Repeated interviews with children who have intellectual disabilities

*Cederborg, A-C., **La Rooy, D., & ***Lamb, M.E.

*Department of Behavioural Sciences, Linköping University,
581 83 Linköping , Sweden

** Psychology Department, Kingston University, Penrhyn Road,
Kingston upon Thames, Surrey KT1 2EE, United Kingdom

*** Faculty of Social and Political Sciences, Free School Lane,
University of Cambridge, Cambridge CB2 3RQ, United Kingdom

This research was funded by the Crime Victim Foundation of Sweden. The authors are grateful to the prosecutors and police officers who so generously provided copies of their files and willingly responded to multiple requests for clarifying information. Correspondence and reprint requests should be addressed to Ann-Christin Cederborg, Department of Behavioral Sciences, Linköping University, 581 83 Linköping, Sweden.

Phone +46 13 285870

Fax +46 13 282145

E-mail: annce@ibv.liu.se

Cederborg, A-C., **La Rooy, D.**, & Lamb, M. (2008). Repeated interviews with children who have intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*. 21, 103-113.

<http://www.wiley.com/bw/journal.asp?ref=1360-2322>

Abstract

Background: We predicted that repeated interviewing would improve the informativeness of children with intellectual disabilities who were questioned in criminal investigations.

Materials: The chronological ages of the 19 children, involved in 20 cases, ranged from between 4.7 and 18 years ($M = 10.3$ years) at the time of the first alleged abuse.

Method: The utterances used by interviewers to elicit information in both initial and later interviews were examined. We then assessed the substantive information provided in both interviews and compared information elicited using focused questions in the initial interview with responses about the same topic elicited using open questions in the second interview.

Results: The hypothesis was supported: over 80% of the information reported in the repeated interviews was about completely new topics or was new information elaborating upon previously discussed topics. However, because the interviewing techniques were so poor in both first and second interviews, information provided in the repeated interviews may have been contaminated irrespective of the children's capacities.

Conclusion: When children with intellectual disabilities are given a second chance to provide information about their abuse, they can further develop the information that they report and even provide entirely new information about their experiences. When interviewers are not specially trained in how to interview children with intellectual disabilities, we cannot assume that repeated interviews provide reliable and accurate information, however.

Keywords: Children with intellectual disabilities, abuse, repeated interviews

Introduction

Children with intellectual disabilities are more likely than typically developing children to be maltreated or victimized by crime (Sedlack & Broadhurst, 1996; Sobsey & Doe, 1991; Sullivan/Knutson 19xx; Vig & Kaminer, 2002). Regardless of their intellectual abilities, however, it is important to obtain reports that are as accurate and complete as possible from alleged victims. When alleged victims have developmental delays, autistic conditions, or other mental problems, they may have difficulty describing their experiences because of their handicaps, but they should not be seen as incompetent witnesses. By definition, both children and adults with intellectual disabilities comprise heterogeneous groups (Kebbell & Hatton, 1999) differing with respect to their psychological vulnerabilities and suggestibility (Ceci, Bruck, & Battin, 2000; Gudjonsson & Henry, 2003) and it is not yet clear how individual differences can influence the ability to describe experienced events. It seems likely that the informativeness of the reports given by abused children with intellectual disabilities varies greatly even when alleged victims have the same diagnosis (Cederborg & Lamb, 2006b), but few researchers have studied techniques that might help them to describe potentially abusive experiences. In this study, our hypothesis was that repeated interviewing might improve the informativeness of children with intellectual disabilities.

The informativeness of children with intellectual disabilities is generally comparable to that of mental age-matched peers (Fowler, 1998; Henry & Gudjonsson, 1999; Iarocci & Burack, 1998; Michel, Gordon, Ornstein, & Simpson, 2000; Zigler, 1969) but severity of disability often explains differences in performance. Children with mild intellectual disabilities report less information in response to open free-recall questions but are as likely as typically developing children of the same age to

provide responses to these type of prompts (Henry & Gudjonsson, 1999; Henry & Gudjonsson, 2003) and to resist misleading questions (Henry & Gudjonsson, 2003). However, children with moderate disabilities provide less information than both typically developing children and children with mild intellectual disabilities. They are also more suggestible although their responses to free recall questions tend to be accurate (Henry & Gudjonsson, 2003). Children and adults with intellectual disabilities have limited memory and higher suggestibility scores than normally developing peers. In addition, children with intellectual disabilities have much higher memory scores than adults with intellectual disabilities (Gudjonsson & Henry, 2003).

It is not known, however, how well children with autistic spectrum disorders perform as eyewitnesses but they may have problems making eye contact (Mirenda, Donellan, & Yoder, 1983) and expressing feelings when being interviewed (Gillberg, 1995). Verbal children with autistic spectrum disorder may also fail to understand questions about other people's knowledge and beliefs, and misunderstand the gestures others use when trying to direct their attention (Trevvarthen, 2000). Some may have failed to develop useful spoken language and those who develop speech may be unable to complete answers when they are interrupted. They may be able to provide detailed information about concrete experiences yet be unable to answer even simple questions about the same event (Gillberg, 1995). If they have impaired memory for recent events their ability to recall past activities in response to questions without directive requests for information may be limited as well (Boucher & Lewis, 1989).

