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Children's episodic and generic reports of abuse

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Abstract

With the present data, we explored the relations between the language of interviewer questions, children's reports, and case and child characteristics in forensic interviews. Results clearly indicated that the type of questions posed by interviewers – either probing generic or episodic features of an event – was related to the specificity of information reported by children. Further, interviewers appeared to adjust their questioning strategies based on the frequency of the alleged abuse. Children alleging single instances of abuse were asked more episodic questions than those alleging multiple abuses. In contrast, children alleging multiple incidents of abuse were asked a greater proportion of generic questions. Given that investigators often seek forensically-relevant episodic information, it is recommended that training for investigators focus on recognition of prompt selection tendencies and developing strategies for posing non-suggestive, episodically-focused questions.

Children's episodic and generic reports of alleged abuse

In this paper we explore interviewer and child interviewee language specificity in investigative interviews of sexual and physical abuse allegations. There is a vast literature on how investigative interviewers can enhance, or interfere with, a child's statement (e.g., Kuehnle & Connell, 2009; Poole & Lamb, 1998). However, there is relatively little informative work about the potential influence of case and child characteristics on the language used by interviewers when questioning children, and likewise, the potential relations between the specificity of features probed by interviewers and children's verbal responses. This is a surprising omission because with an understanding of how these factors are related, interviewers may be able to adjust their questioning strategies to best suit both child interviewees and their own investigative needs. With the present data, we explore the relations between the specificity of interviewer questions, children's reports, and case and child characteristics in forensic interviews.

In the study of investigative interviews, several key recommendations have emerged. Perhaps most prominently, it is recommended that interviewers rely on open-ended prompts that elicit narrative descriptions from children and avoid the use of closed-ended prompts such as questions posed in the yes/no format, when possible (e.g., Lamb, Sternberg, & Esplin, 2000; Orbach & Lamb, 2000; Sternberg, Lamb, Orbach, Esplin, & Mitchell, 2001). Consensus regarding the superiority of open-ended questions has been supported by research in both field and laboratory contexts: Open-ended prompts tend to elicit reports that are more detailed and accurate than closed-ended prompts (e.g., Lamb et al., 2003; Sternberg et al., 1996). However, a challenge often faced by investigative interviewers is that reliance on open-ended questions can make it difficult to obtain complete reports of events due to the lack of guidance interviewers provide to elicit information (Baker-Ward, Gordon, Ornstein, Larus, & Clubb, 1993). Of course, this is exactly the point of open-ended questions – to avoid providing such cues. Yet, because children's ability to report experienced events in detail can be impoverished, cues may be required to elicit detailed information. This is particularly true for younger children, who tend to

provide less information in free recall than their older counterparts (Ornstein, Baker-Ward, Gordon, & Merritt, 1997). This well-known struggle in selecting prompts is the focus of this work: What factors, knowingly or unknowingly, contribute to the specificity of selected prompts and thereby the specificity of the features of an event that are probed? And, what is the impact of prompt selection on children's reports?

Event Frequency

Because most of what children experience in life is repeated to at least some extent (e.g., going to school, daily routines), and certainly the circumstances that bring many children into the justice system are often repeatedly-occurring (e.g., sexual and physical abuse), it is especially important to understand children's recall of commonly-occurring events and how particular questioning techniques may influence this recall. In a legal context, even if abuse is repeated over time, a complainant may be required to provide details of a specific instance in order for prosecution to proceed [*R. v. B. (G.)*, 1990]. However, it has been clearly documented that this is a difficult task for children (e.g., Connolly & Lindsay, 2001; Connolly & Price, 2006; Powell, Roberts, Ceci, & Hembrooke, 1999), although they are able to give a generic account of an entire series of events (Hudson & Nelson, 1986). Given the challenge in eliciting instance-specific details ("episodic" details) from children who have experienced a repeatedly-occurring event, it is important to understand the impact of varying prompts on children's recall. With this information, interviewers may be better able to tailor their interviews to best suit the abilities of child interviewees and the investigative needs of the interviewer.

