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The effect of multipart prompts on children's testimonies in sexual abuse investigations

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A R T I C L E I N F O

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ABSTRACT

Objective: The current study aimed to explore the frequency and effects of multipart prompts on the testimonies of children who were alleged victims of sexual abuse and were interviewed using the National Institute of Child Health and Human Development (NICHD) Investigative Protocol. The effects of the multipart prompts were studied by considering the type of prompt given to the children and examining the richness of the children's testimonies (e.g., the number of words and the number of forensic details) and the ways the children contended with these prompts (e.g., which demand they answered, whether they signaled misunderstanding).

Method: 71 Israeli children aged 4–9 years were interviewed after a complaint of single incident of sexual abuse by a perpetrator who was not a family member. All of the interviews that met the specified criteria and were conducted within a specified period were included in this study. Two raters identified simple versus multipart prompts and analyzed the children's responses.

Results: The results clearly showed that multipart prompts were used in most interviews, regardless of the child's age. An average of 5.58 multipart prompts per interview was given. The effects of the multipart prompts were destructive and harmed the length and the richness of the children's testimonies. Children of all ages failed to signal their lack of understanding of multipart prompts, and 24% of their responses were unintelligible. When the children did produce a relevant and substantive answer, they primarily responded to the last demand in the multipart prompt and rarely provided an answer to both demands.

Conclusions: The study clearly indicates that even well-trained investigative interviewers present inappropriate multipart prompts to children. The findings contribute to the existing knowledge about the adverse effect that multipart prompts have on children's narratives, indicating that children of all ages provided poorer testimonies in response to multipart prompts. The systematic knowledge accumulated in both laboratory and field studies indicates that it is necessary to eliminate the use of multipart prompts by updating existing practical guidelines and training courses.

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Introduction

Most researchers agree that the quality of prompts used by interviewers affects the quality of children's reports of experienced events (Carter, Bottoms, & Levine, 1996; Korkman, Santtila, Drzewiecki, & Sandnabba, 2008; Perry et al., 1995; Poole & Lamb, 1998; Saywitz, Snyder, & Nathanson, 1999; Walker, 1993). In addition to the substantial consensus related

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C. Katz, I. Hershkowitz / Child Abuse & Neglect xxx (2012) xxx-xxx

to the supremacy of open-ended prompts over closed prompts, there is also some empirical evidence suggesting that in addition to the type of prompt addressed to the children, the format of the prompt, such as, simple or multipart, also affects the quality of the information children provide. The current study provides an applied examination of the prompt format's effects on the information children provide in the course of sexual abuse investigative interviews.

Multipart prompts in lab studies

A multipart prompt is one that simultaneously poses two or more demands for information. The negative dynamics involved in interviews that use multipart prompts seem to compromise the accuracy of the information children provide in response to such prompts. Using experimental designs in which children were randomly assigned to participate in interviews using multipart prompts versus simple prompts, researchers asked children of various ages to provide accounts of staged events they had experienced (Carter et al., 1996; Imhoff & Baker-Ward, 1999; Perry et al., 1995; Saywitz et al., 1999).

In all studies, the children who were interviewed using simple prompts provided more accurate information compared with their counterparts who were interviewed using multipart prompts. This effect was apparent regardless of age and was equally observed for children aged 3–4 years (Imhoff & Baker-Ward, 1999), 5–7 years (Carter et al., 1996), and for older children and adolescents 19 years old (Perry et al., 2001). In one study, the advantage of simple prompts was evident even after a 2-week delay (Imhoff & Baker-Ward, 1999); single prompts allowed children to be more accurate and more resistant to suggestion than the children who were interviewed using multipart prompts.