For reasons such as these, interviewers should be specially trained to interview children with intellectual disabilities. Early identification of mentally handicapped witnesses' abilities, capacities, and behaviour may help interviewers understand how to adapt their behaviour appropriately (Davis et al., 1994; Gordon et al., 1995; Jones,

2003; Milne, 1999; Poole & Lamb, 1998; Westcott, 1993). When interviewing both typically developing children and children with intellectual disabilities, interviewers should start with open-ended questions and then proceed to more specific questions as needed (Gordon & Schroeder, 1995; Poole & Lamb, 1998). Interviewers should use open question types because those maximize accurate recall even when intellectually impaired witnesses are involved (Kasari & Bauminger, 1998). Open questions (invitations and directives) prompt respondents to recall information from memory and do not specify the contents of the memories that are to be retrieved. As a result, they elicit richer and more accurate reports than more focused prompts (option posing and suggestive questions) do. The latter often require that respondents relate to one or more of the options suggested by the interviewers and thus not only constrain but also shape their responses, making them potentially less accurate than responses to open questions (Dale et al., 1978; Dent & Stephenson, 1979; Hutcheson et al., 1995; Lamb & Fauchier, 2001; Lamb et al., 1996; Lamb, Orbach, Hershkowitz, & Horowitz, 2007; Oates & Shrimpton, 1991; Orbach & Lamb, 2000).

When asked specific, closed questions, responses from people with intellectual disabilities may become less accurate (Henry & Gudjonsson, 2003; Kebell et al., 2004). Because suggestive questions suggest desirable responses, they should be avoided completely whereas option-posing questions should be used infrequently, provided they are framed neutrally and non-coercively (Kebell et al., 2004; Michel et al., 2000), ideally followed by open-ended prompts for further elaboration (Poole & Lamb, 1998).

On occasion, it may also be helpful to re-interview children so that they can elaborate on the information that they have already provided, and provide details about topics that have not as yet been discussed. Research with typical developing

children shows that repeated interviews about experienced events always yield new information, and that under certain conditions the new information may be highly accurate (La Rooy, Pipe, & Murray, 2005; La Rooy, Lamb, & Pipe, 2006). The benefits of repeated interviews are greatest when repeated interviews occur close together, when the events being talked about are fresh in memory, and when interviews are not suggestive (La Rooy et al., 2005, 2006). When repeated interviews are suggestive, misleading information may become incorporated into children's accounts, thereby decreasing the accuracy of the information obtained (Bruck & Ceci, 1999; Leichtman & Ceci, 1995).

Somewhat surprisingly, there have been few analogue studies on the effects of repeatedly interviewing children with intellectual disabilities. Henry and Gudjonsson (2003) interviewed children with intellectual disabilities 24 hours after watching a classroom presentation and again 2 weeks later. The amount of information that the children freely recalled in the repeated interviews increased without a concomitant increase in errors. Because recall increased (hypermnnesia), new correct information must have been reported in the repeated interview. Moreover, children with intellectual disabilities did not appear to be any more suggestible when responding to yes/no questions than were their age matched typically developing counterparts. The children with intellectual disabilities changed their answers more frequently in the repeated interviews, and in a legal context this is highly problematic.

Although repeated interviewing appears to be a common feature of many child abuse investigations (Ceci & Bruck, 1995; Plotnikoff & Woolfson, 2001), there is little field research on the dynamics of repeated interviews with children who have intellectual disabilities. In a field study with typical developing children, Hershkowitz et al., (1998) showed that repeated interviewing may improve recall in 4- to 13-year-

old children. Specifically, children in that study reported additional new and forensically-relevant information when they were reinterviewed at the crime scene. Hershkowitz and her colleagues (1998) also noted that the children who provided the greatest number of details in the initial interview also provided the greatest number of details when subsequently re-interviewed in context. Thus, the initial interview predicted how many more details were recalled in the repeated interview.

The fact that children with intellectual disabilities may have difficulty describing their experiences does not necessarily mean that they are incompetent informants. In this study we wanted to find out if repeated interviewing could enhance their opportunities to elicit information. Our prediction was that repeated interviewing could improve their informativeness. First, a quantitative analysis was performed on the quality of the interviewers' utterances in first and second interviews when asking for forensically-relevant information. The questions were coded as 1) open-ended invitations for the children to report information, 2) directive requests for information (what, when and where), 3) summaries of the information provided by the children, 4) option-posing questions, or 5) suggestive interviewer utterances. This allowed examination of how comparable the first and second interviews were in terms of the numbers and type of questions asked. Second, the information reported in the later interviews was qualitatively categorized as new information, elaborations on information previously reported, information that was consistent across interviews, and information that directly contradicted previously reported information. Third, we qualitatively examined how information elicited in the first interview using option-posing and suggestive questions was reported in later interviews in response to open questions (invitations and directives).

Method

Sample

We studied 20 different interviews with 19 alleged victims because one woman made allegations about two different suspects. These cases were selected from a larger project involving 69 criminal cases in Sweden. The 19 participants (13 girls and 6 boys) were drawn from the larger sample solely because these children had all been interviewed more than once. Prosecutors in all the 39 Swedish districts were invited to provide as much information as possible about recent cases in which children who had intellectual disabilities were interviewed about suspected abuse. Because intellectual disabilities are not necessarily recorded in Swedish case files, the resulting data base was influenced by the prosecutors' and police officers' memories of whether or not children were disabled and the dataset is therefore selective rather than representative.