Using script theory as a guide, Katherine Nelson, Robyn Fivush and colleagues have conducted a program of research that informs the question of how best to probe children about instance-specific details. Script theory asserts that when an event is repeatedly experienced, a cognitive representation, or script, of what typically occurs develops (Alba & Hasher, 1983). The resulting script is a spatially and temporally organized memory representation with permissible variations and expectations of what will transpire when the routine is encountered in the future (Nelson, 1986; see Alba & Hasher, 1983 for a discussion). Over time, a script becomes more

general and details common to repeated similar experiences need not be encoded and stored for each particular instance because they can be derived from the general script. Therefore, what is encoded and stored in memory will be heavily influenced by the content of the guiding script (Alba & Hasher, 1983). Importantly, script acquisition may reduce, but not necessarily block, instance access (Nelson, 1986). Individual instances are accessible through specific details that vary from script expectations which, when combined with general script knowledge, can constitute recall of a complete instance (Nelson, 1986). Of course, the reconstructive nature of this recall may lead to reporting errors.

During the last several decades, a number of researchers have used script theory to examine the relations between questioning techniques and children's recall of repeated autobiographical events. To explore children's recall of early kindergarten experiences, Fivush (1984) questioned children with either episodic (i.e., "What happened yesterday?") or generic (i.e., "What happens?") prompts. Fivush observed the development of a general event representation, rather than instance-specific memory, which occurred quickly across repetition of the daily school routine. Dominance of the general event representation over incident-specific recall was evident in that children reported relatively more generic than episodic details overall, and that after the second day of school children infrequently reported episodic details when asked either episodic or generic questions. Similarly, Hudson and Nelson (1986) posed generic and episodic questions to 3- and 5-year old children who participated in a camp program (Exp. 2) and found that a greater amount of episodic details were reported in response to episodic, rather than generic questions. Hudson and Nelson suggested that the effectiveness of cues may be dependent on the 'match' between the event and the prompt used to retrieve recall (similar to the classic 'encoding specificity hypothesis'; Tulving & Thomson, 1973).

To extend this research, Hudson (1990) compared children's recall of events that occurred only once with those that were repeated by studying nursery school and kindergarten children's recall of special activity workshops. In response to generic prompts, children who experienced four workshops recalled more information than children who experienced only one

workshop. However, much of this information was generic in nature, when compared with that reported in response to episodic prompts and many children evinced confusion about what occurred across the repeated instances. Hudson concluded that repeated experience helped children report more, but not necessarily more accurate, details with respect to a single instance of the repeated event.

There is also some guiding work in the children's suggestibility literature that indicates that the specificity of interviewer language may indeed influence children's responses. Powell, Roberts, and Thomson (2000) had children participate in repeated play sessions and later questioned them suggestively. In the suggestive interview, the biasing information was either linked to a specific instance of the repeated event or was linked to the event as a whole. When suggestions were directly linked to one instance of the repeated event children were more likely to accept the false suggestion. That is, the specificity of the suggestion determined children's level of suggestibility. The implication for the present work is that it appears as though the specificity of the interviewer's cue may elicit different information from children's memory.

Other theoretical support for the hypothesis that the specificity of retrieval cues will influence the specificity of subsequent recall comes from a contemporary memory theory: fuzzy-trace theory. According to fuzzy-trace theory (e.g., Brainerd & Reyna, 2002; Reyna, Holliday, & Marche, 2002), two independent memory traces are formed each time an event is encountered and stored in parallel: A verbatim trace that contains the precise details of the event and a gist trace that contains the general meaning of the event. As a result, gist and verbatim traces are not concurrently retrieved with a single cue, but rather the retrieval of either of these traces is independent and is likely to be most effective when the specificity of the retrieval cue matches the type of trace, a concept referred to as *dissociated retrieval* (Brainerd & Reyna, 2004). That is, when accessing gist memory a gist-based, or generic, cue is likely to be most effective whereas when accessing verbatim memory a verbatim-based, or episodic, cue is likely to be most effective.