Interestingly, although the children apparently failed to process multipart prompts in these studies, they responded to all prompts (Imhoff & Baker-Ward, 1999), they rarely claimed a lack of understanding (Carter et al., 1996), and they even rated the prompts as "easy" despite the fact that they provided wrong answers (Perry et al., 2001). Researchers have explained this pattern by stating that at times, the children were not aware that they did not understand the referred prompts, either because of insufficient metacognitive skills (Perry et al., 2001) or because of social and communicative dynamics, such as their need to be observed as a competent interviewee (Geiselman, Saywitz, & Bornstein, 1993; Saywitz & Goodman, 1996). The ability to recognize the difficulty of a certain prompt and to use various strategies to cope with misunderstanding develops with age (Markman, 1977, 1979). However, there is also evidence suggesting that when children are warned that some prompts might be difficult, and especially when they are trained to indicate any difficulty understanding, they respond more competently (Saywitz et al., 1999). Poole and Lamb (1998) pointed to the possibility that when a prompt includes more than one demand, children may repeat some or all of what the interviewer just said, leading interviewers to wrongly conclude that the child was confirming their statement.

Consequently, multipart prompts can seriously hamper communication in interviews conducted within a legal context (Saywitz & Goodman, 1996). In addition, it seems that when there is a communication breakdown, children may fail to or avoid informing the interviewer and would rather try to answer the prompt.

Multipart prompts in field studies

Despite systematic and clear results from laboratory studies, and despite experts' recommendations that interviewers avoid using multipart prompts when interviewing children in the field (Geiselman et al., 1993; Poole & Lamb, 1998; Saywitz & Goodman, 1996), 2 studies that analyzed interviews of alleged sexual abuse victims conducted by child care authorities in the United States revealed that multipart prompts were used frequently. Walker and Hunt (1998) reported that in a sample of 36 interviews with children aged 3–13, on average 86% of the prompts used in each interview were multipart. Furthermore, multipart prompts were used regardless of the age and developmental level of the children being interviewed.

Similarly, in their analysis of 42 similar interviews, Warren, Woodall, Hunt, and Perry (1996) found that children were asked on average 28 multipart prompts per interview with a mean of 2.33 demands in each multipart prompt, and some of the prompts consisted of as many as 9 different demands. Warren et al. also explored the children's responses to multipart prompts and reported that approximately half of the multipart prompts were followed by an answer, although the answers were often unclear or uninterpretable; particularly when yes/no prompts were involved (for example, when a "no" response follows the multipart prompt: "Don't you remember? Did someone wake up and see all this happening?"), it was difficult to tell which demand the child was answering (Did he not remember? Did no one wake up? Did no one see it happening?).

A recent study by Korkman et al. (2008) has strengthened our understanding of the adverse effects of multipart prompts. In 43 interviews conducted with children aged 3–8 years by mental health professional interviewers, 8.2% of the first 30 utterances directed toward the children were multipart prompts. The children's responses to multipart prompts were characterized by fewer judicial details than the children's responses to simple prompts.

The current study

The present study extends the examination of forensic interviews with children to further examine the effects of the prompt format on the length of children's answers and the amount of central and peripheral forensic information they conveyed. All of these explorations relate to the type of prompt (recall, recognition) the children were given, an issue that has been proven significant to the study of children's responses. The current study also identified the different ways in which

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2

C. Katz, I. Hershkowitz / Child Abuse & Neglect xxx (2012) xxx-xxx

children contended with multipart prompts and evaluated different measures of the richness and quality of the children's testimonies.

The interviews examined in this study were conducted using the National Institute of Child Health and Human Development (NICHD) Investigative Protocol, which was designed to provide best practice recommendations and ensure the use of developmentally appropriate interviews; consequently, we expected that multipart prompts would be used infrequently. We expected that children in the current sample would indicate their lack of understanding and ask for clarifications more often when multipart prompts were used because the interviewers told them that they might not understand some of the prompts and encouraged them to ask for clarifications when needed, as in the experiment performed by Saywitz et al. (1999).

Most central to this study, because children experience difficulties processing multiple demands simultaneously, we hypothesized that they would provide shorter and less informative responses when given multipart versus simple prompts and that they will compromise the quality of their responses by providing unintelligible answers or answers that respond to only one of the multiple demands. These negative effects of multipart prompts were expected to occur more frequently among younger, whose cognitive and communicative skills are less developed than those of older children.

