Lastly, we aimed to investigate perceived challenges when interviewing children of different ages (preschoolers, school-aged children, adolescents).

Since 2007, Swedish forensic interviewers have been trained in an adapted version of the original National Institute of Child Health and Development (NICHD) protocol (Cederborg et al., 2013). This research-based child interviewing technique (Lamb et al., 2018) is implemented in at least 14 different countries including Sweden, Finland, Israel, and Japan (La Rooy et al., 2015). Furthermore, the central components of the NICHD protocol largely overlap with guidelines published by the U.S. Department of Justice (Newlin et al., 2015) and other research-based child interviewing techniques across the world (Saywitz et al., 2018). Considering the widespread use of the NICHD protocol and its similarities with other techniques, findings from the present survey should be of relevance for an international audience.

In brief, the NICHD protocol divides the child interview into three parts; the pre-substantive phase, the substantive phase and the closure phase (see Lamb et al., 2018). The pre-substantive phase begins with an introduction, an explanation of ground rules (e.g. that the child can say '*I don't know*') and a rapport-building phase where the interviewer asks questions about personal interests. This is followed by a practice narrative when the child is asked to describe a past, unrelated event in detail. The interviewer then transitions to the substantive phase by asking open-ended questions about the incident under investigation. It is advised that the use of specific questions should be postponed as long as possible, and the use of suggestive questions should be avoided. During the closure phase, the interviewer should end with a neutral topic and facilitate the possibility for future communication. A substantial number of field studies demonstrate that implementation of the NICHD protocol can improve forensic interviewers' performance in terms of the question types used (e.g. Benia et al., 2015). A revised version of the NICHD protocol was recently introduced with an increased focus on socio-emotional support to facilitate reluctant victims or witnesses (Ahern et al., 2014; Hershkowitz et al., 2014; Lamb et al., 2018). While parts of the revised NICHD protocol has been implemented in Sweden focusing on strategies for providing support, the complete revision has of yet not been integrated in Swedish settings.

In Sweden, children are forensically interviewed by police employees under the directive of a prosecutor who is acting as the Principal Investigator. Children below the age of 15 years typically do not testify or go through cross-examination in court. Instead, their video-recorded forensic interview is presented during trial. During the police investigation, the defense has a right to review the child's statement and prepare questions. The defense attorney can therefore listen in on the forensic child interview (via a one-way video link from an adjacent room together with the prosecutor and other practitioners involved in

the case) and ask the forensic interviewer to expand on different topics or pose specific questions. Since children are not heard in court, it is common to carry out more than one forensic child interview to address questions that may arise during trial (The Prosecution Authority, 2018).

According to the Swedish Decree on Preliminary Investigations (§ 18), child interviews should be conducted by a police employee with competence in the task. No further guidance is given regarding how this competence is determined. In practice, the police employee should have received some form of training in child interviewing, although this is not mandatory (The Prosecution Authority, 2018). The Swedish police are currently offered specialized training consisting of three courses (H. Lundgren Ramsten, personal communication, August 14, 2019). The first course (Step 1, full time study for 10 weeks with 50% independent study) focuses on investigative and legal aspects surrounding criminal investigations involving children. The second course (Step 2, 25 days over 6 months, of which 10 days is independent study) comprises forensic child interviewing techniques including the adapted NICHHD protocol (see Cederborg et al., 2013), and the third course (Step 3, 7 days, of which 2 days are independent study) is a refresher course that can be taken every third year. The Swedish training program has been found to increase the use of open-ended questions and decrease the use of more inappropriate question types compared to interviews conducted before training (Cederborg et al., 2013). However, a recent report showed that out of 305 forensic interviewers who worked actively with child cases across Sweden, only 41.3% had completed the training program (the Prosecution Development Centre Gothenburg, 2016).

The implementation of training programs is one important step towards improving the quality of forensic child interviews. However, trainees do not always adhere to guidelines taught during training and researchers have found that training effects tend to decrease over time (Lamb, 2016; Powell, 2008). Considering that forensic interviewing is a complex practical skill, continuous supervision and performance feedback appear necessary to promote long-term effects of training in different child interviewing protocols (Cyr et al., 2012; Lamb, Sternberg, Orbach, Esplin et al., 2002; Lamb, Sternberg, Orbach, Hershkowitz et al., 2002; Powell et al., 2008). Individual differences among interviewers, child characteristics, and situational factors may also help explain why interviewers sometimes do not adhere to research-based guidelines (e.g. Hershkowitz et al., 2006; Lafontaine & Cyr, 2016). Thus, training focused on increasing the knowledge on how to interview children is often not enough to encourage a sustainable change in practitioners' behavior.

To gain a better understanding on these issues, some researchers have asked practitioners about their perspective on child interviewing. Wright and Powell (2006) for instance interviewed eight Australian child abuse investigators about their experiences of using open-ended questions. Following a qualitative approach, they found three main themes to help explain why trainees sometimes do not adhere to open-ended questions; (1) that practitioners felt the need to ask more specific questions to gain information needed for investigative purposes, (2) that the open-ended questioning style was unfamiliar, and (3) that the trainees sometimes expressed difficulties classifying questions as open-ended or more specific. In line with these concerns, a survey of 88 Scottish forensic interviewers found that only 43% of the practitioners reported always or almost always employing open-ended questions during child interviews (La Rooy et al., 2011). However, 88% of the participants reported believing open-ended questions to be effective, indicating a

gap between their knowledge and the self-reported practical application in field interviews. Furthermore, years of experience conducting child interviews was not associated with their reported usage or the perceived importance of asking open-ended questions.

Hanway and Akehurst (2018) also conducted semi-structured interviews with nine police interviewers from the UK. Several different components were identified relating to the police officers' child interviewing practices. This included pressures on the interviewers (a high cognitive load, stress, organizational culture), difficulties asking open-ended questions and receiving informative responses from children, a lack of continuous feedback on their field performance, and the perceived importance of building and maintaining rapport with child victims. Furthermore, Collins et al. (2014) interviewed 19 Scottish forensic child interviewers about their perceptions on rapport building. Using a grounded theory approach, they found several key components described in relation to the process of building rapport. This included enabling assessments of the child's developmental abilities and motivation to communicate. According to the practitioners, both factors were closely related to child age, with younger children being more reluctant and limited in their verbal abilities.

In a survey with 188 forensic child interviewers from the US, Rowback Rivard and Schrieber Compo (2017) asked practitioners about the most challenging aspects when conducting child interviews. The most common response (discussed by 27% of the practitioners) was to interview young children, citing for example the need to phrase developmentally sensitive questions and keeping the children's attention. Roberts and Cameron (2015) also surveyed 8 forensic child interviewers from Canada about their views on the usefulness of specific interviewing techniques with children of different ages. In line with Rowback Rivard and Schrieber Compo (2017), the Canadian practitioners reported difficulties eliciting adequate accounts from children below the age of six during forensic interviews. Furthermore, some expressed concerns regarding the testimony of adolescents. Roberts and Cameron (2015) emphasized the need for further research on witness interviews with adolescents, as the majority of studies on this age group has focused on suspect interrogations (see for example Redlich, 2010).