The effectiveness of verbatim- and gist-based cues in retrieving verbatim and gist traces, respectively, has been well-documented in basic experimental paradigms (e.g., Brainerd & Reyna, 1995). However, these hypotheses have yet to be examined in naturalistic contexts with allegedly maltreated children where verbatim and gist details might be closer together on the verbatim-gist continuum. Additionally and importantly, in the research reviewed above, when prompt specificity was examined, interviewers were assigned questions to pose. In field interviews, such questioning occurs naturally and may be influenced by characteristics of both the event and interviewee. However, relatively little is known about how interviewers decide to probe for details of either generic or episodic features of experiences. It may be the case that interviewers naturally match their question specificity to the alleged event (i.e., probe for more generic features when discussing an allegation of repeated abuse). On the surface, this may appear to be an effective strategy but we have little indication as to whether or not such a matching process will be successful in eliciting details that interviewers desire. It may be the case that the expected facilitation of recall due to appropriate “matching” of the retrieval cue to the targeted features may be complicated by event factors, such as event repetition. Perhaps after repeated experience, retrieval of episodic information which is typically facilitated by episodic cues, may simply become inaccessible to the point that quality narratives are difficult to elicit.

Thus, we explored the potentially complex relations between frequency of alleged abuse, interviewer prompt specificity selection, and children’s responses. In the present study, we examine the occurrence of generic and episodic questions in actual forensic interviews. Based on the above review, we expected that generic questions in the current forensic interviews would result in reporting of more, but less detailed, information than episodic questions.

Developmental differences

There are, of course, other characteristics of the allegation that may influence how interviewers select questions. Despite the potential value in exploring the personal characteristics of the child, there has been relatively little work that has examined relations between such characteristics and interviewer behavior. Several studies, both laboratory (e.g., Hudson, 1990;

Hudson & Nelson, 1986) and field-based (e.g., Lamb et al., 2003), have reported that older children tend to provide more details in their reports than do younger children and may also be more accurate (Powell & Thomson, 1996). Yet, Lamb et al. (2003) noted that even children as young as four years of age are capable of providing detailed descriptions of events in response to open-ended prompts, though older children may report a greater number of episodic details (Powell & Thomson, 1996). What has yet to be examined is whether or not the types of questions posed by interviewers elicit different responses from children of varying ages. Age differences in other aspects of children's testimony, such as suggestibility, demonstrate that the age of a child interviewee is related to his or her response to certain types of questions (i.e., younger children tend to be more susceptible to suggestion; e.g., Bruck & Ceci, 1999; Farrar & Goodman, 1990), and it is not unreasonable to imagine that similar developmental differences may also exist in the specificity of responses to questions posed by interviewers.

Despite the plausibility of age differences in responses to different types of interviewer questions, there has not yet been a systematic examination of the specificity of features probed by interviewers and the potential influence on children's reports. Further, it is not unreasonable to anticipate that interviewers adjust their prompt specificity based on age-based expectations of children as well as the alleged frequency of abuse. In the present study, we address the ways in which the language that interviewers use when structuring questions is linked to child and allegation characteristics and how these factors are related to children's responses.

Method

Interviews were selected for analysis from a larger sample of 117 investigative interviews that were part of an extensive interviewer training study modeled after the well-known National Institute for Child Health and Human Development (NICHD) protocol (see Price & Roberts, 2009). In this training program, interviewers experienced two, two-day training sessions – separated by two months - in which material was presented that covered basic child development principles as well as specific recommendations for conducting investigative interviews with children. Interviewers received weekly written, graphical, and oral feedback on interviews

conducted over the course of eight months. All interviews were transcribed and these transcripts provided the basis for the present analyses.

All cases in this larger sample that involved at least one allegation of physical or sexual assault or other violence were included resulting in a sample of 51 forensic interviews (the remainder of the interviews involved non-specific allegations or no allegations). Interviewers were child abuse investigators ($n = 2$ police officers, $n = 10$ child protection workers) in a large Canadian city. The manager of four teams in the child protective agency and police unit gave open invitations to staff to participate in a joint training initiative. At the beginning of training, the child protection workers' experience in the participating agency ranged from 0.25 to 5 years ($M = 1.92$, $SD = 1.86$), while overall experience interviewing children ranged from 0.50 to 17 years ($M = 4.33$, $SD = 4.99$). The participating police had been officers for 11 and 18 years and one had interviewed children for one year, while the other had spent three years interviewing children. All participants gave informed consent and the project was approved by the appropriate institutional review boards.