Method

Sample

The interviews that were included in the current study were selected from all of the investigative interviews with children that were conducted in Israel between January 2002 and January 2003. Seventy one interviews were selected using the following criteria: the alleged crimes were single events of sexual abuse, the alleged perpetrators were extra-familial individuals and this was the child's first investigative interview. The children's ages ranged from 4 to 9 years (M = 6.8 years), and they were divided into 2 age groups (4-6 years, N = 36; 7-9 years, N = 35). The sample consisted of 20 boys and 51 girls, all of whom were Hebrew speakers. The allegations consisted of sexual touch over clothes (N = 16), sexual touch under clothes (N = 27), and penetration (N = 28). Most suspects were strangers (N = 44), while the others were familiar to the child (N = 27).

A total of 24 experienced and trained child investigators conducted all the investigative interviews, as required by law (Sternberg, Lamb, & Hershkowitz, 1996). These child investigators (20 women and 4 men) had degrees in social work and were employed by the Israeli Ministry of Labor and Welfare as the only professionals authorized to conduct forensic interviews with children younger than 14 years of age. The interviews closely followed the NICHD Investigative Protocol (Orbach et al., 2000; see description below).

Permission to perform this study was provided by the management of the Ministry of Labor and Welfare in Israel and was subject to strict limitations regarding the privacy of the victims, suspects, or witnesses involved.

The NICHD protocol

The NICHD protocol provides interviewers with detailed guidance through all phases of the investigative interview. In the introductory phase, the interviewer introduces him/herself, explains the need for the child to describe events in detail and to tell the truth, and explains the ground rules and expectations (i.e., that the child can and should say 'I don't remember', 'I don't know', 'I don't understand', ask for clarification or correct the interviewer whenever necessary).

The rapport-building phase that follows consists of two sections. The first is designed to create a relaxed, supportive environment for children and to establish rapport between the child and the interviewer. In the second phase, the children are prompted to describe in detail a neutral event that they have experienced so that the child understands his/her role as an invaluable informant and can become familiar with the investigative recall strategies and techniques used to explore the alleged abuse.

A transitional phase between the presubstantive and substantive parts of the interview involves a series of prompts that progress from open to focused and are designed to identify the target event/s to be investigated.

The free recall phase follows as soon as the child mentions an incident that might be considered abusive. It begins with the main invitation ("Tell me everything that happened, from the beginning to the end, as best you can remember") and is followed by additional recall and cued-recall prompts used to elicit details about the alleged incident/s from free recall memory.

Only after the free recall phase has been exhausted do interviewers move to directive ("Where did that happen?") prompts. Option-posing prompts ("Was it before or after you visited him?") are addressed to children only at the end of the interview if essential information is still missing. Suggestive utterances, which communicate what response is expected, are to be avoided throughout the interview (e.g., "You didn't want to join him, did you?").

Data coding

Audio tape recordings of the interviews were transcribed and reviewed to ensure their completeness and accuracy. Two raters analyzed the substantive phase of the interviews and documented the number of utterances that were directed toward the children, then the raters classified the interviewers' prompts as either open-ended, directive, option-posing or suggestive, which were collapsed for analysis purposes into recall (including open-ended and directive) and recognition

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C. Katz, I. Hershkowitz / Child Abuse & Neglect xxx (2012) xxx-xxx

(including option-posing and suggestive) prompts. Further details regarding the coding categories and rules were provided by Lamb, Hershkowitz, Sternberg, Boat, and Everson (1996) and by Orbach et al. (2000).

The raters also classified the children's replies and identified multipart prompts. An utterance was coded as multipart if it contained more than one demand for information (e.g., "Tell me everything about how he caught you? When did it happen?"). The coding of the multipart prompts was extremely meticulous, and prompts were tagged as multipart only if the transcribers clearly indicated that there was no pause between the different parts of the prompts (if there was a pause, it was considered "no answer from the child"). The children's replies were categorized as responsive when the children addressed at least one of the demands or as unresponsive when they failed to do so. Within the category of responsive replies, requests for clarification were marked when the children either claimed lack of understanding or asked to clarify the prompt.

