

The Effects of Question Type on Self-contradictions by Children in the Course of Forensic Interviews

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SUMMARY

Twenty-four forensic interviews of seven alleged victims of child sexual abuse were examined to elucidate the circumstances in which the children contradicted forensically relevant details they had provided earlier. Suggestive questions by the interviewers elicited a disproportionate number of contradictions, whereas open-ended invitations never elicited contradictions. Because contradictions necessarily imply that details were stated inaccurately at least once, these close analyses of forensic interviews demonstrate that, as in analogue contexts, open-ended prompts yield more accurate information than do focused questions, particularly option-posing and suggestive prompts. Published in 2001 by John Wiley & Sons, Ltd.

Over the last 15 years, many researchers have examined the abilities of young children to provide competent and credible accounts of their abusive experiences. Most of these researchers have focused on the strengths and limitations of children's developing capacities to remember and describe their experiences, as well as their abilities to distinguish between actual experiences and those that were either reported to them or fantasized. Many studies have been conducted in laboratory analogue contexts, but an increasing number have been conducted in the field. In the present analysis of forensic interviews, we examined the accuracy of details provided by children in response to various prompts.

The ways in which memory is probed dramatically affect the accuracy of the information retrieved (e.g. Dent, 1982, 1986; Dent and Stephenson, 1979; Goodman and Aman, 1990; Goodman *et al.*, 1991; Hutcheson *et al.*, 1995; Oates and Shrimpton, 1991; Peterson and Bell, 1996). Studies in laboratory analogue contexts, in which the accuracy of children's accounts can be determined, have repeatedly shown that when adults and children are invited to recall events ('Tell me everything you remember...'), they provide narrative accounts which, although they are typically incomplete, are likely to be accurate. If prompted for more details using open-ended prompts like 'Tell me more about that' or 'And then what happened?' children often recall additional details, and these too are likely to be accurate. If interviewers prompt with option-posing questions such as 'Did he have a beard?', or suggestive questions like 'So he touched you under your clothes!' when no touching has been mentioned, however, the probability of error rises dramatically. Preschoolers tend to respond more accurately to Wh-questions, acknowledging when appropriate that they do not know the answer, whereas they avoid such

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responses when asked Yes/No (option-posing) questions, whether or not they would be appropriate (Peterson *et al.*, 1999). Such tendencies underscore the fact that children—especially young children—are more likely to respond to option-posing and suggestive questions than to open-ended questions (Lamb *et al.*, 2000; Sternberg *et al.*, in press) making such questions even more risky.

In order to enhance the accuracy of the information they elicit, effective interviewers must thus maximize the reliance on open-ended prompts and minimize (or delay until later in the interview) the use of those prompts that are more likely to elicit inaccurate information. Responses to open-ended prompts are not always accurate, of course, especially when the events occurred long before the interview or there have been opportunities for contamination (Leichtman and Ceci, 1995; Poole and Lindsay, 1995 and presentation at the biennial meeting of The Society for Research in Child Development, Washington, DC, 1997; Poole and White, 1993; Warren and Lane, 1995) but free recall responses are much more likely to be accurate than those elicited by recognition memory prompts. As a result, there is a widespread professional consensus that in forensic contexts, where the truth or accuracy often cannot be determined independently, as much as possible of the information should be elicited using open-ended prompts (e.g. American Professional Society on the Abuse of Children (APSAC), 1990, 1997; Bull, 1992, 1995, 1996; Fisher and Geiselman, 1992; Jones, 1992; Lamb *et al.*, 1994, 1995, 1998, 1999; *Memorandum of Good Practice*, 1992; Poole and Lamb, 1998; Raskin and Esplin, 1991; Raskin and Yuille, 1989; Sattler, 1998).

Unfortunately, agreement about the goals and desired characteristics of investigative interviews has not ensured that forensic interviews are typically performed well. Analyses of forensic interviews conducted in the United States, the United Kingdom, and Israel revealed few open-ended invitations (around 6% of the total number of prompts) regardless of the children's age, the nature of the alleged offenses, the professional background of the interviewers, or the utilization of props and dolls (Craig *et al.*, 1999; Davies *et al.*, 2000; Lamb *et al.*, 1996a,b; Sternberg *et al.*, 1996; Stockdale, 1996, unpublished manuscript; Walker and Hunt, 1998). The under-utilization of open-ended prompts persists even though such invitations consistently yield responses that are roughly three times longer and richer in relevant details than responses to more focused interviewer utterances, such as those described in the second paragraph (e.g. Lamb *et al.*, 1996a,b; Sternberg *et al.*, 1996). Focused questions thus abound, even though narrative responses are more desirable because they are elicited by open-ended prompts, they are more detailed, and they should be more accurate.