Interview characteristics

Thirty-four of the cases involved allegations of repeated abuse, while 17 involved allegations of single incidents. Refer to Table 1 for case characteristics. Children ranged in age from 4-16 years (median = 9 years). Mean ages for children alleging single ($M = 9.81$, range = 4-16yrs) and repeated abuse ($M = 8.80$, range 4-15yrs) were similar, as were the gender distributions (single: males = 47%; repeated: males = 56%). For those children alleging repeated abuse, most allegations involved hitting ($n = 85\%$), followed by general violence (9%), and sexual assault (6%). For single allegations, most allegations were of sexual assault (53%), then general violence (24%), hitting (12%) and other (12%). Thus, the majority of allegations irrespective of whether the allegations referred to single or repeated incidents focused on events in which the children were directly involved.

Coding

Interviewer prompts. Interviewer prompts were coded as either *episodic* or *generic*. If interviewers posed multiple questions within a single conversational turn, coders only coded the final prompt, as is customary (e.g., Lamb et al., 2003). *Episodic* prompts referred to details that were described as specific to a particular time and event (e.g., “what did the shirt look like?”, “what did you do on that day?”, “tell me about a time that you felt scared.”, “have you seen this man before?”). *Generic* prompts contained vague terms or references to general routines or events that are typically unchanging (i.e., “what happens when you visit [X]?”, “who lives in this house?”, “what happens when mom gets angry?”, “what’s home like?”).

Children’s responses. Coding was based on Lamb et al. (1996). The coding of children’s responses occurred in two phases. First, the number of details reported by children in response to each question was counted. Details referred to a word or words that were identified as a complete subject (“I”, “you”, “she”), object (“ball”, “shirt”), preposition (“put on” is one detail), verb (“talk”, “run”), adjective (“white”, “hard”), any other grammatical structure that provided information, such as pronouns (e.g., “my”), or any other information-containing words. Words that simply reflected stylistic patterns of speech (e.g., “like”, “umm”) were excluded from word counts. Intercoder agreement for the count of child details was 90% (interim agreement checks throughout training ranged from 89-96%).

Second, each of the counted details was assigned to one of five categories: *episodic*, *generic*, *factual*, *omission*, or *miscellaneous*. Information was coded as *episodic* if the child’s response referred to particular events on particular days or events that may have occurred over multiple days but were perceived of as a single event (e.g., “one day the cops came”, “I went to Wonderland”). The *generic* category was assigned if the child’s response referred to a summary of common events. This also included self-reports about the past that had been grouped together by the child. The *generic* category was also used if the information provided was described as factual but included general actions or routines or if the child reported general information about themselves, personal characteristics or possessions (e.g., “sometimes they fight”, “mom and dad live in the house”, “I was in gymnastics since I was four”). The *factual* category included

references to information in the immediate present and not to events in particular (e.g., “play-dough smells like orange”), *omission* occurred when the child denied an occurrence or provided no information (e.g., “no”, “I don’t know”), and the *miscellaneous* category was used for everything else. The frequency with which factual, omission, and miscellaneous categories were reported was very small (i.e., each represented < 1% of all comments), and are thus not considered further.

Both individual words and whole sentences were evaluated in determining detail categorization (i.e. *episodic*, *generic*, etc.). Once a generic or specific idea was identified, the supporting details were summed. For example, the statement “I wore the white shirt” is a specific report and thus would be valued as 4 *specific* details (“I”, “wore”, “white”, “shirt”). Similarly, if a child vacillated between specific and generic reporting, the supporting details would be summed according to each category. For example, “I wore a white shirt but I don’t like blue” would be valued as 4 *specific* details (“I wore a white shirt”) and 5 *generic* details (“but I don’t like blue”). Responses to closed-ended interviewer questions such as “yes”, were considered details and coded according to the grammatical structure of the question (i.e., a question posed that clearly addressed a specific detail and was responded to with “yes” would be counted as one specific detail response; when unclear if the detail was generic or episodic such details may have been coded as *miscellaneous*).