The raters also tabulated the number of words and details conveyed in the children's responses by employing a technique first developed by Yuille and Cutshall (Yuille, 1988; Yuille & Cutshall, 1986) and elaborated by Lamb, Hershkowitz, Sternberg, Esplin, et al. (1996). Details were defined as words or phrases that identified or described individuals, objects, or events (including actions) related to the investigated incident or its disclosure. Details were counted only when they were new and added to the understanding of the target incidents and their disclosure. All new details were coded as central when they addressed the core of the incidents or as peripheral when they addressed the context of the events.

The children's responses to the multipart prompts was analyzed according to the following categories: whether the children answered the first demand introduced by the interviewer, the second demand, or both of the demands (full information); whether they gave a response that included substantive information but was unrelated to any of the demands; whether they asked for clarification or signaled misunderstanding of the multipart prompt; and whether they provided an answer that was unintelligible, meaning that there was no reliable or valid way characterize the answer (for example: "Did he touch your private body parts or hurt your body?"; answer: "Yes").

Before coding transcripts for the study, 2 raters were trained on an independent set of transcripts until they agreed on the identification of at least 90% of the utterances, responses and details. The raters were well trained in the basic coding scheme elaborated by Lamb et al., and they were trained and kept reliable by an international coder from the NICHD Institute. During the coding process, 20% of the transcripts were independently coded by both coders to ensure reliability for all categories. The agreement was above 90% for the interviewer's prompts, the children's responses and the number of details the children provided. For each double-coded transcript, both raters conducted an intensive discussion, and any disagreement was discussed until an agreement was established.

Results

The frequency of multipart prompts in the sampled interviews is described first, followed by the multipart prompts' various effects on children's responses.

As described in the Method section, the length of the interview was related to the number of substantive utterances that were directed toward the children. An average of 90 utterances were referred to the children (M=90.75, SD=46.56); the shortest interview included 32 utterances and the longest interview included 297 utterances. The differences between the age groups regarding interview length were not significant.

In 91.5% of the 71 interviews (65 interviews), multipart prompts were posed to the children, with a frequency ranging from 1 to 24 prompts per interview and averaging 5.58 prompts per interview (SD = 4.69) or 6.21% (SD = 4.64). A comparison of the relative numbers of multipart prompts within the two categories of prompt types showed no significant differences between recall (*simple:* M = 0.75, SD = 0.09; *multipart:* M = 0.65, SD = 0.09) and recognition prompts (*simple:* M = 0.25, SD = 0.11; *multipart:* M = 0.35, SD = 0.12), indicating that multipart prompts were equally used to elicit recall and recognition. The following analyses refer to the 65 interviews in which multipart prompts were tagged (i.e., 6 interviews with no multipart prompts were excluded from the following analyses).

The effect of multipart prompts on children's responsiveness

To test the format effects on the rate of responsive/unresponsive replies, two separate ANOVAs were employed. The first was a 2 (prompt format: simple vs. multipart, within-subject) \times 2 (prompt type: recall vs. recognition, within-subject) \times 2 (age group: 4–6 years old vs. 7–9 years old, between-subject) mixed model ANOVA with the rates of responsive/unresponsive replies as the dependent variables revealed no main effects or interactions. The responsive/unresponsive replies were similar for children of both age groups in response to simple (responsive: M=0.84, SD=0.27; unresponsive: M=0.16, SD=0.09) and multipart prompts (responsive: M=0.89, SD=0.25; unresponsive: M=0.11, SD=0.08).

To examine the rate of requests for clarification in children's responsive replies, a 2 (prompt format: simple vs. multipart, within-subject) \times 2 (prompt type: recall vs. recognition, within-subject) \times 2 (age group: 4–6 years vs. 7–9 years, between-subject) mixed model ANOVA revealed no main effects or interactions. The children in both age groups were equally unlikely to ask for clarifications following simple and multipart prompts (simple: M = 0.05, SD = 0.04; multipart: M = 0.06, SD = 0.05).