The practitioner concerns regarding young children are anchored in current research on preschoolers' developmental limitations during forensic interviews. Children can begin to provide reliable witness statements from around three to four years of age given the right prerequisites (Hershkowitz et al., 2012). However, young children can not be expected to provide as complete accounts as older children considering their limited verbal and cognitive abilities (Goodman & Melinder, 2007). Beyond developmental abilities, a wide range of contextual and motivational factors can also influence children's capability and willingness to disclose abuse during forensic interviews. Loyalty towards the perpetrator, concerns for future consequences, and internal feelings of shame, guilt, and self-blame are just a few of the many barriers that could hinder a child victim from disclosing details of their experience (McElvaney, 2019). Field studies of legal cases containing strong corroborative evidence have demonstrated that abused children of all ages sometimes omit sensitive information during forensic interviews (Leander, 2010; Magnusson et al., 2017; Sjöberg & Lindblad, 2002). Furthermore, retrospective studies with adults and adolescents show that many young victims delay their disclosures (London et al., 2008). Disclosure rates among children have also been found to increase in a linear fashion during early childhood and up until eleven years of age, after which disclosure

rates begin to decline (Leach et al., 2017). In line with this observation, prosecution of alleged abuse concerning preschoolers and adolescents have been reported to be less likely compared to cases involving school-aged children (e.g. Buting, 2008).

The use of props during forensic child interviews is a controversial subject that has sparked debate for decades. Some argue that certain types of props can facilitate children's disclosures about traumatic experiences (e.g. Langballe & Davik, 2017), and others advise caution emphasizing that props might increase the risk for inaccuracies (e.g. Lamb et al., 2018). Considering that 'props' is an umbrella term including a variety of different tools (e.g. drawings, anatomical dolls, body diagrams, rapport-enhancing tools, anxiety reduction tools, picture cards), the issue is nuanced. To date, researchers have mainly focused on investigating the influence of anatomical dolls, body diagrams, and drawings. Laboratory findings on the use of anatomical dolls and body diagrams (i.e. figure drawings with or without clothes) typically equate their use to an increase in false details (Poole & Bruck, 2012). Studies on the use of drawings have shown mixed results. Some report positive increases in the amount of details without compromised accuracy, while others report null-findings, or in a few cases, increases in false details (Butler et al., 1995; for a recent overview, see Lamb et al., 2018). In Sweden, forensic interviewers are advised to avoid using props during the substantive phase of an interview, with the exception of drawings which are allowed but should be used cautiously and without the presence of leading questions (the Prosecution Authority, 2018).

Insights into forensic interviewers' experiences of conducting child interviews and the perceived challenges involved with interviewing children of varying ages may help researchers understand why practitioners do not always adhere to research-based guidelines. Notably, while a sizable body of studies have investigated the effects of different child interview techniques on practitioners' behavior, research is still scarce with regard to the practitioners' self-reported experiences. The aim of this survey was four-fold. First, we aimed to explore the interviewers' perceptions of different child interviewing components (including ground rules, rapport building, practice narrative, open-ended questions and leading questions). To enable comparisons with past literature, we adapted and translated items from previous questionnaires on child interviewing (Cheung, & Boutté-Queen, 2010; La Rooy et al., 2011). We predicted that interviewers who had finished their training in the adapted NICHD protocol (Step 2) would report more frequent usage and higher importance for the components compared to interviewers who had not finished their training. Similar to La Rooy et al. (2011), we also intended to explore correlations between years of experience conducting child interviews and ratings of the different components. Second, we aimed to investigate self-reported prop use among the interviewers and whether these practices concurred with the current Swedish recommendations. Third, we sought information about how forensic interviewers adapt their interviewing method when questioning preschoolers compared to older children. Fourth, we aimed to examine forensic interviewers' perceived challenges when questioning preschoolers, school-aged children, and adolescents.

Method

The study was pre-registered on the Open Science Framework; https://osf.io/7vqrz/?view_only=8e9b4623305540e0a54ed2da49317104.

Participants

A total of 92 participants responded to the survey. However, four participants did not meet the pre-specified inclusion criterion of conducting child interviews during the last five years and were therefore excluded from the final sample. The analyses were thus based on responses from 88 forensic interviewers (75 women, 7 men, 6 did not report gender, $M_{age} = 45.26$, $SD = 9.06$, Age range: 26–64 years). From an estimate reported by the Prosecution Development Centre (2016), 305 interviewers work actively with child interviews in Sweden. Based on this number, our sample represents approximately 29% of the targeted population. Fifty-seven of the participants (64.8%) worked as police officers (three years of training at the police academy) and thirty-one (35.2%) worked as civilian officers (academic background in relevant fields such as law, criminology, or psychology). The participants' experience of conducting child interviews varied between 1 and 20 years, with a mean estimate of 6.45 years ($SD = 4.62$, median = 6 years).

With regard to the participants' specialized training in child interviewing, 83 (94.3%) of the participants indicated that they had received some form of training in the subject. Of the remaining five participants, two (2.3%) stated they had not received any training and three (3.4%) did not respond to the question. A total of 68 (77.3%) participants had completed Step 1 of the Swedish training program, and 64 (72.7%) of those participants had also finished Step 2. An additional four participants indicated that they had taken part in courses provided before the implementation of the new training program. In response to an open-ended question inquiring about additional courses, 31 participants (35.2%) reported having participated in the refresher course (Step 3).

Survey

The electronic survey contained two parts. The first part related to the present study and will be described in more detail below. The second part was conducted for another study and contained questions regarding collaboration and psychosocial work environment.

First, the survey included a 'participant information' page with details about the purpose of the study and the participants' ethical rights (e.g. that participation was voluntary and could be withdrawn at any time). All participants were asked for their informed consent before being able to reach the other sections of the survey. The first part also included a screening question asking if the participants had experience working with child interviewees during the last five years. The second section of the survey comprised demographic questions concerning the participants' training and experience. The participants were asked about their profession, the estimated time (in years) working with forensic child interviews, the estimated number of conducted child interviews, if they had taken part in any specialized child interviewing training and if so, what training courses they had finished.

The third section contained Likert-type scales and open-ended questions regarding the participants' self-reported attitudes and usage of specific components of the NICHD protocol (the use of ground rules, rapport building, practice narrative, open and leading questions). For all aspects of interviews listed above apart from the question types, the participants indicated how often they use the different techniques (1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Always*) and, for all aspects including the question types,

they rated how important they perceive each technique to be (1 = *Not at all important*, 3 = *Medium importance*, 5 = *Very important*). The Likert scale items were adapted from previous surveys on child interviewing (Cheung & Boutté-Queen, 2010; La Rooy et al., 2011) and were translated to Swedish. For each component, the participants were asked to elaborate using open-ended questions asking for additional comments. With regard to ground rules, the participants were asked to also indicate which, if any, ground rules they typically use. Furthermore, the participants were asked via an open-ended question to write down their strategies for building rapport during the pre-substantive phase. The fourth section contained questions regarding prop use. First, the participants were asked to rate their frequency of use and the perceived importance of using drawings. They were also asked to indicate with what purpose, or purposes, they used drawings. Second, the participants were asked if they used other props and if so, to indicate what type of props, followed by an open-ended question asking them to elaborate on their prop use.