Because investigators ask many more focused than open-ended questions and children are more likely to respond to focused questions, the bulk of the information obtained in the average interview is provided in response to focused prompts, and thus concerns about possible inaccuracy become prominent. Unfortunately, forensic interviewers can seldom assess the accuracy of individual details provided by alleged victims (see Orbach and Lamb, 1999, for an exception), so professionals have had to base their recommendations on the results of the laboratory/analogue studies cited earlier. In the present study, however, we were able to study the accuracy of some details provided by several alleged victims in the course of repeated interviews by focusing on individual details that were later contradicted by the children. In such instances, at least one of the reported details (the initial detail or the later contradiction) must have been inaccurately reported and we were thus able to examine which types of eliciting utterances were more likely to elicit inaccurate information. Guided by the results of laboratory analog studies, we

hypothesized that contradictions would be elicited by focused questions—especially option-posing and suggestive questions—more often than by invitations.

METHOD

Subjects

The seven children (2 boys; 5 girls) included in this study were all interviewed in the early 1990s by either of two experienced forensic interviewers in the course of an investigation regarding allegations of sexual abuse in a daycare centre. The children's allegations all led to convictions, suggesting that the information they provided was deemed credible and consistent with other relevant information, although the alleged perpetrator continued to protest his innocence. At the time of the interviews, the children averaged 78 months of age (range 66 to 107 months). One of the children was interviewed once, four were interviewed three times, one was interviewed five times, and one was interviewed six times. The average length of time between the first and last interviews was 5 months (range 1 to 9 months). All children and interviewers were native English speakers.

Procedure

All interviews were video-recorded and transcribed by professional transcribers. All coding was performed using transcripts which had been checked exhaustively against the video-recordings in the course of trial preparation.

A trained coder, blind with respect to the purposes of the study, reviewed each of the transcripts, categorizing each substantive investigative utterance and counting each of the substantive details provided in response to each such prompt. Interviewer utterance types and details were defined and coded as in previously published field research by Lamb and his colleagues (Lamb *et al.*, 1996a,b). As in these earlier studies, 13 different types of interviewer utterances were distinguished, although we focus here on the five types of utterances that comprised some 90% of the substantive utterances:

- (1) *Invitations* (using questions, statements, or imperatives) for an open-ended response from the child. Such utterances do not delimit the child's focus except in the most general way (for example: 'And then what happened?').
- (2) *Facilitators*. Utterances like 'OK', restatements of the child's previous utterance, and non-suggestive words of encouragement that are designed to prompt continuation of the child's narrative.
- (3) *Directive utterances*, which focus the child's attention on details or aspects of the event that the child had previously mentioned. Most direct questions began with a Wh—(who, what, when, and where) word.
- (4) *Option-posing utterances*, which focus the child's attention on details or aspects of the account that the child had not previously mentioned, usually by asking yes/no questions or offering the child other options (e.g. 'Were your clothes on or off?').
- (5) *Suggestive utterances*, stated in such a way that the interviewer strongly communicates what response is expected, or assumes details that have not been revealed by the child.

By definition, invitations were open-ended prompts, whereas directive, option-posing and suggestive utterances were together considered 'focused'. Facilitators tended to punctuate incomplete responses, and the details that followed them were considered as part of the responses to the previous eliciting utterances.

By definition, details involve the identification and description of individuals, objects, events, or actions relevant to the alleged incident. Although details were only counted when they were new, the coder also noted repetitions of the same details and details which contradicted the information provided earlier by that child. Details were considered to be contradictions of previously stated details only when the two pieces of information were mutually exclusive. Details that elaborated or expanded on earlier details were thus not counted as contradictions.

The coder received extensive training regarding the categorization of utterance types and the definition/tabulation of details. She had achieved interrater reliability of above 90% exact agreement before beginning work on the transcripts included in the present study. While coding these transcripts, reliability was repeatedly reassessed by having transcripts independently coded by two raters to ensure that she remained reliable (> 90% exact agreement) with other trained coders in the identification of utterance categories and details.