Information about the participants' diagnoses and capacities were not well documented in the records. A previous study showed that this information was seldom obtained formally during investigations and that courts often obtain information of this nature third hand (Cederborg & Lamb, 2006a); it is therefore important to emphasize that the current study may actually contain children with a diverse array of disabilities. In Sweden, the accepted term for developmental difficulties is developmental disorder (DD) and as in the Diagnostic and Statistical Manual of Mental Disorders (DSM IV, 1994) three different groups are distinguished: mild developmental disorder (IQ of 50 -55 to 70), moderate DD (IQ of 35 - 40 up to 55), and severe developmental disorder (IQ below 35-40). From the limited information available, we discerned that 11 of the 19 children were developmentally delayed; 8 were assessed with mild DD (M= 13.7 years of age and between 7.1-22 years old when initially interviewed), 2 with moderate DD (M=7.4 years of age and between

6.1-8.7 years old when initially interviewed) and 1 with unspecified degree of DD (16.1 years of age when initially interviewed). Three alleged victims were reported to have ADHD/ADD (M= 9.2 years of age and between 6.5-12.2 years of age when initially interviewed), 4 had been diagnosed with DD (3 mild and 1 moderate) combined with Autistic features (M=14.11 years of age and between 10-19.1 when initially interviewed), and 1 child was described as having Autistic features (age 16.3 when initially interviewed). Overall, their chronological ages were between 4.7 and 18 years (M = 10.3 years) when allegedly abused for the first time and between 5.3 and 21.10 years (M = 16.2 years) when abused for the last time. The delay between the last incident of abuse and the first interview averaged 300 days and varied between 1 day and 5 years. The average delay between the first and later interviews was 51 days. All but one child in the sample had allegedly experienced sexual abuse or both sexual and physical abuse. One had experienced physical abuse. Eight of the alleged perpetrators were immediate family members, two were unfamiliar, and twelve were familiar to the children. In two cases, there were two suspects. Because of their developmental delays and because they were exposed to possible abuse for the first time when their chronological ages were under 18 years, they are referred to as children throughout this manuscript.

All case material was given to the first author by the prosecutors and police officers involved in accordance with the provisions of Sweden's Official Secrets Act. Personal details and references to places that may permit identification were removed to ensure that none of the victims could be recognized, but the omissions do not affect the conclusions reported here. When the study was conducted, Swedish researchers were not required to have their studies reviewed by human subjects' protection committees, but the present study was reviewed and approved by the employee of

Linköping University, Sweden, responsible for monitoring research being conducted by University staff. This official ensured that the study was designed and implemented in accordance with the Helsinki declaration (1975) regarding research on humans.

Procedure

This study included both quantitative and qualitative strategies, with three steps to the analysis. First, the quality of the first and second interviews was assessed. For this analysis, the interviews were transcribed from video recordings and checked to ensure their completeness and accuracy. The Swedish coders reviewed the transcripts and categorized each interviewer utterance asking for forensically-relevant information using the categories developed by Lamb et al. (1996). For the purpose of these ratings, no distinction was made between questions and statements. Interviewer statements made during the portion of the investigative interviews concerned with substantive issues were placed in one of the following categories (Lamb et al., 1996):

1. Invitations. Utterances including questions, statements, or imperatives, prompting free-recall responses from the child. Such utterances do not delimit the child's focus except in a general way (for example, "Tell me everything that happened"), or use details disclosed by the child as cues (for example, "You mentioned that he touched you. Tell me everything about the touching.").

2. Directive utterances. These refocus the child's attention on details or aspects of the alleged incident that the child has already mentioned, providing a category for requesting additional information using "Wh-" questions (cued recall).

3. Summary. Accurate summaries by the interviewer of what the child had said earlier, without requests for additional information about the incident. Examples:

“You said [a summary of what the child had mentioned]” or “I understand that [a summary of what the child had mentioned]”.

4. Option-posing utterances. These focus the child's attention on details or aspects of the alleged incident that the child has not previously mentioned, asking the child to affirm, negate, or select an investigator-given option using recognition memory processes, but do not imply that a particular response is expected.

5. Suggestive utterances. These are stated in such a way that the interviewer strongly communicates what response is expected (for example: “He forced you to do that, didn't he?”) or they assume details that have not been revealed by the child (for example: Child: “We laid on the sofa.” Interviewer: “He laid on you or you laid on him?”)

Facilitative utterances related to non-suggestive encouragement to continue with an ongoing response and request for clarifications about what the child mentioned were few and not accounted for in the analysis.

All 40 transcripts were coded by first author. Twenty percent of the transcripts were randomly selected and independently coded by a second researcher. Inter-rater reliability was 95%. Disagreements between coders were resolved through discussion.