Interrater reliability (ICC_1), conducted on a randomly selected subset of 12 interviews was excellent, according to guidelines reported by Cicchetti and Sparrow (1981): ranging from .92-.99 for the classification of each of generic and episodic prompts and responses. All remaining interviews were coded by one coder. Interviews were comprised of three phases. The first phase was a rapport-building and rule-establishment phase (e.g., discussion of truth/lies). The second phase consisted of the substantive phase of the interview. The third stage involved closure of the interview. Only the substantive phases of each interview were coded for the purposes of the present study.

Results

The average interview was 28.41 minutes in duration, included 97 interviewer prompts, and 1120 details reported by the child. Paired samples *t*-tests indicated that across all participants, a greater number of generic ($M = 61.45$, $SD = 40.78$) than episodic questions ($M = 36.00$, $SD = 27.89$) were posed, $t(50) = 4.13$, $p < .01$, and more generic ($M = 695.80$, $SD = 608.73$) than episodic ($M = 424.04$, $SD = 340.73$) details were reported, $t(50) = 3.07$, $p < .01$.

With these data, we were interested in examining several questions: (i) What is the nature of the language used by children and interviewers in investigative interviews?, (ii) Is the frequency of alleged abuse related to interviewer questioning behavior and children's reports?, (iii) When posed episodic questions, do children who have alleged repeated abuse have difficulty reporting episodic detail?, and (iv) Are there developmental differences in relation to interviewer questioning behavior and children's reports? We present the results of these queries below. Of course, because the focus is on natural interviewing behavior, we do not draw conclusions about the direction of the effects in the present study. That is, although we are interested in the relations between interviewer question specificity and children's response specificity, the reader should be careful not to interpret one as a result of the other.

(i) What is the nature of the language used by children and interviewers in investigative interviews?

First, we were interested in the impact of the type of prompt – generic or episodic – on the nature of children's responses. As expected, paired samples *t*-tests indicated that generic questions elicited a greater number of generic ($M = 619.47$, $SD = 572.43$) than episodic details ($M = 121.14$, $SD = 128.11$), $t(50) = 6.84$, $p < .01$. Similarly, episodic questions elicited more episodic ($M = 302.90$, $SD = 280.88$) than generic ($M = 76.33$, $SD = 79.86$) details from children, $t(50) = 6.35$, $p < .01$.

(ii) Is the frequency of alleged abuse related to interviewer questioning behavior and children's reports?

With the present sample, there was a concern of unequal representation of sexual-to-physical assault cases between the single and repeated-allegations conditions (see Table 1).

Because of the possibility of a confound between type and frequency of abuse, analyses of covariance (ANCOVA) were conducted with frequency of alleged abuse (single, repeated) as the independent variable, type of abuse (dichotomized as physical or sexual, where possible) as a covariate, and the mean proportion of episodic and generic questions and details reported as dependent variables. For both analyses, the covariate was not significant (F 's < 0.44 , p 's $> .51$). For ease of interpretation, we report the results from the original ANOVA analyses.

Interviewer questioning data are presented first, followed by data on children's responses. For the following analyses, we examined the proportion of prompts and details that were generic and episodic. Proportional analyses are required because the total number of questions (i.e., generic + episodic) of each may differ across interviews, and so proportions allow for a clean comparison between the relative representation of each type. For each analysis, only one category (either generic or episodic) is considered given that the category variable is dichotomous and the proportion scores are therefore dependent. Raw data are provided in Table 2.

Interviewer questioning. We examined interviewer behavior as a function of the nature of the child's allegation. A greater proportion of generic questions were posed to children alleging repeated abuse ($M = .69$, $SD = .18$) than those alleging single incidents of abuse ($M = .50$, $SD = .20$), $F(1,50) = 12.19$, $p = .001$, $\eta_p^2 = .20$.¹

Children's reports. We then examined the frequency of alleged abuse and the mean proportion of generic details reported. When we compared the relative proportion of generic details reported by children, those alleging repeated abuse reported a higher proportion of generic details ($M = .68$, $SD = .22$) than children alleging a single instance of abuse ($M = .46$, $SD = .20$), $F(1,50) = 12.38$, $p = .001$, $\eta_p^2 = .20$.