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4

CHIABU-2463; No. of Pages 7

C. Katz, I. Hershkowitz / Child Abuse & Neglect xxx (2012) xxx-xxx

Table 1

The effect of the prompt format on the mean number of words and details children of the two age groups provided in response to recall vs. recognition prompts.

Prompt type	Age group	Simple M (SD)			Multipart M (SD)		
		Words	Details		Words	Details	
			Central	Peripheral		Central	Peripheral
Recall	4-6	10.6	2.26	0.87	9.82	1.26	0.79
		-8.35	-1.34	-0.68	-8.62	-1.08	-0.52
	7-9	18.64	3.56	1.74	13.81	2.09	1.49
		-8.01	-1.54	-0.73	-7.98	-1.68	-0.77
Recognition	4-6	6.93	1.26	0.89	5.81	0.88	0.83
		-3.89	-0.95	-0.08	-5.64	-0.14	-0.65
	7-9	9.22	1.87	1.12	5.88	0.65	0.95
		-6.77	-0.18	-0.27	-4.17	-0.09	-0.71

The effect of multipart prompts on children's productions

The following analysis tested the format effects on the mean number of words the children provided. A 2 (prompt format: simple vs. multipart, within-subject) × 2 (prompt type: recall vs. recognition, within-subject) × 2 (age group: 4–6 years vs. 7–9 years, between-subject) mixed model ANOVA revealed a main effect for the prompt format [F(1, 37)=6.87; p < 0.013; $\eta_p^2 = 0.15$], indicating that children provided a lower number of words in response to multipart prompts (M=8.83, SD=0.75) than in response to simple prompts (M=11.35, SD=0.92). There was also a significant age effect [F(1, 37)=6.68; p < 0.014; $\eta_p^2 = 0.15$], with older children (M=11.89, SD=0.97) producing more words in their average response compared with younger children (M=8.29, SD=0.99). However, no main effect for the prompt type and no interactions were evident.

The effect of multipart prompts on the forensic information

The next analysis examined the amount of forensic details the children provided. A 2 (prompt format: simple vs. multipart, within-subject) × 2 (prompt type: recall vs. recognition, within-subject) × 2 (detail type: central vs. peripheral, within subject) × 2 (age group: 4–6 years vs. 7–9 years, between-subjects) mixed model ANOVA revealed a main effect for the prompt format [F(1, 37) = 13.90; p < 0.001; $\eta_p^2 = 0.27$], indicating that the number of details provided in response to a multipart prompt was significantly lower (M = 1.12, SD = 0.08) than that provided in response to a simple prompt (M = 1.94, SD = 0.18; see Table 1). There were also significant main effects for the detail type [F(1, 37) = 16.57; p < 0.000; $\eta_p^2 = 0.31$], with children overall providing more central details (M = 1.93, SD = 1.17) than peripheral details (M = 1.13, SD = 0.11), and for child's age [F(1, 37) = 5.21; p < 0.028; $\eta_p^2 = 0.12$], with the older children providing higher numbers of details (M = 1.77, SD = 0.14) than did the younger children (M = 1.29, SD = 0.15). An interaction between the prompt format and detail type [F(1, 37) = 8.50; p < 0.006; $\eta_p^2 = 0.18$] revealed that in response to simple prompts, the children provided larger numbers of central (M = 2.62, SD = 0.31) than peripheral details (M = 1.27, SD = 0.18), while in response to multipart prompts, they provided similar numbers of central (M = 1.24, SD = 0.13) and peripheral details (M = 1.00, SD = 0.11). These data indicate that the number of central details declined in response to multipart prompts.