The participants were thereafter asked to indicate if they make any changes (via a forced-choice response question including the response options; *Yes, No, I don't have experience interviewing preschoolers*) to (1) the introduction, and (2) their prop use, if the child is a preschooler. If they responded that they do make changes, they were asked, via an open-ended question, how these interviews usually differ. The fourth section contained three open-ended questions. The participants were asked to elaborate on the perceived challenges when interviewing preschoolers, school-aged children, and adolescents. Lastly, the participants were asked about their gender and age. The survey was pre-tested, before distribution by undergraduate forensic psychology students ($n = 32$) for clarity and closely reviewed by three specialized forensic interviewers for terminology and content.

Procedure

Data collection

The survey was distributed online using Qualtrics Software. First, information letters were sent out via e-mail to coordinators at the seven Swedish police regions with a request to distribute the survey. Second, e-mail requests to share the survey were sent to all Barnahus staff (i.e. premises where children can be interviewed during a criminal investigation) that had their e-mail information listed on the internet ($n = 24$ out of 32 across the country). A reminder message was sent out after three weeks to the police coordinators and the Barnahus staff. Third, a link to the survey was shared on social media (Twitter, Facebook, LinkedIn). Fourth, verbal information and a link to the survey was presented to approximately 150 practitioners during a national conference for child interviewers in Stockholm in March 2019. The study was open for responses during a total of 16 weeks (December 2018–April 2019). The participants did not receive any compensation for taking part in the survey.

Quantitative analyses

Rank-order correlations (Spearman rho) and Welsh's t -tests for unequal variances were used for the quantitative analyses.

Qualitative analyses

A content analysis approach (Neuendorf, 2016) was employed to classify the open-ended responses to questions regarding different interview components, prop use, and changes

used by participants when interviewing preschoolers. The written responses were classified by the first author into categories that closely matched the original data (e.g. all descriptions regarding asking the children about their personal interests during rapport building were categorized to the code 'Build rapport by asking about personal interests'). Since we searched for shared patterns in the data, only codes that were reported by at least five participants were considered as a category in the final stage of the content analyses. To gain a broader understanding of the longer open-ended written responses about challenges when interviewing children of different ages, we analyzed the data using a data-driven thematic analysis (Braun & Clarke, 2006). Initially, the first two authors separately read all written responses and created code labels that closely matched the content of the responses. These codes were thereafter cross-compared and merged to a preliminary thematic structure with themes and sub-themes.

To assess the inter-rater reliability of both coding systems, a research assistant (naïve to the purpose of the study) coded 20% of the data for the pre-specified categories (for the content analyses) or thematic structure (for the thematic analyses). The agreement rates ranged from 94.3% to 100%. Disagreements were resolved through discussion and the first author thereafter re-coded the data following the final categories and thematic structure. Lastly, quotations for the thematic analyses were selected, edited to facilitate reading, and translated to English.

Ethical considerations

The study was reviewed and approved by the Regional Committee Board. All participants gave their informed consent to participate.

Results

Interviewing components

Frequency of use and perceived importance ratings

For descriptive statistics regarding the self-reported frequency of use and the perceived importance of covering ground rules, early rapport building, conducting a practice narrative, using open and leading questions, see [Tables 1](#) and [2](#). We found no significant differences on the self-reported usage and perceived value of the different components between participants who had finished their interviewing training and those who had not finished the training, all p 's > .05. Interestingly, for our exploratory analyses with regard to years of experience conducting child interviews, we did observe two significant negative correlations between experience and the reported use as well as perceived importance of the narrative practice phase, ($r_s = -.309$, $p = .004$, and $r_s = -.319$, $p = .003$, respectively). Hence, longer experience was associated with more negative views towards the practice narrative phase. No other correlations between years of experience and the remaining interviewing components reached the significance threshold (all p 's > .05).

Ground rules

Beyond the frequency and perceived importance ratings with regard to ground rules (see [Tables 1](#) and [2](#)), the participants were also asked to indicate which, if any, ground rules

Table 1. Descriptive statistics, means and standard deviations of self-reported frequency of use of different interviewing components.

Interview component	(1) Never	(2) Rarely	(3) Sometimes	(4) Often	(5) Always	Mean (SD)	Completed Training Mean (SD)	Not completed training Mean (SD)
Tell ground rules	–	–	1.2%	24.7%	74.1%	4.73 (0.47)	4.70 (0.49)	4.81 (0.40)
Early rapport building	–	4.7%	10.6%	47.1%	37.6%	4.18 (0.80)	4.20 (0.80)	4.10 (0.83)
Practice narrative	3.5%	3.5%	11.8%	49.4%	31.8%	4.02 (0.95)	4.02 (0.92)	4.05 (1.07)
Drawings	5.9%	41.2%	44.7%	8.2%	–	2.55 (0.73)	2.53 (0.69)	2.62 (0.87)

Note: Means are based on a scale ranging from 1 (Never) to 5 (Always). Of the participants who responded to the survey items above, a total of 62 participants had completed their training and 19 had not completed their training.

they typically use during interviews with children. We ranked the reported usage from most used to least as follows; That the child should say something if he or she does not understand the interviewer ($n = 86$, 97.7%), That the child should tell if he or she does not know the answer to a question ($n = 76$, 86.4%), That the interviewer may need to ask the child to clarify if he or she does not understand ($n = 71$, 80.7%), That the child should correct the interviewer if the interviewer says something that is wrong ($n = 70$, 79.5%), That it is important to only tell things that has really happened ($n = 60$, 68.2%), That the child can use any words he or she wants ($n = 18$, 20.5%), and That the child has not said something wrong if the interviewer continues to ask questions about something specific ($n = 9$, 10.2%). Forty-six participants provided a written response to an open-ended question asking for additional comments on the ground rules phase. The most common points discussed in these responses were: That the ground rules need to be adjusted depending on the age of the child ($n = 16$), that the ground rules are sometimes postponed to the substantive phase of the interview ($n = 14$), that if a child starts disclosing, the interviewer should follow the child and not disrupt their narrative to provide the ground rules ($n = 12$), and that the ground rules should be reinforced throughout the interview ($n = 5$).

Rapport building techniques

Sixty-eight participants expanded on their rapport building strategies in response to an open-ended question. The most common strategies were: To talk about the child's interests ($n = 34$), To ask the child to describe a previous episode (i.e. a practice narrative, see the next section) such as their day up until the interview ($n = 17$), To build rapport in the waiting room before starting the interview ($n = 15$), To show interest and convey active listening ($n = 11$), and To ask the child about their thoughts and feelings about talking to the police ($n = 10$). In answer to an open-ended question asking for other comments on rapport building, 46 interviewers expanded on the topic. Several participants discussed the purposes of early rapport building, which were described as a way to gain trust ($n = 8$) and/or to make the child feel more comfortable with the interview situation ($n = 6$). Others discussed that rapport building is an important prerequisite to help children report their experiences, particularly for reluctant witnesses ($n = 10$). Lastly, a few participants ($n = 5$) described rapport in more general terms as a fundamental component of police interviewing.

Table 2. Descriptive statistics, means and standard deviations of perceived importance of different interviewing components.