Second, to assess the value of the repeated interviews, substantive information reported in the repeated interview was tabulated in relation to what was elicited in the first interview. No distinction was made between central and peripheral forensic-relevant information. The information coded pertained to the alleged sexual/physical incidents, including statements referring to recollection of the alleged events at a specific time, specific locations, and generic statements referring generally to something that happened during the incident. Thus information might involve

identification of the suspect, location and time of incident, state of the victim or suspect during the abuse, abusive actions, information about the main characters, state of the victim or suspect prior to the abuse, and the victim's emotions and thoughts.

The following categories were used:

1. Elaborated event details added to information previously mentioned in the first interview.
2. Completely new event details were not previously mentioned in the first interview.
3. Repeated information was provided in the first interview and repeated in the later interview.
4. Contradicted information provided in later interviews contradicted details provided in the first interview.

The main coder analysed all the interviews and the second coder examined 20% of them. Inter-rater reliability was 95%. Differences were resolved through discussion.

Third, we wanted to find out how the information elicited using possibly contaminating questions in the initial interview was later reported (second interview) in response to open-ended questions. We thus categorized all the substantial event information elicited using option-posing and suggestive questions in the first interview that the children were asked about using invitations and directive questions in the later interview. The children's responses in the first interview were coded using the following categories:

1. Child agrees to the option proposed or detail suggested by the investigator.
2. Child disagrees with the option proposed or detail suggested by the investigator.
3. No answer to the question as well as responses such as "don't know" and "don't remember".

4. Child selects an investigator-given option when asked to affirm, negate, or select one.
5. Child agrees and develops an option when asked to affirm, negate, or select an investigator-given option.
6. Child disagrees and proposes an alternative option when asked to affirm, negate, or select an investigator-given option.
7. Child proposes an option not mentioned by the interviewer without agreeing or disagreeing when asked to affirm, negate, or select an investigator-given option.

The related event information provided in the second interviews in response to invitations and directive questions was coded using the following categories:

1. Elaborated event details added to information previously mentioned in the first interview.
2. Completely new event details i.e., those not previously mentioned in the first interview.
3. Repeated information
4. Contradicted information

All the information was independently coded by two coders and inter-rater reliability was 95%. Differences were solved through discussion.

Results

Quantitative analysis of interviewer utterances

The first objective was to compare the interviewers' behaviour with respect to the number of eliciting utterances of each type in the initial and second interviews (see Table 1).

Insert Table 1 here

A two-way ANOVA performed with interview (initial interview v. repeated interview) and the eliciting interviewer utterance (invitation, directive, summary, option posing, and suggestive) as factors showed that more questions were asked in the initial interview ($M=138.85$, $SD=59.20$) than in the second interview ($M=94.75$, $SD=74.30$), $F(1,76) = 10.42$, $p < .01$. The eliciting interviewer utterances also varied, $F(4,76) = 37.40$, $p < .01$. Because the interviewers were not trained in the use of interview protocols based on current best-practice guidelines (Cederborg, Orbach, Sternberg & Lamb, 2000; Cederborg & Lamb, 2006c) it is not surprising that very few invitations were asked. Instead, interviewers elicited information using option-posing and directive questions. Interestingly, however, these interviewers asked relatively few suggestive questions. Therefore, although the numbers of potentially rich and extended responses were limited by the excessive reliance on option-posing and directive questions, the interviews were nonetheless not ‘highly’ suggestive. There was also a significant interaction between type of eliciting utterance and interview status, $F(4,76) = 3.38$, $p < .05$. Further post-hoc t-tests showed that the number of invitations and option-posing utterances did not differ between the initial and second interviews ($t(20)=1.93$, and $t(20)=1.23$, respectively), but that more directive, summary, and suggestive utterances were used by the interviewers in the initial interviews, ($t(20)=3.01$, $p < .01$, $t(20)=3.83$, $p < .01$, and $t(20)=2.12$, $p < .05$, respectively, than in the repeated interviews

Quantitative analysis of information reported in the repeated interview

The second objective was to examine the relative proportions of information elicited in the second interviews (see Table 2).

Insert Table 2 here

The analyses revealed that most of the information either elaborated on earlier responses (42%: range 38-50%) or was completely new information (39%: range 22-47%). A far smaller amount of the information reported in the second interviews was repeated from earlier interviews (17%: range 12%-28%). Little of the information provided in the second interview contradicted information originally reported in the initial interview (2%: range 0-3%).

Analysis of suggestive information in the repeated interview

The third objective was to examine whether information elicited using option-posing and suggestive questions in the first interviews became incorporated into the children's responses to invitations and directives in the second interview (see Table 3).

Insert Table 3 here

Examination of the children's responses in the first interview showed that more than half of the time (disagree, 18%: disagree+ child-proposed option, 11%: child-proposed option, 26%) the children disagreed and proposed their own options when interviewers asked possible contaminating questions in the first interview. By contrast, the children agreed to the proposed options and developed the information proposed by the interviewer 40% of the time (agree, 22%: agree + child-proposed option, 6%: interviewer-proposed option, 12%). Only rarely did the children provide no information at all (5%).

Inspection of Table 4 shows that, when interviewers used open questions (invitations and directives) in the repeated interviews to ask about information elicited using either option-posing or suggestive prompts in the first interview, the children seldom contradicted (3%) or repeated (8%) the information they had given

previously; neither did they report much completely new information (1%) or report no details at all (7%).