In sum, interviewers appeared to adjust their questioning strategies based on the frequency of allegations made. Children alleging single instances of abuse were asked a greater

¹ This analysis was conducted excluding the outlier evident in Figure 1. No differences were found and thus, the analysis including all cases is reported.

proportion of episodic questions. Conversely, children alleging repeated abuse were asked a greater proportion of generic questions. This shift in questioning as a function of frequency of abuse may also have influenced children's responses. As anticipated, children who alleged a single instance of abuse provided more episodic details than children who alleged repeated abuse. Also, the proportion of details reported by children who alleged repeated abuse that were generic was significantly higher than children who alleged single abusive instances (i.e., reports from children who alleged repeated abuse contained proportionally fewer episodic details).

There is of course a concern that increasing the number of specific questions will also increase the number of undesirable and potentially suggestive questions. To examine whether or not this occurred in the present interviews, we selected interviews that we considered to be primarily either episodic or generic in terms of the questions posed by interviewers. Interviews that contained 60% or more of either generic or episodic prompts were compared in terms of the number of overall questions that were coded as suggestive, open-ended, and closed-ended (previously coded as part of a larger study). Thirty-one interviews were coded as primarily generic and eight interviews were considered to be primarily episodic (the remainder of the interviews, $n = 13$, fell in the middle and were thus, not included in these analyses). There were no significant differences between generic and episodic interviews in the average proportion of interviewer prompts that were suggestive (generic $M = .02$, $SD = .02$; episodic $M = .03$, $SD = .03$), open-ended (generic $M = .35$, $SD = .18$; episodic $M = .29$, $SD = .12$), or closed-ended (generic $M = .63$, $SD = .18$; episodic $M = .69$, $SD = .13$) (F 's < 2.30 , p 's $> .14$). This finding suggests that when interviewers in the present study posed episodic questions, these questions did not carry the cost of being less reliable and less effective questions: The episodic questions were directed at retrieving episodic memories rather than directed at extracting particular details.

(iii) When posed episodic questions, do children who have alleged repeated abuse have difficulty reporting episodic detail?

To examine this question, we performed two one-way ANOVAs comparing the proportion of responses to episodic questions that were specific (episodic details) and the

proportion that were generic, as a function of alleged abuse frequency. There was a significant difference in the proportion of episodic details reported by children who alleged single ($M = .80$, $SD = .16$) instances of abuse, compared with children who alleged repeated instances of abuse ($M = .67$, $SD = .25$), $F(1, 49) = 3.93$, $p = .05$, $\eta_p^2 = .08$. That is, children who alleged repeated abuse were less likely to respond to episodic questions with episodic details than were their single-allegation counterparts. Similarly, there was also a significant difference in the proportion of generic details reported by children who alleged single ($M = .17$, $SD = .16$) versus repeated instances of abuse ($M = .32$, $SD = .24$), $F(1,49) = 5.32$, $p = .03$, $\eta_p^2 = .10$; children who alleged repeated abuse were more likely to respond to episodic questions with generic answers than were single-allegation children.

(iv) Are there developmental differences in relation to interviewer questioning behavior and children's reports?

To examine developmental differences, we performed bivariate correlations, first, between children's age and the mean proportion of generic interviewer questions and, second, between children's age and the proportion of children's reported generic details. Again, because proportions of specific and generic questions/responses are dependent, only generic questions/responses are analyzed here. Age was not related to the proportion of interviewer questions that were generic ($r = -.19$, $p = .19$), and neither were there significant differences in the proportion of children's generic responses ($r = -.22$, $p = .14$) (refer to Figures 1 and 2). We were also interested, however, in the raw number of generic and episodic details reported by children as a function of their ages given that older children provide more episodic detail than do younger children (Powell & Thomson, 1996). Although analyses of proportions allow for the examination of the generic-episodic balance, they do not allow for a comparison of the relative volume of each type of detail. To examine this, we conducted additional bivariate correlations between children's age and both the absolute number of generic and episodic details provided. As anticipated, as age increased, so did the number of episodic details provided by children ($r = .30$, $p = .04$; see Figure 3). However, there was no relation between age and the absolute number

of generic details provided by children ($r = .10, p = .49$). Comparatively, there were no significant differences in the mean numbers of generic and episodic prompts posed by interviewers as a function of age ($r_s < .07, p_s > .65$).