Interview component	(1) Not at all important	(2) Low importance	(3) Medium importance	(4) High importance	(5) Very high importance	Mean (SD)	Completed Training Mean (SD)	Not completed training Mean (SD)
Tell ground rules	–	1.2%	9.4%	28.2%	61.2%	4.49 (0.72)	4.50 (0.74)	4.47 (0.61)
Early rapport building	–	–	1.2%	8.3%	90.5%	4.89 (0.35)	4.90 (0.35)	4.84 (0.38)
Practice narrative	5.9%	10.6%	21.2%	31.8%	30.6%	3.71 (1.18)	3.65 (1.19)	3.84 (1.26)
Drawings	8.3%	26.2%	40.5%	17.9%	7.1%	2.89 (1.03)	2.77 (1.05)	3.21 (0.98)
Open-ended questions	–	–	2.4%	8.2%	89.4%	4.87 (0.40)	4.94 (0.25)	4.79 (0.54)
Suggestive questions	49.4%	27.1%	17.6%	4.7%	1.2%	1.81 (0.97)	1.79 (0.96)	1.79 (0.92)

Note: Means are based on a scale ranging from 1 (Not at all important) to 5 (Very high importance). Of the participants who responded to the survey items above, a total of 62 participants had completed their training and 19 had not completed their training.

Practice narrative

Sixty-two participants elaborated in response to an open-ended question asking about comments on the practice narrative procedure. Some described that the practice narrative served an important function as it enabled both the interviewer and other legal actors to evaluate a child's cognitive and verbal abilities ($n = 18$). Other functions discussed by the participants were that this phase enables a child to practice answering questions in a detailed manner ($n = 10$) and could make children feel more at ease in the interview situation ($n = 7$). Some participants commented that the practice narrative had a positive effect on the subsequent interview and/or the child's account ($n = 17$). Others discussed negative aspects of the practice narrative ($n = 13$), including that it is time consuming, difficult to carry out, confusing for the child, and sometimes subjected to criticism from prosecutors.

Some participants stated that it is important for the child to understand the purpose of the practice narrative ($n = 11$) and that the practice narrative could have a positive impact on rapport building, but that it could also have negative effects when the child does not understand the purpose of talking about unrelated events ($n = 7$). Another point brought up in the responses was that the practice narrative was age dependent ($n = 18$), with some participants ($n = 7$) stating that it was more difficult with younger children and others ($n = 6$) stating that it was more difficult with older children. The effectiveness of the practice narrative was also described as dependent on other child-related factors ($n = 6$), including intellectual disabilities and shyness. Lastly, a few participants ($n = 5$) stressed that they usually skipped the practice narrative if the child started to talk about the allegations early during the interview.

Question types

Sixty-two participants elaborated on using open-ended and leading questions. With regard to open-ended questions, participants ($n = 12$) discussed the benefits of this procedure, including increasing the quality of the interview, reducing the risk of suggestive influence, and gaining more information from children. Some ($n = 9$) stated that they always begin with open questions, and/or that they sometimes need to use more specific questions when open-ended questions do not work, such as Wh-questions (when, where, who etc.) or option-posing questions ($n = 9$). The need to sometimes use leading questions was raised by 40 participants. Leading questions were described as a way forward when nothing else worked ($n = 32$), and as necessary when a child did not mention the allegation during their responses to open questions ($n = 9$). It was suggested that leading questions may also be needed to clarify specific forensically relevant details needed for the criminal investigations ($n = 6$). Some participants emphasized that when using leading questions, it is important to use open-ended follow-up questions afterwards ($n = 20$). Others ($n = 12$) commented that they only used leading questions after consulting (or at times, being told to do so) by the prosecutor and/or other staff members (e.g. after a break in the interview during which the team members usually have a meeting). Lastly, some described that they are not allowed to use leading questions ($n = 11$) and that it can decrease the evidential value of children's testimony ($n = 8$).

Prop use

As seen in [Table 1](#), nearly all participants stated that they used drawings to some extent during child interviews. When asked about the purpose behind using drawings,

the most commonly reported reasons were to help the child describe places (72.7%) or objects (67%), followed by helping the child feel comfortable in the interviewing situation (22.7%), as a memory aid (19.3%), or to build rapport (17%). Only a few interviewers reported using drawings to help children describe people (9.1%). To an open-ended question asking about other purposes for drawings, some interviewers (5.7%) reported that they used it in situations where a child asked if he or she could draw.

Thirty-six interviewers (40.9%) stated that they use other props during child interviews. The most commonly used props according to the interviewers were photographs (15.9%), stress-reduction objects (10.2%), picture cards (9%; 'Bildstöd', i.e. pictures developed for interviewing purposes, see www.bildsamt.se), toys or teddy bears (8%), anatomical dolls (3.4%), pictograms for children with intellectual disabilities (2.3%), body diagrams (2.3%), and emotion cards (2.3%). Twenty-six participants elaborated in response to an open-ended question asking about comments on prop use. Some participants suggested that props should not be used and/or that they lacked knowledge on how to use props ($n = 8$). Other participants mentioned the use of photographs, which included the use of line-ups and photos of crime scenes or injuries ($n = 6$).

Adjustments when interviewing preschoolers

When asked if they made any adjustments to the pre-substantive phase of interviews (ground rules, rapport building, practice narratives) when interviewing a preschooler, 82 (93.2%) participants responded that they did adjust their techniques. Of the remaining six participants, only two (2.3%) responded that they did not adjust the interview and four (4.6%) did not select any of the response options. In response to an open-ended question asking the interviewers to expand on how they adjust these interviews, a wide range of different strategies were described. Many discussed how they adapted and simplified their language to better suit young children ($n = 38$). This category included descriptions regarding the use of short sentences and simple words that a young child can understand, as well as talking slower and only asking one question at a time. A number of participants also discussed the need to shorten the pre-substantive phase due to the limited time available before young children begin experiencing fatigue ($n = 34$). However, the strategies for saving time varied across participants. For example, some participants explained that they shortened and/or removed ground rules from the introduction ($n = 26$). Notably, we did not find any systematic pattern in the rules they reported adjusting or removing. Furthermore, others discussed the need to shorten or remove the practice narrative phase to save time ($n = 10$).

When participants were asked if they made any adjustments to their prop use when interviewing preschoolers, 21 participants stated that they adjusted their practices (23.9%). In response to an open-ended question asking how they adjusted their prop use, the most common descriptions were that they allowed the children to bring a toy or teddy bear inside the interview room for support ($n = 6$) or that they made adjustments to the use of drawings ($n = 6$, where 3 participants used drawings with young children and 3 participants stated that drawings should be avoided with preschoolers).

Thematic analysis

Main challenges when interviewing a preschooler (3–6 years)

Seventy-seven interviewers responded to an open-ended question asking about the main challenges when interviewing preschoolers. Three main themes were identified; *developmental challenges*, *interviewing challenges* and *legal challenges* (see Table 3). The first theme included three sub-themes. Thirty-three interviewers discussed how young children's developing verbal abilities limited their witness capabilities during police interviews. Another twenty-one participants brought up preschoolers' limited attention span as a barrier. Some, for example, described how young children quickly start to experience fatigue and have difficulties staying on topic. The last sub-theme on developmental challenges, discussed by eight interviewers, concerned preschoolers' limited memory retrieval capabilities. Some described that young children had great difficulties recalling events unless they were recent in time.

Table 3. Themes and sub-themes for open-ended responses about main challenges when interviewing children of different ages.