Insert Table 4 here

Instead, as much as 81% of the information involved elaboration, suggesting that directive questions and invitations can be used to encourage witnesses who have intellectual disabilities to provide more elaborated information.

As previously mentioned, the children did not report as much contradictory information as expected. When contradictions did occur, however, they appeared to reflect inadequate opportunities to provide accurate information.. An example of contradiction is evident in the following example (No 1) involving a girl with ADD who was believed to have been abused physically. She was 6.5 years old when first interviewed and there was a delay of 7 days between the first and second interviews.

First interview: Suggestive question with whose premise the child disagrees:

Interviewer: You're pointing to the back of your bottom?

Child: No, not like that. No he hit me on my hands.

In the second interview, however, the girl points at her bottom when she is encouraged to describe by herself where she was hit, thereby contradicting the information she provided earlier:

Interviewer: Can you turn around and show me again and point?

Child: I don't know. It is gone.

Interviewer: It is already gone. But please point where it was.

Child: There

Interviewer: No. Do you think you can stand up and turn around so I can see? Can you point?

Child: Here, there or there.

The child was thus able to elaborate on the information in the second interview but because the question asked in the first interview was so poor, it is difficult to determine where she actually was hit; because of the suggestive initial prompt, we cannot rely on the child's answer to an open question about the same event in the later interview either. An answer contradicting a previous response is ambiguous because either the child's credibility or poor questioning may be at issue, distorting the child's memory. Unwittingly, the interviewer may have contributed to perceptions that the child was not credible.

When asked open questions in the repeated interview the children did not produce much new event information about events previously mentioned in response to contaminating questions in the first interview (Table 4). However, one alleged victim of sexual abuse with ADHD/ADD who was interviewed for the first time when she was 8 years and 9 months old and then again 300 days later indeed provided more information:

Example 2.

First interview: Option- posing question to which the child responds with new information

Interviewer: Has Sam done something other than touching your bottom?

Child: What more has he done? He has threatened me, he said don't tell anyone because if you do something you do not know anything about will happen. And then I had to say OK.

This girl did not just respond with a yes or no answer to the option-posing question in the first interview, but instead added information about what may have happened.

Second interview. Directive question and completely new details not mentioned in the first interview

Interviewer: And what did he do then?

Child: Touched my bottom. I actually had one more thing to tell you that I did not tell you the last time because I was afraid.....

The open question asked in the second interview encouraged her to report completely new event details. In addition, of course, she was also almost one year older when interviewed the second time and so may have been more verbally proficient.

Elaborated details were the most common responses when children were asked open questions about events previously mentioned in response to focused questions. For example, an alleged victim of sexual abuse who had moderate developmental disorder and autistic features was interviewed for the first time when she was 18.4 years old. The delay between the first and second interviews was 6 days.

Example 3

First interview. Option-posing question to which child acquiesces.

Interviewer: Has he touched your body somewhere else?

Child: Yes.

Interviewer: Where? Has he touched your bottom?

Child: Yes yes

This girl has an intellectual disability that may have restricted her ability to express herself clearly and provide a coherent report.

In the second interview, however, she was able to elaborate on the narrow response to the earlier focused questions and was able to explain more explicitly what she meant by being touched.

Second interview. Directive question in response to which child elaborates on information provided in the first interview

Interviewer: When you now say ‘touched’ what do you mean by that?

Child: Then he touched me under my pants and under, he went in between my pants.

Clearly, even children with severe disabilities may be able to provide distinct details about abuse experiences although they may be unable to provide lengthy narrative accounts.

Discussion

The limitations of this study were that we could not control for diagnosis, assess the accuracy of reported information, or determine how the questions were asked. In addition, the data were selective rather than representative. On the other hand, few studies have investigated how children with intellectual disabilities are repeatedly interviewed in real investigations. The findings from this study can perhaps prompt further laboratory studies in which the necessary controls can be implemented.

In this study, we predicted that repeated interviews may serve as a means of improving the informativeness of children with intellectual disabilities. This hypothesis was supported; over 80% of the information reported in the repeated interviews was about completely new topics or involved elaborations of previously discussed information. However, because the interviewing style in both the first and second interview was so poor, information provided in the repeated interviews may have been contaminated irrespective of the children’s capacities.

The same techniques recommended for use when interviewing typically developing children are also appropriate for children and adults with intellectual disabilities (see, for example, Bull & Cullen, 1992; Clare & Gudjonsson, 1993; Henry & Gudjonsson, 1999; Milne & Bull, 1998). Compared to information elicited using

open questions, less accurate reports are obtained from intellectual disabled witnesses when focused and closed questions are used (Kebell & Hatton, 1999; Perlman et al., 1994). It is thus a matter of concern that focused questions predominated in this study. Such question types may have influenced the value of the information elicited and prevented witnesses from developing their answers, thereby limiting both the children's opportunities to fully report their experiences and more likely, their accuracy. This is troublesome because witnesses with poorer memory capacities and limited abilities to cope with uncertainty or understand the purposes of the interview may still be able to give new information about their experiences if appropriately questioned using open prompts (Cederborg & Lamb, 2006b).