In sum, this exploratory analysis shows that children's age appears to have not influenced interviewers' questioning strategies nor the proportion of children's responses that were of a generic nature. Yet, consistent with prior research (Powell & Thomson, 1996), older children provided more episodic detail than younger children.

Discussion

Ask a generic question, get a generic answer. In the present study, it was evident that the type of question posed by interviewers – either generic or episodic – was related to the nature of children's responses. That is, when interviewers posed generic questions, they received responses that were primarily generic. Likewise, when interviewers posed episodic questions, they were more likely to receive episodic responses. Though intuitive, these findings have not yet been reported in the context of forensic interviews and clearly show that episodic details are accessible even after a script is likely to have formed about a repeated event.

One of the most interesting findings was that responding episodically was clearly more difficult for the children who alleged repeated, rather than a single incident of, abuse as shown by the analyses of proportional generic responses to episodic questions for repeated, versus single, allegation children. This novel finding has important implications for forensic investigators who may seek to elicit detailed recall of a particular episode from a child who has experienced several similar incidents.

Where legal requirements exist (such as the specificity principle described above; *R. v. B. (G.)*, 1990) for particularization of details of a specific episode, forensic investigators must be provided with the knowledge of how to obtain this information. Even without such explicit requirements, children may appear more credible when describing individual episodes than generic descriptions of repeated events (Connolly, Price, Lavoie, & Gordon, 2008). The present data make it clear that in order to obtain episodic detail from a child, it is imperative to ask

episodic questions. Let us be clear that this does not mean that directive questions are required. Rather, the very open-ended questions that are typically recommended to investigative interviewers (e.g., ‘Tell me about...’; Kuehnle & Connell, 2009; Sternberg et al., 2001; Poole & Lamb, 1998) are still the most desirable, but these questions may be more effective when targeted at a particular episode, rather than referring to generic details (e.g., ‘Tell me about the time you remember best’, ‘Tell me about the last time’).

It is critical, of course, to understand the circumstances under which interviewers pose either generic or episodic questions. The decision-making process that leads to question selection may not be conscious. A demonstration of the relationship between interviewer question type and the specificity of children’s responses currently practiced, then, may assist interviewers in posing more effective questions.

With the present data, we also investigated case characteristics that may have impacted the decisions made by investigators: frequency of alleged abuse and the age of the child interviewee.

Frequency of alleged abuse

Interviewers appeared to adjust their questioning strategies based on the frequency of the alleged abuse. Independent of abuse type, children alleging single instances of abuse were asked a greater proportion of episodic questions than those alleging multiple abuses. Conversely, children alleging multiple incidents of abuse were asked a greater proportion of generic questions. Why might interviewers change their questioning strategies based on the frequency of abuse alleged? There are at least a couple of possibilities. First, interviewers may adjust their strategies unconsciously. With empirically-based evidence that brings this tendency to light, interviewers could be instructed to be more deliberate in their question selection. Deliberately using episodically-phrased questions may better highlight to child witnesses precisely what kind of information they are being asked to report.

It is also possible that interviewers may consciously believe that such tailoring of questions is the best questioning strategy. Knowing that something has happened several times, it

may seem natural to ask first about the commonalities between the incidents (i.e., the gist) and then later follow-up with specific questions. However, there is evidence that this approach may not be effective if the ultimate goal is to obtain episodic detail and it is still an empirical question as to whether or not initial recall of generic information may interfere with later recall of more specific, but related information. As discussed previously, Fivush (1984) reported that when children who experience repeated similar instances are asked to respond to the generic question “what happens when...?” they report substantial routine-relevant information, but few instance-specific details. However, when children are asked the more episodic question “what happened during [instance X]?” children report more details from the instance, but less information overall. These findings, driven by script theory (e.g., Nelson, 1986), suggest that a general event representation may be richer and more accessible than instance-specific details. After repeated instances of abuse, if this bias towards recall of generic information exists, questioning strategies that target recall of generic information will only further reduce the amount of episodic information that children report. Regardless of whether or not the decision-making process about the language used in questions is conscious, the current data suggests that the choices made by interviewers are not always the most effective.