Child age	Themes	Sub-themes	n (%)	
Preschool	Developmental challenges	Limited verbal abilities	33 (42.9%)	
		Short attention span	21 (27.3%)	
		Insufficient memory	8 (10.4%)	
	Interviewing challenges	Time pressure	24 (31.2%)	
		Transition to allegation	11 (14.3%)	
		Difficulties open-ended prompts	10 (13.0%)	
		Specific without being leading	9 (11.7%)	
	Legal challenges	Lack of specific details ^a	13 (16.9%)	
		Brief incoherent testimonies	9 (11.7%)	
		Credibility criteria	5 (6.5%)	
School-age	Barriers for disclosure	Think about consequences	31 (43.7%)	
		Protective of parents	17 (23.9%)	
		Loyalty	13 (18.3%)	
		Shame and guilt	12 (16.9%)	
		Easiest to interview	10 (14.1%)	
	Interview-related factors	Provide support	10 (14.1%)	
		Facilitate free narrative	7 (9.9%)	
			75 responses	
	Adolescent	Content of their testimony	Do not want to disclose	28 (37.3%)
			Lack of details	8 (10.7%)
Avoid embarrassing subjects			5 (6.7%)	
Barriers for disclosing		Think about consequences	17 (22.7%)	
		Negative attitudes	16 (21.3%)	
		Loyalty	10 (13.3%)	
Demands on the interviewer		Difficult building rapport	12 (16%)	
		Alternative explanations	6 (8%)	
		Need knowledge on teen life	5 (6.7%)	

Note: ^aThe interviewers discussed the need to know the time and location of the crime, the number of occasions it occurred, prepositions such as over/under or inside/outside etc.

It is difficult to assess their verbal development. Many parents say that a child is verbal and knows many words, but that doesn't mean that the child can give an account of a past event or understand the expectation of the interaction. Preschoolers are often good at talking about everything between heaven to earth. However, they can only keep their focus for a limited time.

The second theme (interviewing challenges) encompassed four different sub-themes related to factors that influenced the success of interviews. Twenty-four participants discussed time pressure as critical, which in turn made the interviewers change their interviewing (for more information, see the prior section on adjustments when interviewing preschoolers). Eleven interviewers described difficulties transitioning to questioning about the criminal allegation without using leading questions, since young children sometimes do not understand the purpose of the interview and/or what they are expected to talk about. Among these responses, some interviewers described the metaphor of 'fishing for the topic' using more and more specific questions, which was seen as time consuming and could lead to children experiencing fatigue before questions about the allegation could be asked. On a similar note, ten interviewers discussed how young children have difficulties responding to broad open-ended questions and invitations. Lastly, nine participants brought up the difficulties of asking specific questions and keeping the conversation on topic, without using leading questions that could have a negative influence on the children's statements.

A main challenge is that your time is limited because they can't keep their attention for long. And if the child does not know what they are there to talk about, which is common, it can be a real challenge approaching the topic. The youngest ones can't maintain and steer their focus, so if they get tired then you have to stop, no matter if you have more questions or not.

The third theme concerned legal challenges relating to preschoolers' testimonies. Thirteen participants described how legal professionals often need details that young children cannot be expected to provide due to their limited knowledge. This included for example time and frequency estimates (e.g. When did it happen? How many times? For how long?), as well as details involving prepositions (e.g. Was it over or under your clothes? Was it inside or outside?). Nine interviewers emphasized that preschoolers' testimonies are brief and tend to be incoherent. In turn, it was suggested by participants that these testimonies could be difficult to interpret without additional information such as corroborative evidence. Lastly, five participants discussed how the credibility criteria from the Swedish Supreme Court, stating that a credible testimony should be clear, long, and rich in detail (NJA, 2017 s 316 I & II), were not applicable to young children's statements.

For some crimes, such as child sexual abuse, young children lack the vocabulary to tell what happened to them ... The legal system also has to realize that a young child may not be able to give more than a few details about the crime, such as 'I cried', 'I said ouch', 'Mummy hit, I cried'.

Main challenges when interviewing a school-aged child (7–12 years)

Seventy-one interviewers elaborated on the main challenges when interviewing school-aged children. Two main themes were identified: *Barriers for disclosure*, and *Interview-related factors* (see Table 3). For the first theme, the most common sub-theme ($n = 31$

responses) was to discuss difficulties relating to school-aged children's ability to reflect on future consequences of disclosing. This included fears that the suspect would go to prison or that something else bad would happen if the child talked to the police. Seventeen participants also described how children often try to protect their parents, who they do not want to hurt or disappoint by disclosing. In many of these cases, the parents were described as the alleged perpetrators of physical abuse. Thirteen participants also discussed loyalty towards the perpetrator as a problem that would hinder a disclosure, particularly if the suspect was someone close to the child. Lastly, twelve participants described how shame and guilt was frequent among this age group, which could in turn be a barrier for a disclosure.

During this age, children start to think about consequences. Sometimes you understand that something has happened, but the child does not want to tell you. This could be because the child understands that something bad will happen to the parent, and they might fear that he or she will go to prison.

The second main theme concerned the interview style. Ten participants emphasized that school-aged children are the easiest age group to interview compared to adolescents and preschoolers. Participants suggested that children this age could both maintain focus and provide a coherent narrative, although some stressed that this varied between children. Ten participants discussed the importance of providing support during the interview, which was seen as an important factor to help children overcome reluctance. Lastly, seven interviewers discussed the difficulties of eliciting free narratives from these children without leading questions. A few of these responses included the suggestion that school-aged children often want to be helpful and please the interviewer, which in turn could lead to errors.

I think this is the easiest age category to interview. They can answer questions. They can often tell in a detailed manner what happened. However, they do understand the consequences of disclosing so you may receive questions about that.

Main challenges when interviewing an adolescent child (13–17 years)

Seventy-five participants expanded on an open-ended question asking about main challenges when interviewing teenagers. Three main themes were identified: *Content of their testimony*, *Barriers for disclosing*, and *Demands on the interviewer* (see Table 3). The first theme concerned challenges related to the content of adolescents' testimony. Twenty-eight participants discussed the observation that adolescents sometimes do not want to disclose information about a criminal allegation. Another eight participants brought up difficulties eliciting details without using specific questions. Some of these interviewers also remarked that adolescents can be very brief in their responses. Lastly, five participants emphasized that adolescents sometimes avoid embarrassing subjects, including sexual acts or other details that children might think could reflect negatively on themselves.

It all goes well when they want to talk, but if they don't want to talk then that's that. They can be very brief. Some think you are really annoying when you ask questions that they think they have already answered.

In the second theme (*Barriers for disclosing*), seventeen interviewers discussed how adolescents' ways of reflecting about potential consequences proved a challenge for

eliciting disclosures. This included statements about not wanting to go through the legal process, or not wanting their peers or family to know what happened to them. Another commonly discussed barrier was that adolescents sometimes have a negative attitude toward adults and/or the police. Finally, for this sub-theme, participants suggested that adolescents' often demonstrate loyalty toward either the suspect (who they did not want to go jail), their parents (who they did not want to hurt or disappoint), and/or to their friends (who they did not want to snitch on).

It's challenging when the criminal allegation concerns a friend or boyfriend since friendships are very important at this age. It is also difficult for adolescents to disclose in cases involving a family member since they want to keep the relationship with the adult and not make everything worse.