Children's reactions to multipart prompts

A further analysis of the children's responses to multipart prompts explored whether the children answered the first demand, the second demand, gave substantive information that did not relate to the demands, answered both of the demands, asked for a clarification or gave an unintelligible answer. A 6 (responded to multipart prompt: first, second, unrelated, full, clarification, unintelligible; within-subject) $\times 2$ (age group: 4–6 years vs. 7–9 years, between-subjects) mixed model ANOVA revealed a main effect for the children's responses [F(5, 59) = 199.96; p < 0.000; $\eta_p^2 = 0.94$], but no age effects or interaction effects. Both the younger and older children were most likely to answer the last demand (M = 0.53, SD = 0.03). Their second most likely response was an unintelligible answer (M = 0.24, SD = 0.02), followed by an answer to the first demand (M = 0.12, SD = 0.02). The children rarely answered both demands (M = 0.04, SD = 0.01), asked for clarification (M = 0.03, SD = 0.01) or gave a substantive but unrelated answer (M = 0.01, SD = 0.01).

Discussion

The current study aimed to explore the use of multipart prompts in investigative interviews with children who were alleged victims of sexual abuse. All of the interviews were conducted according to the NICHD Investigative Protocol, and the main aim of the current study was to evaluate the extent to which multipart prompts affected the richness and quality of the children's testimonies.

The results clearly indicated that even the trained child investigators who conducted the interviews in this sample used multipart prompts in most interviews. However it is important to emphasize that none of the multipart prompts found in the

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C. Katz, I. Hershkowitz / Child Abuse & Neglect xxx (2012) xxx-xxx

current study exceeded 2 demands; in contrast, the study by Warren et al. (1996) found a mean number of 2.33 demands, with some prompts composed of 9 demands. It is also important to discuss the frequency of such prompts in our study, which was lower than previous studies have reported. While the children in the sample studied by Warren et al. (1996) were given an average of 28 multipart prompts per interview, the children in the current sample faced a substantially lower number of multipart prompts (5.6 per interview). However, this comparison is problematic because the data regarding the overall number of prompts presented to the children in the Warren et al. study is unavailable. In comparison, Korkman et al. (2008) found that 8.2% of 30 interviewer's utterances were multipart prompts, and in the current study, multipart prompts accounted for 6.4% of an average of 90 utterances per interview.

The use of the NICHD Protocol (Orbach et al., 2000) may explain the lower complexity of the multipart prompts and the low frequency of multipart prompts used by the child investigators in this sample. This protocol provides child investigators with developmentally appropriate strategies, and it structures the use of simple and organized prompts while suggesting various forms (e.g., 'Tell me everything about a... person/object/action/time/location'). Such templates may facilitate the use of simple prompts, particularly recall prompts, which interviewers find difficult to structure.

However, the interviewers used similar numbers of multipart prompts when they interviewed younger (4–6 years old) and older children (7–9 years old), indicating that young children were presented with multipart prompts regardless of their age and developmental levels. Consistent with this finding, previous studies (Walker & Hunt, 1998; Warren et al., 1996) have shown that a child's age had no effect on interviewers' use of multipart or simple prompts. This finding has led researchers to conclude that sometimes child investigators are unaware of children's cognitive limitations and often overestimate their abilities (Poole & Lamb, 1998; Saywitz, 2002), presenting them with prompts that are beyond their ability to process.

The interviewers' tendency to ignore the difficulty that multipart prompts place on children seems to be reinforced by children's failure to signal that those prompts are difficult to answer. In the current sample, as in the samples used in previous studies (Carter et al., 1996), the children did not indicate that multipart prompts were unclear or difficult to process, nor did they ask for clarifications. This contradicts the expectation that children who are interviewed according to the NICHD protocol will acknowledge any difficulties with the prompts they are given, as they are clearly provided with the option to express a lack of understanding and encouraged to ask for clarifications (Saywitz et al., 1999).

It is quite possible that the children did not recognize that these prompts were difficult because of their limited metacognitive skills. This explanation is consistent with previous findings that children reported that prompts were easy to answer even when they failed to answer them (Carter et al., 1996; Imhoff & Baker-Ward, 1999; Perry et al., 2001). However, one cannot exclude the possibility that although the children realized that they could not respond completely, they still attempted to conform to expectations and provide some answer (Perry et al., 1995).