RESULTS

The data provided in Table 1 show that the forensic interviews of the children included in this study were quite comparable in structure to those described in other analyses of forensic interview transcripts, although these interviewers asked fewer invitations and relied more on focused prompts than did interviewers in comparable studies.

The effects of these interviewing styles are evident in Table 2 which shows that a remarkably small proportion of the information was obtained using the widely recommended and less risky open-ended questions and prompts. Specifically, the interviewers studied here obtained less information using invitations than did most of their counterparts in the UK and USA in the early to mid-1990s, when these interviews were conducted. Instead of relying on open-ended invitations to prompt the children's accounts, in other

Table 1. Characteristics of interviews with children aged 6 years or younger. (All figures represent the proportion (%) of the total number of substantive utterances in the interviews concerned)^a

Utterance	USA ^b (N = 37)	UK ^c (N = 34)	Present study (N = 7)
Invitation	7	6	3
Facilitator	13	12	16
Directive	37	43	41
Option-posing	31	33	34
Suggestive	11	7	6

Notes:

Columns do not sum to 100% due to rounding.

^aChildren in the comparison groups were aged 6 years or younger (i.e. ≤ 84 months) because the average age of children in the present study was 78 months.

^bData compiled from subsamples of children studied by Sternberg *et al.*, 1996, 1999, in press.

^cData represent a subsample of the children studied by Sternberg, Lamb, Davies and Westcott (in press).

Table 2. Informativeness of interviews with children aged 6 years or younger. (All figures represent the proportion (%) of the total number of substantive details provided by the children)^a

Utterance	USA ^b (<i>N</i> = 37)	UK ^c (<i>N</i> = 34)	Present study (<i>N</i> = 7)
Invitation	10	9	7
Directive	47	47	43
Option-posing	28	34	40
Suggestive	16	11	10

Notes: 1. See Table 1.

words, the interviewers we studied were more likely than their peers to use focused questions to elicit information.

The riskiness of these interviewing strategies was illustrated in our analyses of contradictory details. In the course of the interviews we analysed, all the children contradicted some substantive details that they had provided earlier. In all, 188 details specifically contradicted earlier details reported by the same children. Importantly, every contradiction emerged in response to a focused question; no response to an open-ended question ever contradicted an earlier detail provided by the child (see Table 3). These dramatic statistics further underscore the desirability of relying on open-ended prompts and eschewing focused prompts as much as possible for fear of eliciting erroneous information. Table 3 also reveals that repeated details were more likely than new details to be elicited by directive questions, but were equally or less likely to be elicited by other question types. Directive questions were also quite likely to elicit contradictions, although researchers conducting laboratory analogue studies have not considered them to be as risky as option-posing and suggestive prompts.

Because we have no way of knowing whether the initial detail or its contradiction was correct, we also examined the types of utterances which elicited the original details and compared the expected and actual probabilities that details elicited using each type of utterance would later be contradicted. Expected probabilities were calculated using the proportion of new details elicited by each question type overall. Chi-square tests showed that invitations elicited significantly fewer details that would later be contradicted ($\chi^2_3 = 21.87$; $p < 0.001$) and suggestives elicited significantly more details that were later contradicted ($\chi^2_3 = 71.88$; $p < 0.001$) than would be expected by chance (see Table 4).

In addition, because the correct information could be either the initial detail or the contradiction, we categorized the two eliciting questions of each pair of contradicted details, using the more risky utterance type to characterize the pair when the two prompts differed. (For example, if the initial detail was elicited by an option-posing prompt and the contradiction was elicited by a suggestive prompt, the contradicted

Table 3. Association between eliciting utterance types and the production of new, repeated, and contradictory details

Utterance type	New details	Repeated details	Contradictory details
Invitation	627 (7)	106 (4)	0 (0)
Directive	3996 (45)	1648 (65)	64 (34)
Option-posing	3499 (39)	658 (26)	73 (39)
Suggestive	822 (9)	116 (5)	51 (27)

Note: Numbers in parentheses are percentages within the columns.