The third theme concerned challenges relating to demands placed on the interviewer when questioning adolescents. Twelve participants discussed the difficulties involved in building rapport and creating trust with this age group. During investigations involving adolescents, six participants stated that they need to consider and rule out alternative explanations behind allegations, including that the children might intentionally fabricate information for different reasons. Lastly, five participants discussed the need to keep up with teenage trends, including their vocabularies, social media usage, and other technical developments.

You have to keep up with their language, understand their use of slang, understand what happens on the internet, be updated on different phone apps etcetera. Children should not have to explain these things to us.

Discussion

In the present survey, we sought to explore practitioners' views on child interviewing and the challenges they encounter when questioning children of different ages. There were four primary aims of this study. First, we investigated the participants' views on different interviewing components (explaining ground rules, rapport building, practice narratives, open and leading questions) in relation to their training and experience. At odds with our predictions, we did not find any significant differences in the self-reported frequency of use or the perceived importance of the different components between interviewers who had finished their training in the adapted NICHD protocol and those who had not finished their training. Furthermore, similar to La Rooy et al. (2011), we did not observe any significant correlations between years of experience and views on the different components, with the exception of negative correlations between years of experience and ratings of the effectiveness of the practice narrative.

On the whole, the participants' ratings as well as their open-ended responses were in line with current research recommendations (Newlin et al., 2015), with the exception of the practice narrative. That is, ratings of the practice narrative were more negative compared to those for the other interview components. This is at odds with the empirical support for the effectiveness of practice narratives (Price et al., 2013; Sternberg et al., 1997). We would like to note that some of the practitioners' open-ended descriptions of the purpose behind the practice seemed to be based on misunderstandings of the underpinning psychological knowledge. Carson and Rooy (2015) reported similar observations as potential barriers for

adherence to the technique. Understanding the purpose behind specific components such as the practice narrative may be important for encouraging usage of the technique. Furthermore, following concerns from prosecutors, the suggested topic of the practice narrative was recently changed in Sweden; from asking questions about an unrelated past event to asking about the child's day up until the forensic interview, which in turn could help the police explore what type of information the child has received beforehand regarding the interview (the Prosecution Development Centre Gothenburg, 2016). As one of our participants pointed out, the practice narrative is no longer about unrelated events but rather about information that could be of relevance for the investigation. This procedure thus deviates from past studies and the effects have, to our knowledge, not been scientifically studied.

Secondly, we aimed to examine the practitioners' views on prop use. Nearly all participants reported using drawings to some extent during child interviews. The most common purposes of using drawings were to describe spatial information or objects. However, the main bulk of research has focused on using drawings as a memory aid by asking children to draw-and-tell what happened during an event (e.g. Butler et al., 1995). Based on our findings, further investigation is required regarding how children of different ages use drawings to convey spatial and object-related details. Likewise, more knowledge is needed regarding whether children's drawings of, for example, spatial information are assessed in court. Furthermore, 40.9% of the participants reported using other props. Stress-reduction tools were one of the more common props, including hand-held objects (e.g. fidget toys) to reduce anxiety. Practitioners also reported using photographs, with a range of different purposes including photo line-ups, photos of the crime scene, or photos of injuries. Another prop used by some interviewers were specially designed pictures (Bildstöd) for providing information during the introduction phase of the interview. Concerningly, a handful of interviewers reported using props that are strongly advised against according to Swedish guidelines (the Prosecution Authority, 2018), including anatomical dolls and body diagrams. The majority of these interviewers (80%) reported that they had finished Step 2 of the training program.

Third, we investigated the interviewers' self-reported strategies for adapting their methods when questioning young children. We observed a large variation in how the participants adapted their interviewing method for preschoolers. Specifically, with regard to the pre-substantive phase of the interview, the participants described a need to save time to prevent fatigue during the substantive phase. However, to meet this aim, a wide range of modifications to the introduction, ground rules, and practice narrative phases, were reported, including removing, modifying, and reorganizing different components from the NICHD protocol. For example, some interviewers reported removing either all or some of the ground rules during interviews with young children. The choice of what rules to use or remove appeared to be up to each interviewer, as we found no systematic pattern in their rule selection. Similarly, many interviewers described that they either removed or abbreviated the practice narrative phase to save time. The self-reported non-adherence to the recommended child interviewing protocol when interviewing preschoolers is concerning, particularly considering the lack of research on the effects of modifying the protocol. On the other hand, young children do have a limited attention span and the interviewers concerns about fatigue after a lengthy pre-substantive phase need to be taken seriously. Furthermore, the current research literature is limited regarding

the effectiveness of specific interviewing components with very young children, including for example different strategies for building rapport and preschoolers' understanding of ground rules (e.g. Brown et al., 2019; Saywitz et al., 2015). Future research on the optimal time and content for the pre-substantive phase of interviews with preschoolers may thus be of practical value. An interesting solution to the fatigue dilemma was for example recently implemented in Norway, where child interviews have a longer break scheduled between the pre-substantive and the substantive phases (Langballe & Davik, 2017). However, the effects of the Norwegian procedure have, as of yet, not been empirically examined in controlled experimental settings.

A quarter of the interviewers reported making changes to their prop use when questioning preschoolers, with the most common changes being to occasionally allow young children to bring a toy for comfort or to change their drawing practices. Some practitioners brought up different views on whether drawings should or should not be used with preschoolers, which points to the importance of conveying research-based guidelines with regard to prop use with children of different ages. While a substantial amount of research has been conducted on the use of anatomical dolls or body diagrams with young children, less is known with regard to other types of props, such as asking preschoolers to convey spatial information by using drawings or crime scene photographs. Future research on these topics may benefit from drawing on cognitive (e.g. encoding specificity principle, Tulving & Thomson, 1973) and developmental theories (e.g. dual representation theory of symbolic development, Deloache, 2000) when exploring benefits and risks associated with prop use during interviews with young children.

Fourth, we identified a range of different challenges when questioning preschoolers, school-aged children, and adolescents. Whereas the main challenges with younger children revolved primarily around developmental limitations and short attention spans, the challenges with older children involved to a larger extent conflicts of loyalty and concerns about future consequences. It should be noted that both preschoolers and adolescents were perceived as particularly challenging due, in part, to their brief accounts lacking forensic details. The underlying reasons varied according to the interviewers, with preschoolers being limited by their verbal and cognitive abilities, and adolescents omitting information primarily due to motivational factors. The additional difficulties involved when interviewing very young children and adolescents are in line with studies reporting that children of these age groups are less likely to disclose abuse (e.g. Leach et al., 2017). Furthermore, these cases have been found to be more difficult to prosecute (Buting, 2008), indicating a need to further understand how to potentially improve the quality of these police investigations.

Furthering our knowledge on the challenges practitioners encounter when interviewing children of different ages may provide valuable insights to inspire future developments of research-based child interviewing protocols. Child interviewing manuals, such as the revised NICHD protocol (Lamb et al., 2018), have recently increased their focus on socio-emotional support to help children overcome reluctance. Interviewer supportiveness and the use of rapport building techniques may reduce children's anxiety and in turn, potentially help them overcome some of the obstacles involved when disclosing sensitive information. However, the scientific body of literature is scarce with regard to the effectiveness of different rapport building strategies during interviews with children (Saywitz et al., 2015). Future research should benefit from examining rapport-building techniques with

children of different ages. Several interviewers in the present study for example reported asking children about their thoughts and feelings about talking to the police, which may be a potential tool to identify barriers that could hinder a disclosure (see also Ahern et al., 2014; Hershkowitz et al., 2014). Furthermore, future studies could focus on comparing the quality of child interviews across different countries and between specific techniques. A cross-cultural perspective may provide even further insights into the challenges encountered by practitioners.