Concerns about the information provided, largely in response to option-posing questions, should be tempered by the fact that the children with intellectual disabilities often disagreed with the interviewers' suggested options, substituting their own accounts of what happened. This contrasts with the findings of a recent study showing that typically developing children often do not correct the misinformation contained in misleading questions - even when they detect discrepancies between the misinformation and their own memories (Peterson et al., 2004). Although we did not control for how carelessly or carefully the option-posing questions were framed and we cannot say that the children always resisted misinformation in the present study, it was encouraging to see them correcting the interviewers.

A concern with repeated interviews is that they may encourage witnesses to develop information previously elicited using option-posing and suggestive questions. Although, it would be easy to judge the information as less reliable in the first interview, it may appear to be credible in the second interview, because it is reported in response to open prompts. The data in this study show that,

when children were given the opportunity to provide more information in response to open prompts in the second interview about topics they had previously mentioned in response to option-posing and suggestive questions in the initial interview, they typically elaborated upon the information. Bruck et al. (1995) earlier found that the repetition of misinformation in repeated interviews with typically developing children led to the incorporation of such details into memory. We do not know if this is true for children with intellectual disabilities as well, but if repeated interviews are used to enhance children's recall, it is important to ascertain whether this information was discussed in earlier interviews, and if so what type of question(s) elicited the information initially.

The quality of the information given in the repeated interviews may also be dependent on the witnesses' diagnoses and capacities to report information about their experiences. Unfortunately, such information was sparsely documented in the investigative files used in the current investigation. Even witnesses with the same diagnosis can differ widely with respect to their psychological vulnerabilities and suggestibility (Ceci, Bruck, & Battin, 2000; Gudjonsson & Henry, 2003; Kebbell & Hatton, 1999). This means that children participating in the current study who had the same diagnosis may still have specific limitations that could have reduced their ability to describe their experiences effectively. We know from research, however, that witnesses with mild intellectual disabilities may be better able to provide accurate information than those with moderate intellectual disabilities (Henry & Gudjonsson, 2003) even if both children and adults with intellectual disabilities have more limited memory capacities than their normally developing peers (Gudjonsson & Henry, 2003). Those witnesses with autistic features may have had limited abilities to develop their answers, and understand the interviewers' perspectives, or the reasons

why some questions were asked (Gillberg, 1995) and they may have difficulty answering open questions without cues to help them remember past activities (Boucher & Lewis, 1989). Even though we were largely uninformed about the participants' capacities, it is notable that they were able to provide forensically relevant information in the repeated interviews. The results underscore the importance of identifying the unique characteristics, competencies, and limitations of handicapped children before interviewing them (Jones, 2003). Such knowledge may help forensic interviewers to adapt their interview techniques to the children's needs in order to facilitate accurate and informative responses and better understand those responses.

In light of a previous analogue study showing that children with both mild and moderate intellectual disabilities changed their answers in repeated interviews more often than their mental age matched peers did (Henry & Gudjonsson, 2003), it is interesting that the new and elaborated information provided in this study did not contradict previous statements. In fact, the overall number of between-interview contradictions was surprisingly low. However, because poor interviewing techniques predominated in the interviews, we did not distinguish the quality of each question type, and little was known about the participants' capacities, we cannot assume that the information provided in the repeated interviews was any more accurate than information provided in the first interview.

Vulnerable witnesses pose unique challenges to the legal system (Bottoms & Goodman, 1996; Ellison, 2001). The present study showed that repeated interviews were valuable when children had intellectual disabilities because they elicited completely new information as well as information that elaborated on the previous reports. Because the information reported in the repeated interview was not

contradictory we have no reason to suspect that being re-interviewed made the children feel pressured to change their answers. The problems observed in the interviews were largely confined to interviewer behaviour. The findings indicate that when children with intellectual disabilities are given a second chance to report about their abuse, they may be able to develop their answers and even provide new information about their experiences.

There are issues to be controlled, however. More research about repeated interviewing as a means to increase the informativeness of children with intellectual disabilities is needed. Researchers need to find out whether carefully worded non-leading questions in the repeated interview may facilitate responses when open questions in the first interview have failed to elicit information. We also need to know how eyewitnesses react when the wording and format of the repeated question vary. Moreover, although the repeated interviews elicited additional forensically relevant information, we still need to understand whether interviewers who were trained to use open questions would elicit as much or more additional information in the repeated interviews as those in the present study. We also need to determine whether cued invitations both in the first and second interview may help keep respondents focused on the topic and thus more responsive.

References:

- Bottoms, B. & Goodman, G. (1996). *International perspectives on child abuse and children's testimony. Psychological research and law*. Sage Publication.
- Boucher, J., & Lewis, V. (1989). Memory impairments and communication in relatively able autistic children. *Journal of Child Psychology and Psychiatry*, 29, 433-445.
- Bruck, M. & Ceci, S. J. (1999). The suggestibility of children's memory. *Annual Review of Psychology*, 50, 419-439.
- Bruck, M., Ceci, S.J., Francoeur, E., & Barr, R. (1995). "I hardly cried when I got my shot". Influencing children's reports about a visit to their paediatrician. *Child Development*, 66, 193-208.
- Bull, R. & Cullen, C. (1992). *Witnesses who have mental handicaps*. Edinburgh: Crown Office.
- Ceci, S.J. & Bruck, M. (1995). *Jeopardy in the courtroom: A scientific analysis of children's testimony*. Washington, DC: American Psychological Association.
- Ceci, S. J., Bruck, M., & Battin, D.B. (2000). Suggestibility of children's testimony. In D.F Bjorklund (ed.), *False memory creation in children and adults. Theory, research and implications* (pp, 169-201).
- Cederborg, A-C. & Lamb, M.E. (2006a). How does the legal system respond when children with learning difficulties are victimized? *Child Abuse and Neglect*, 30, 5, 451-574.
- Cederborg, A-C & Lamb, M.E. (2006b). Interviewing alleged victims with intellectual disabilities (Resubmitted).