Like the children in other studies (Imhoff & Baker-Ward, 1999), the children in the current sample attempted to answer the multipart prompts instead of signaling their difficulty with them; however, the quality of the children's answers was obviously compromised. The direct examination of response length and the amount of forensically relevant information conveyed reveals the harmful effects of multipart prompts. The average response to multipart prompts was shorter and contained fewer forensic details compared with the responses to simple prompts. These findings suggest that multipart prompts, which pose complex demands, adversely affect the children's ability to cognitively process the prompts and consequently compromise the richness of the children's forensic statements. Moreover, the results showed that multipart prompts were especially harmful to the children's ability to provide central information that describes core elements of the abuse and indicates its severity. In this study, we could not assess the accuracy of the information the children provided; however, Perry et al. (2001) reported a decline in accuracy when children responded to multipart prompts. Taken together, multipart prompts seem to compromise the quality of the forensic statements children provide in their investigation.

The adverse effects of the multipart prompts was evident not only in the richness of the children's testimony but also in the quality of their responses. Twenty-four percent of the children's answers to multipart prompts were unintelligible, indicating that the children tried very hard to be competent and to provide any answer even though they did not understand the demand. This finding is not surprising given the results of Waterman and colleagues' studies, which systematically showed that children will try to answer any question, even if it nonsensical (Waterman, Blades, & Spencer, 2000, 2001, 2004). When the children in the current study did provide clear and substantive answers, they usually answered the last demand presented in multipart prompts. This pattern clearly reflects the children's limited attention skills and is not surprising giving the children's developmental abilities and the theoretical recommendations (Poole & Lamb, 1998).

The age effects found in this study reinforce the well-established advantage that older children have over preschoolers in the amount of forensic details they are able to provide in their investigation. However, contrary to the hypothesis, no age differences were found regarding the effect of multipart prompts on the children's responses, indicating that children in both age ranges had difficulty with that format.

Our findings should be considered within the context of the study's limitations. First, the low rate of multipart prompts may have obscured certain effects, such as the interactive effect of prompt type and prompt format. The low number of multipart prompts might also explain the effect size that occurred when the type of prompt (recall vs. recognition) was included in the analysis. Second, it is important to consider the possibility that some questions only appeared to be multipart prompts because the second prompt followed unrecorded and thus unrecognized responses from the children. Third, as in other field studies, the lack of accuracy measures make it impossible to assess the way multipart prompts might adversely

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6

C. Katz, I. Hershkowitz / Child Abuse & Neglect xxx (2012) xxx-xxx

affect the accuracy of the children's testimonies. Despite the study's limitations, however, it sheds light on multipart prompts' negative dynamics in forensic investigations of children and their adverse effects on children's testimonies.

Practice implication

This study confirms that even highly trained investigative interviewers used multipart prompts when interviewing alleged victims and that multipart prompts have negative and possibly adverse effects on the interviewing process and the richness and quality of children's testimonies. These findings strongly demonstrate that multipart prompts are inherently problematic and need to be eliminated, especially when interviewing children who are alleged victims of abuse. Therefore, when planning best-practice investigations, it is essential to consider not just the type of prompt (recall vs. recognition) but also the format of the prompts. Guidelines and training programs for investigative interviews of children should highlight the risks that multipart prompts impose on the children and encourage interviewers to avoid using them.

References

- Carter, C. A., Bottoms, B. L., & Levine, M. (1996). Linguistic and socioemotional influences on the accuracy of children's reports. *Law and Human Behavior*, 20(3), 335–358.
- Geiselman, R. E., Saywitz, K. J., & Bornstein, G. K. (1993). Effects of cognitive questioning techniques on children's recall performance. In G. S. Goodman, & B. L. Bottoms (Eds.), Child victims, child witnesses: Understanding and improving testimony (pp. 71–93). New York: The Guilford Press.

Imhoff, C. M., & Baker-Ward, L. (1999). Preschoolers' suggestibility: Effects of developmentally appropriate language and interviewer supportiveness. Journal of Applied Developmental Psychology, 20(3), 407–429.

Korkman, J., Santtila, P., Drzewiecki, T., & Sandnabba, N. K. (2008). Failing to keep it simple: Language use in child sexual abuse interviews with 3–8-year old children. *Psychology, Crime, and Law*, 14, 41–60.