There are a couple of methodological limitations of the current investigation that should be discussed. First, the data is based on the self reports of interviewers. What interviewers say they do might not correspond with their actual interviewing practices and could reflect for example social desirability effects, response biases, and difficulties estimating behavior. Nonetheless, survey data can provide valuable insights into the beliefs, knowledge, and attitudes of practitioners (Tourangeau et al., 2000). Second, while the current methodology enabled us to capture a large number of practitioners' self-reported experiences, in-depth interviews or focus groups could have generated a richer text material for the qualitative analyses (see e.g. Hanway & Akehurst, 2018). Third, we did not observe any significant differences between participants who had completed their training and those who had not on any of the dependent measures. However, due to the low number of participants who had not finished the NICHD training ($n = 19$), our statistical analyses would only have been able to detect rather large effect sizes due to limited power. Notwithstanding these limitations, the findings of the current survey contribute novel insights into the dilemmas reported by practitioners including under-researched areas such as challenges when interviewing different age groups and adaptations when questioning young children.

Conclusions

The present survey sheds light on Swedish practitioners' experiences and the challenges involved when interviewing children of differing ages. The perceived barriers for children to disclose and the demands placed on the interviewer varied across cases involving preschoolers, school-aged children, and adolescents. With regard to the youngest children, practitioners described a need to change the interviewing protocol to account for preschoolers' limited attention span, and in turn reported a wide range of modifications to their methods. Future research into ways of adapting child interviewing techniques in a standardized manner to meet the needs of young children may be beneficial. Furthermore, listening to the concerns raised by practitioners can provide valuable insights to help guide future research on investigative interviewing with children of all ages. To facilitate young complainants and witnesses, all children who are capable of giving testimony should have the right to be interviewed with techniques suitable for their cognitive development and socio-emotional needs.

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Data availability statement

The data that support the findings of this study are available from the corresponding author, [MM], upon a reasonable request. The data are not publicly available due to information that could compromise the privacy of research participants.

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Pre-registration

The study was pre-registered on the Open Science Framework, see https://osf.io/7vqrz/?view_only=8e9b4623305540e0a54ed2da49317104.

References

- Ahern, E. C., Hershkowitz, I., Lamb, M. E., Blasbalg, U., & Winstanley, A. (2014). Support and reluctance in the pre-substantive phase of alleged child abuse victim investigative interviews: Revised versus standard NICHD protocol. *Behavioural Sciences & the Law*, 32(6), 762–774. <https://doi.org/10.1002/bsl.2149>
- Benia, L. R., Hauck-Filho, N., Dillenburg, M., & Stein, L. M. (2015). The NICHD investigative interview protocol: A meta-analytic review. *Journal of Child Sexual Abuse*, 24(3), 259–279. <https://doi.org/10.1080/10538712.2015.1006749>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/148088706qp063oa>
- Brown, D. A., Lewis, C. N., Lamb, M. E., Gwynne, J., Kitto, O., & Stairmand, M. (2019). Developmental differences in children's learning and use of forensic ground rules during an interview about an experienced event. *Developmental Psychology*, 55(8), 1626–1639. <https://doi.org/10.1037/dec0000756>
- Buting, L. (2008). Sexual offences against children: An exploration of attrition in the Northern Ireland criminal justice system. *Child Abuse & Neglect*, 32(12), 1109–1118. <https://doi.org/10.1016/j.chiabu.2008.09.002>
- Butler, S., Gross, J., & Hayne, H. (1995). The effect of drawing on memory performance in young children. *Developmental Psychology*, 31(4), 597–608. <https://doi.org/10.1037/0012-1649.31.4.597>
- Carson, L., & Rooy, D. (2015). 'Commonsense psychology' is a barrier to the implementation of best practice child interviewing guidelines: A qualitative analysis of police officers' beliefs in Scotland. *Journal of Police and Criminal Psychology*, 30(1), 50–62. <https://doi.org/10.1007/s11896-013-9139-5>
- Cederborg, A.-C., Alm, C., da Silva Nises, D. L., & 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(3), 242–254. <https://doi.org/10.1080/15614263.2012.712292>

- Cheung, M., & Boutté-Queen, N. M. (2010). Assessing the relative importance of the child sexual abuse interview protocol items to assist child victims in abuse disclosure. *Journal of Family Violence*, 25(1), 11–22. <https://doi.org/10.1007/s10896-009-9265-0>
- Collins, K., Doherty-Sneddon, G., & Doherty, M. J. (2014). Practitioner perspectives on rapport building during child investigative interviews. *Psychology, Crime & Law*, 20(9), 884–901. <https://doi.org/10.1080/1068316X.2014.888428>
- Cyr, M., Dion, J., McDuff, P., & Trotier-Sylvain, K. (2012). Transfer of skills in the context of non-suggestive investigative interviews: Impact of structured interview protocol and feedback. *Applied Cognitive Psychology*, 26(4), 516–524. <https://doi.org/10.1002/acp.2822>
- Deloache, J. S. (2000). Dual representation and young children's use of scale models. *Child Development*, 71(2), 329–338. <https://doi.org/10.1111/1467-8624.00148>
- Ernberg, E., Tidefors, I., & Landström, S. (2016). Prosecutors' reflections on sexually abused preschoolers and their ability to stand trial. *Child Abuse & Neglect*, 57, 21–29. <https://doi.org/10.1016/j.chiabu.2016.06.001>
- Goodman, G. S., & Melinder, A. (2007). Child witness research and forensic interviews of young children: A review. *Legal and Criminological Psychology*, 12(1), 1–19. <https://doi.org/10.1348/135532506X156620>
- Hanway, P., & Akehurst, L. (2018). Voices from the front line: Police officers' perceptions of real-world interviewing with vulnerable witnesses. *Investigative Interviewing: Research and Practice*, 9, 14–33.
- Hershkowitz, I., Lamb, M. E., & Katz, C. (2014). Allegation rates in forensic child abuse investigations: Comparing the revised and standard NICHD protocol. *Psychology, Public Policy and Law*, 20(3), 336–344. <https://doi.org/10.1037/aa0037391>
- Hershkowitz, I., Lamb, M. E., Orbach, Y., Katz, C., & Horowitz, D. (2012). The development of communicative and narrative skills among preschoolers: Lessons from investigative interviews about child abuse. *Child Development*, 83(2), 611–622. <https://doi.org/10.1111/j.1467-8624.2011.01704.x>
- 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*, 30(7), 753–769. <https://doi.org/10.1016/j.chiabu.2005.10.016>
- Lafontaine, J., & Cyr, M. (2016). A study of the relationship between investigators' personal characteristics and adherence to interview best practices in training. *Psychiatry, Psychology and Law*, 1–16. <https://doi.org/10.1080/13218719.2016.1152925>
- Lamb, M. E. (2016). Difficulties translating research on forensic interview practices to practitioners: Finding water, leading horses, but can we get them to drink? *American Psychologist*, 71(8), 710–718. <https://doi.org/10.1037/amp0000039>
- Lamb, M. E., Brown, D. A., Hershkowitz, I., Orbach, Y., & Esplin, P. W. (2018). *Tell me what happened: Questioning children about abuse* (2nd ed.). Wiley-Blackwell.
- Lamb, M. E., Sternberg, K. J., Orbach, Y., Esplin, P. W., & Mitchell, S. (2002). Is ongoing feedback necessary to maintain the quality of investigative interviews with allegedly abused children? *Applied Developmental Science*, 6(1), 35–41. https://doi.org/10.1207/S1532480XADS0601_04
- Lamb, M. E., Sternberg, K. J., Orbach, Y., Hershkowitz, I., Horowitz, D., & Esplin, P. W. (2002). The effects of intensive training and ongoing supervision on the quality of investigative interviews with alleged sex abuse victims. *Applied Developmental Science*, 6(3), 114–125. https://doi.org/10.1207/S1532480XADS0603_2
- Langballe, Å, & Davik, T. (2017). Sequential interviews with preschool children in Norwegian barnahus. In S. Johansson, K. Stefansen, E. Bakketeig, & A. Kaldal (Eds.), *Collaborating against child abuse: Exploring the Nordic barnahus model* (pp. 165–183). Springer International Publishing.
- La Rooy, D., Brubacher, S. P., Aromäki-Stratos, A., Cyr, M., Hershkowitz, I., Korkman, J., Myklebust, T., Naka, M., Peixoto, C. E., Roberts, K. P., Stewart, H., & Lamb, M. E. (2015). The NICHD protocol: A review of an internationally-used evidence-based tool for training child forensic interviewers. *Journal of Criminological Research, Policy and Practice*, 1(2), 76–89. <https://doi.org/10.1108/JCRPP-01-2015-0001>
- La Rooy, D. J., Lamb, M. E., & Memon, A. (2011). Forensic interviews with children in Scotland: A survey of interview practices among police. *Journal of Police and Criminal Psychology*, 26(1), 26–34. <https://doi.org/10.1007/s11896-010-9072-9>