- Clare, I.C.H., & Gudjonsson, G.H. (1993). Interrogative suggestibility, confabulation and acquiescence in people with mild mental retardation (mental handicap): Implications for reliability during police interrogations. *British Journal of Clinical Psychology*, 32, 295-301.
- Davis, G.M., Wilson, C., Mitchell, R., & Milsom, J. (1994). *Videotaping children's evidence: An evaluation*, London: HMSO.
- Dale, E.F. Loftus & L. Rathbun. (1978). The influence of the form of the question of the eyewitness testimony of preschool children, *Journal of Psycholinguistic Research* 74, 269-277
- Dent, H. R., & Stephenson, G. M. (1979). An experimental study of the effectiveness of different techniques of questioning child witnesses. *British Journal of Social & Clinical Psychology*, 18, 41-51.
- Ellison, L. (2001). The mosaic art?: cross-examination and the vulnerable witness. *Legal studies*, 21, (3), 353-375.
- Fowler, A. E. (1998). Language in mental retardation: Association with and dissociation from general cognition. In J. A. Burack., R. M. Hodapp., & E. Zigler. (eds.), *Handbook of mental retardation and development*. (pp, 290-333). Cambridge: Cambridge University Press.
- Gillberg, C. (1995). *Clinical child neuropsychiatry*. Cambridge; Cambridge University Press.
- Gordon, B., & Schroeder, C.S. (1995). *Sexuality: A developmental approach to problems*. New York: Plenum.
- Gordon, B, N., Schroeder, C, S., Ornstein, P.A., & Baker-Ward, L., (1995). Clinical implications of research on memory development. In T. Ney (Ed.), *True and*

- false allegations of child sexual abuse: Assessment and case management* (pp, 99-124). New York: Bruner/Mazel.
- Gudjonsson, G. H. & Henry, L. (2003). Child and adult witnesses with intellectual disability: The importance of suggestibility. *Legal and Criminological Psychology*, 8, 241-252.
- Henry L.A., & Gudjonsson, G.H.(1999). Eyewitness memory and suggestibility in children with mental retardation. *American Journal on Mental Retardation*, 104, 491-508.
- Henry, L.A., & Gudjonsson, G. H. (2003). Eyewitness memory, suggestibility and repeated recall sessions in children with mild and moderate intellectual disabilities. *Law and Human Behavior*, 27, 5, 481-505.
- Hershkowitz, I., Orbach, Y., Lamb, M. E., Sternberg, K. J., Horowitz, D., & Hovav, M. (1998). Visiting the scene of the crime: Effects on children's recall of alleged abuse. *Legal and Criminological Psychology*, 3, 195-207.
- Hutcheson, G. D., Baxter, J. S., Telfer, K., & Warden, D. (1995). Child witness statement quality: Questions type and errors of omission. *Law & Human Behavior*, 19, 631-648.
- Iarocci, G. & Burack, J. A. (1998). Understanding the development of attention in persons with mental retardation: Challenging the myths. In J. A. Burack., R. M. Hodapp. & E. Zigler (eds.), *Handbook of mental retardation and development*. (349-381). Cambridge: Cambridge University Press.
- Jones, D.P.H. (2003). *Communicating with vulnerable children. A guide for practitioners*. Gaskell: London.
- Kasari, C. & Bauminger, N. (1998). Social and emotional development in children with mental retardation. In J. A. Burack., R. M. Hodapp & E. Zigler (eds.),

Handbook of mental retardation and development. (pp, 411-423) Cambridge: Cambridge University Press.

Keibell, M. R. & Hatton, C. (1999). People with mental retardation as witnesses in court: A review. *Mental retardation*, 37, 179-187.

Keibell, M.R., Hatton, C., & Johnson, S.D. (2004). Witnesses with intellectual disabilities in court: What questions are asked and what influence do they have? *Legal and Criminological Psychology*, 9, 23-35.

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.

Lamb, M. E., & Fauchier, A. (2001). The effects of question type on self contradiction by children in the course of forensic interviews. *Applied Cognitive Development*, 15, 483-491.

Lamb, M. E., Orbach, Y., Hershkowitz, I., Horowitz, D., & Abbott, C. B. (2007). Does the type of prompt affect the accuracy of information provided by alleged victims of abuse in forensic interviews? *Applied Cognitive Psychology*.

La Rooy, D., Pipe, M.-E., & Murray, J. E. (2005). Reminiscence and hypermnesia in children's eyewitness memory. *Journal of Experimental Child Psychology*, 90, 235-254.