Lamb, M. E., Hershkowitz, I., Sternberg, K. J., Boat, B., & Everson, M. D. (1996). Investigative interviews of alleged sexual abuse victims with and without anatomical dolls. Child Abuse & Neglect, 20, 1239–1247.

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*(3), 627–637.

Markman, E. M. (1977). Realizing that you don't understand: A preliminary investigation. Child Development, 48, 986-992.

Markman, E. M. (1979). Realizing that you don't understand: Elementary school children's awareness of inconsistencies. Child Development, 50, 643–655.
Orbach, Y., Hershkowitz, I., Lamb, M. E., Sternberg, K. J., Esplin, P. W., & Horowitz, D. (2000). Assessing the value of structured protocols for forensic interviews of alleged child abuse victims. Child Abuse & Neglect, 24(6), 733–752.

Perry, N. W., McAuliff, B. D., Tam, P., Claycomb, L., Dostal, C., & Flanagan, C. (1995). When lawyers question children. Law and Human Behavior, 19(6), 609-629.

Perry, N. W., McAuliff, B. D., Tam, P., Claycomb, L., Dostal, C., & Flanagan, C. (2001). When lawyers question children: Is justice served? In R. Bull (Ed.), Children and the law (pp. 304–332). UK: Blackwell.

Poole, A. D., & Lamb, E. M. (1998). Investigative interviews of children: A guide for helping professionals. Washington, DC: American Psychological Association. Saywitz, K. J. (2002). Developmental underpinning of children's testimony. In H. L. Westcott, G. M. Davies, & R. H. C. Bull (Eds.), Children's testimony: A handbook of psychological research and forensic practice (pp. 3–21). England: John Wiley & Sons.

Saywitz, K. J., & Goodman, G. S. (1996). Interviewing children in and out of court: Current research and practice implications. In J. Briere, L. Berliner, J. A. Bulklley, & T. Reid (Eds.), The APSAC handbook on child maltreatment (pp. 297–318). Thousand Oaks, CA, USA: Sage Publications.

Saywitz, K. J., Snyder, L., & Nathanson, R. (1999). Facilitating the communicative competence of the child witness. *Applied Developmental Science*, 3(1), 58–68. Sternberg, K. J., Lamb, M. E., & Hershkowitz, I. (1996). Child sexual abuse investigations in Israel. *Criminal Justice and Behavior*, 23, 322–337.

Walker, A. G. (1993). Questioning young children in court: A linguistic case study. *Law and Human Behavior*, 17(1), 59–81.

Walker, N. E., & Hunt, J. S. (1998). Interviewing child victim witnesses: How you ask is what you get. In C. P. Thompson, D. J. Herrmann, J. Don Read, D. Bruce, D. G. Payne, & M. P. Toglia (Eds.), Eyewitness memory (pp. 55–87). Mahwah, NJ: Lawrence Erlbaum Associates.

Warren, A. R., Woodall, C. E., Hunt, J. S., & Perry, N. W. (1996). It sounds good in theory, but. . .": Do investigative interviewers follow guidelines based on memory research? *Child Maltreatment*, 1(3), 231–245.

Yuille, J. C. (1988). The systematic assessment of children's testimony. Canadian Psychologist, 29, 247–262.

Waterman, A. H., Blades, M., & Spencer, C. P. (2000). Do children try to answer nonsensical questions? British Journal of Developmental Psychology, 18, 211–226.

Waterman, A. H., Blades, M., & Spencer, C. P. (2001). Interviewing children and adults: The effect of question format on the tendency to speculate. *Applied Cognitive Psychology*, 15, 521–531.

Waterman, A. H., Blades, M., & Spencer, C. P. (2004). Indicating when you do not know the answer: The effect of question format and interviewer knowledge on children's "don't know" responses. British Journal of Developmental Psychology, 22, 335–348.

Yuille, J. C., & Cutshall, J. L. (1986). A case study of eyewitness memory of a crime. Journal of Applied Psychology, 71(2), 291–301.