- Leach, C., Powell, M. B., Sharman, S. J., & Anglim, J. (2017). The relationship between children's age and disclosures of sexual abuse during forensic interviews. *Child Maltreatment, 22*(1), 79–88. <https://doi.org/10.1177/1077559516675723>
- Leander, L. (2010). Police interviews with child sexual abuse victims: Patterns of reporting, avoidance and denial. *Child Abuse & Neglect, 34*(3), 192–205. <https://doi.org/10.1016/j.chiabu.2009.09.011>
- 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 (Hove, England), 16*(1), 29–47. <https://doi.org/10.1080/09658210701725732>
- Magnusson, M., Ernberg, E., & Landström, S. (2017). Preschoolers' disclosures of child sexual abuse: Examining corroborated cases from Swedish courts. *Child Abuse & Neglect, 70*, 199–209. <https://doi.org/10.1016/j.chiabu.2017.05.018>
- McElvaney, R. (2019). Helping children to tell about their experiences of sexual abuse. *Child Abuse Review, 28*(2), 166–172. <https://doi.org/10.1002/car.2559>
- Neuendorf, K. A. (2016). *The content analysis guidebook* (2nd ed.). SAGE Publications, Inc.
- Newlin, C., Steele, L. C., Chamberlin, A., Anderson, J., Kenniston, J., Russell, A., Stewart, H., & Vaughan-Eden, V. (2015). *Child forensic interviewing: Best practices. Juvenile Justice Bulletin*. U.S. Department of Justice. <https://www.ojjdp.gov/pubs/248749.pdf>
- NJA. (2017). *Bevisvärdering i mål om sexualbrott* [Assessing evidence in cases of sexual offences]. Nytt Juridiskt Arkiv (p. 316). <https://lagen.nu/dom/nja/2017s316>
- Poole, D. A., & Bruck, M. (2012). Divining testimony? The impact of interviewing props on children's reports of touching. *Developmental Review, 32*(3), 165–180. <https://doi.org/10.1016/j.dr.2012.06.007>
- Powell, M. B. (2008). Designing effective training programs for investigative interviewers of children. *Current Issues in Criminal Justice, 20*(2), 189–208. <https://doi.org/10.1080/10345329.2008.12035804>
- Powell, M. B., Fisher, R. P., & Hughes-Scholes, C. H. (2008). The effect of intra- versus post-interview feedback during simulated practice interviews about child abuse. *Child Abuse & Neglect, 32*(2), 213–227. <https://doi.org/10.1016/j.chiabu.2007.08.002>
- Price, H. L., Roberts, K. P., & Collins, A. (2013). The quality of children's allegations of abuse in investigative interviews containing practice narratives. *Journal of Applied Research on Memory and Cognition, 2*(1), 1–6. <https://doi.org/10.1016/j.jarmac.2012.03.001>
- Redlich, A. D. (2010). The susceptibility of juveniles to false confessions and false guilty pleas. *Rutgers Law Review, 62*, 943–957.
- Roberts, K. P., & Cameron, S. C. (2015). Observations from Canadian practitioners about the investigation and prosecution of crimes involving child and adult witnesses. *Journal of Forensic Psychology Practice, 15*(1), 33–57. <https://doi.org/10.1080/15228932.2015.997611>
- Rowback Rivard, J., & Schrieber Compo, N. (2017). Self-reported current practices in child forensic interviewing: Training, tools, and pre-interview preparation. *Behavioral Sciences and the Law, 35*(3), 253–268. <https://doi.org/10.1002/bsl.2290>
- 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 Sciences & the Law, 33*(4), 372–389. <https://doi.org/10.1002/bsl.2186>
- Saywitz, K. J., Lyon, T. D., & Goodman, G. S. (2018). *Interviewing children*. In J. Conte & B. Klika (Eds.), *APSAC handbook on child maltreatment* (4th ed., pp. 310–329). Sage.
- Sjöberg, R. F., & Lindblad, F. (2002). Limited disclosure of sexual abuse in children whose experiences were documented by videotape. *American Journal of Psychiatry, 159*(2), 312–314. <https://doi.org/10.1176/appi.ajp.159.2.312>
- Sternberg, K. S., 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*(11), 1133–1146. [https://doi.org/10.1016/S0145-2134\(97\)00071-9](https://doi.org/10.1016/S0145-2134(97)00071-9)
- The Prosecution Authority (2018). *Förhör med barn. Förhör med vuxna som har osynliga funktionsnedsättningar* [Interviewing children. Interviewing adults with in-visible disabilities]. www.aklagare.se/globalassets/dokument/handbocker/forhorshandboken.pdf

- The Prosecution Development Centre Gothenburg. (2016). *Kvalitet i barnförhör* [Quality of forensic interviews with children]. Utvecklingscentrum Göteborg.
- Tourangeau, R., Rips, L. J., & Rasinski, K. (2000). *The psychology of survey response*. Cambridge University Press.
- Tulving, E., & Thomson, D. M. (1973). Encoding specificity and retrieval processes in episodic memory. *Psychological Review*, 80(5), 352–373. <https://doi.org/10.1037/h0020071>
- Wright, R., & Powell, M. B. (2006). Investigative interviewers' perceptions of their difficulty in adhering to open-ended questions with child witnesses. *International Journal of Police Science & Management*, 8(4), 316–325. <https://doi.org/10.1350/ijps.2006.8.4.316>