LaRooy, D., Lamb, M.E. & Pipe, M. (2006). Repeated interviews with young children. (Under review)

Leichtman, M.D., & Ceci, S.J.(1995). The effects of stereotypes and suggestions on preschoolers' reports. *Developmental Psychology*, 31, 568-578.

- Michel, M. K., Gordon, B. N., Ornstein, P. A., & Simpson, M. A. (2000). The abilities of children with mental retardation to remember personal experiences: Implications for testimony. *Journal of Clinical Child Psychology*, 29, 453-463.
- Milne, R. (1999). Interviewing children with learning disabilities. In A. Memon & R. Bull (Eds.), *Handbook of the psychology of interviewing* (pp. 165-180). Chichester, UK: Wiley.
- Milne, R., & Bull, R. (1998). Interviewing children with and without a learning disability. Paper presented at the American Psychological and Law conference, Los Angeles, March 1998.
- Mirenda, P.L., Donellan, A.M., & Yoder, D.E. (1983). Gaze behaviour: a new look at an old problem. *Journal of Autism and Developmental Disorders*, 13, 397-409.
- Oates, K., & Schrimpton, S. (1991). Children's memories for stressful and non-stressful events. *Medicine, Science and Law*, 31, 4-10.
- Orbach, Y., & Lamb, M. E. (2000). Enhancing children's narratives in investigative interviews. *Child Abuse & Neglect*, 24, 1631-1648.
- Perlman, N.B., Ericson, K. I., Esses, V.M., & Isaacs, J. (1994). The developmentally handicapped witness. Competency as a function of question format. *Law and Human behaviour*, 18, 171-187.
- Peterson, C., Parsons, T., & Dean, M., (2004). Providing misleading and reinstatement information a year after it happened: Effects on long- term memory. *Memory*, 12, 1, 1-13.
- Plotnikoff, J. & Woolfson, R. (2001). *An evaluation of child witness support*. Scottish Executive Central Research Unit.

- Poole, D.A. & Lamb, M.E. (1998). *Investigative interviews of children: A guide for helping professionals*. Washington, DC: American Psychological Association.
- Sedlack, A. J., & Broadhurst, D. D. (1996). *Executive summary of the national incidence study of child abuse and neglect*. Washington, DC: US Department of Health and Human Services, National Center on Child Abuse and Neglect.
- Sobsey, D. & Doe, T. (1991). Patterns of sexual abuse and assault. *Journal of Sexuality and Disability*. 9, 185-199.
- Sullivan P. M. & Knutson, J. F. (2000) Maltreatment and disabilities: a population-based epidemiological study. *Child Abuse and Neglect*, 24, 1257-1273.
- Trevarthen, C. (2000). Autism as a neurodevelopmental disorder affecting communication and learning in early childhood: prenatal origins, post-natal course and effective educational support. *Prostaglandins, Leukotrienes and Essential Fatty Acids*, 63, 41-46.
- Vig, S. & Kaminer, R. (2002). Maltreatment and developmental disabilities in children. *Journal of Development and Physical Disabilities*, 14 (4), 371-386.
- Westcott, H.L. (1993). *The abuse of disabled children & Adults*. Policy & Practice Series. London: NSPCC.
- Zigler, E, (1969). Developmental versus difference theories of mental retardation and the problem of motivation. *American Journal of Mental Deficiency*, 73, 536-556

Table 1. The mean number of interviewer utterances (and SD) in the initial and second interview.

	Question type				
	Invitation	Directive	Summary	Option -Posing	Suggestive
Initial Interview	5.55 (3.27)	51.10 (30.23)	23.95 (11.14)	50.25 (27.92)	8.00 (6.26)
Second Interview	3.70 (3.73)	33.80 (22.89)	9.95 (16.25)	42.30 (36.29)	5.00 (5.47)
Overall	4.62 (2.77)	42.45 (23.53)	16.95 (11.26)	46.27 (28.92)	6.50 (4.97)

Table 2. The percentage of each type of information elicited in the repeated interview as a function of eliciting utterance type.

Question type	Type of information			
	Elaborating a previous response	New	Repeated	Contradiction
Invitations	40%	39%	18%	3%
Directives	38%	47%	14%	1%
Summary	50%	22%	28%	0%
Option-Posing	45%	41%	12%	2%
Suggestive	39%	46%	13%	2%
Overall	42%	39%	17%	2%

Table 3. Percentages of children's responses to option posing and suggestive questions in the first interview.

Responses category (N=105)						
No response (5%)	Disagree (55%)			Agree (40%)		
Don't know/ remember	Child disagree	Disagree+ Child proposes an option	Child proposes an option	Child agree	Agree + Child proposes an option	Interviewer proposed option
(N=5) (5%)	(N=19 (18%))	(N=12) (11%)	(N=27) (26%)	(N=23) (22%)	(N=6) (6%)	(N=13) (12%)

Table 4. Children's information in the second interview

Questions	Responses				
Directives/ Invitations N=84	Contradiction	Repeated	No answer (Don't know/ remember)	Elaborated Details	New event details
Child's response N=88	3 (3%)	7 (8%)	6 (7%)	71 (81%)	1 1%

The questions (5) and responses (5) where the children requested clarifications are not included.