Table 4. Comparison between expected and actual frequencies of utterance types eliciting contradictions ($N = 188$ contradicted details)

Utterance type	Expected frequency ^a	Initial detail ^b	Contradicting detail ^c	Most problematic eliciting utterance ^d
Invitation	13.2	2	0	0
Directive	80.8	78	64	27
Leading	75.2	74	73	80
Suggestive	18.8	34	51	81
χ^2		$\chi^2_3 = 21.87$	$\chi^2_3 = 71.88$	$\chi^2_3 = 255.11$
χ		$p < 0.001$	$p < 0.001$	$p < 0.001$

Notes:^aThe rate with which details were elicited by each utterance type.^bThe earlier statements by the child which were later contradicted.^cThose details which contradicted the initial details.^dThe more suggestive of the utterance types eliciting either the initial or contradicting details, when the utterance types differed.

information pair would be characterized as suggestive.) Option-posing or suggestive questions were involved in 86% of the contradictory pairs of details.

Because six of the seven children were interviewed more than once, we wondered whether contradictions might appear more frequently when children were repeatedly interviewed. Surprisingly, 151 (80%) of the identified contradictions occurred in the same interview, suggesting that repeated interviewing did not itself increase the likelihood that contradiction would emerge, perhaps because the different interviews tended to focus on different events.

DISCUSSION

Close examination of the forensic interviews included in this study provide support for widespread recommendations by professional expert groups that investigative interviewers should rely as much as possible on open-ended prompts when eliciting accounts of alleged abuse from children (e.g. American Professional Society on the Abuse of Children (APSAC), 1990, 1997; Bull, 1992, 1995, 1996; Fisher and Geiselman, 1992; Jones, 1992; Lamb *et al.*, 1994, 1995, 1998, 1999; *Memorandum of Good Practice*, 1992; Poole and Lamb, 1998; Raskin and Esplin, 1991; Raskin and Yuille, 1989; Sattler, 1998). These recommendations have been informed by the results of numerous laboratory/analogue studies, in which the detailed course of the to-be-remembered events was known to the experimenters (e.g. Dent, 1982, 1986; Dent and Stephenson, 1979; Goodman and Aman, 1990; Goodman *et al.*, 1991; Hutcheson *et al.*, 1995; Oates and Shrimpton, 1991; Peterson and Bell, 1996; Peterson *et al.*, 1999). All such studies have confirmed that the information elicited using open-ended prompts is more likely to be accurate than information elicited using other, more-focused prompts—especially option-posing and suggestive prompts—but the relevance of these studies has often been questioned, especially by professionals in the field, because the alleged events differ so greatly from incidents of abuse (see Lyons, 1999, for example). In the face of such challenges, the few field studies, like the present, in which it is possible to identify some details as

inaccurate assume increased importance. In one such study, for example, Orbach and Lamb (1999) reported that open-ended prompts elicited no inaccurate details from a child abuse victim who tape-recorded one of the abusive incidents she described.

In the present study, we showed that contradictory details, which logically had to be inaccurate, were much more likely to be elicited using focused prompts than by open-ended prompts; indeed, no contradiction was ever elicited by an invitation, whereas 86% of all contradicted/contradicting detail pairs were elicited by either an option-posing or suggestive prompt. These findings underscore the potential risks associated with the option-posing and suggestive prompts which unfortunately continue to dominate most forensic interviews (Craig *et al.*, 1999; Davies *et al.*, 2000; Lamb *et al.*, 1996a,b; Sternberg *et al.*, 1996; in press a,b; Stockdale, 1996; Walker and Hunt, 1998), despite near-unanimous agreement among professionals that they should be avoided whenever possible and used late in the interview when necessary. The findings also confirm the results of analogue studies showing both that open-ended prompts are the most desirable and that wh-or directive questions are superior to option-posing prompts with respect to the accuracy of the information elicited.

Because this study was conducted in the field and thus involved accounts that could not be independently verified, we have no way of knowing what proportion of the total number of details (8944) reported by these children were erroneous. Instead, we focused on those 188 details provided by these children that were of questionable validity because the child reported mutually contradictory information. By definition, the existence of a contradiction implied that inaccurate information had been reported. As predicted, a disproportionate number of these contradictions were elicited by focused questions. Overall, invitations mostly elicited new details; directives elicited all types of details, but especially repeated details; and suggestive questions elicited a disproportionately high number of contradictions. The results of this study thus strongly support the professional consensus that interviews should be conducted using as many open-ended and as few focused prompts as possible. This study also provided a rare opportunity to examine the accuracy of actual reports of child sexual abuse and to demonstrate that inaccurate information is disproportionately likely to be elicited in forensic contexts by suggestive questions.

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