If interviewers structure their questions based in part on the frequency of alleged abuse, then the obvious next question is whether or not the types of questions posed influence the details provided by children. It is evident from the above findings that this may indeed be the case. It is also important to note that children alleging single instances of abuse reported a higher proportion of episodic details overall than children alleging repeated abuse, while children alleging repeated abuse reported a higher proportion of generic details than children alleging a single instance of abuse. Of course, in the present study, we were unable to randomly assign either interviewers or child interviewees to question type. As a result, we were unable to determine whether children’s responses varied as a function of frequency of the alleged abuse, or as a function of the types of questions they were asked. Our goal, however, was to investigate naturally-occurring practices in forensic interviewing to see whether these relations actually

exist. Indeed, there appears to be important relations between the frequency of the allegation, the questions posed, and the specificity of children's responses.

With the more detailed examination of repeat- and single-allegations in relation to responses to episodic questions, it was clear that children who experienced repeated abuse appeared less able to respond to the more-detailed episodic questions with similar specificity. Indeed, single-allegation children were more likely to respond to episodic questions with episodic detail and less likely to respond with generic detail. This finding provides support for the suggestion that children who have alleged repeated abuse may be further challenged in reported forensically-relevant instance-specific details that may be necessary for pursuit of prosecution. This pattern of results also indicates that although there was a clear empirical demonstration of the link between question specificity and response specificity (e.g., Hudson, 1990), and good theoretical reason to expect this link (e.g., fuzzy-trace theory; Brainerd & Reyna, 1995), there may be factors – such as event frequency – that can impede the success of such cue “matching”. Although fuzzy-trace theory does not make specific predictions about the influence of event frequency on cue-matching, the evidence for dissociated retrieval of gist and verbatim memory traces (Brainerd & Reyna, 2004) itself provides a way to predict how event frequency may influence the likelihood of cue-matching. If repeated similar experiences strengthen gist traces in memory, the accessibility of gist traces is likely to be increased relative to verbatim traces. That is, after experiencing a repeated event, a larger range of cues will successfully access a gist trace than any given related verbatim trace. Thus, the likelihood that a gist trace will be retrieved by any particular cue, even if that cue is episodically-matched, may be greater than a verbatim trace.

Of course, when one is interested in recall of episodic details – as investigators in the forensic arena are likely to be – facilitating recall of generic details is of reduced interest relative to instance-specific, or episodic, details that may be corroborated more easily. However, there is additional evidence to suggest that facilitating recall of episodic memories may also have utility for the quality of information children are able to provide. Brainerd, Wright, Reyna, and

Mojardin (2001) found evidence that relying on gist memory (i.e., through the use of generic cues in the present context) can lead to the development of phantom recollections – an impression that a never-experienced detail was indeed experienced. Although primarily studied in a lab context, it may be the case that such a pattern generalizes to more real-world contexts which could mean that children would be more likely to report inaccurate information when probed with generic cues. Though we do not have empirical data that addresses the risk of the development of phantom recollections in response to generic prompts in forensic interviews, the possibility is of concern and should be viewed as an additional potential risk of relying on generic prompts.

The specificity of children's responses may be of particular interest because of its relations with perceptions of children's credibility. Connolly, Price, Lavoie, and Gordon (2008) found that children who described a singly-occurring event were perceived of as more credible than children who described a single instance of an event they had experienced repeatedly, even when equally accurate. Given the findings of Fivush (1984) and Hudson and Nelson (1986) that the language children use when describing repeated instances may differ (e.g., more present tense and generic responses), the language differences may very well help to explain why these children were seen as less credible. In the present study, generic language was reported more often in response to generic questions. If interviewers ask generic questions of children who have experienced repeated abuse, they may be putting the children at an even greater disadvantage. Should less specific, more script-like language diminish the perceived credibility of children, the finding that interviewers may adjust their questioning style in a less-than-advantageous way should be further explored.

Developmental differences

Consistent with the findings of Powell and Thomson (1996), older children reported more episodic information than younger children. Whether the question is generic or episodic, it is not surprising that older children provided more detail than younger children as this pattern has been clearly demonstrated in prior research (Hudson, 1990; Hudson & Nelson, 1986; Lamb et al.,

2003). In the present study, the overall larger number of details reported by older children appeared to be the case regardless of the number of episodic questions posed (i.e., there was no relationship between age and the mean number of episodic questions posed to children). This result suggests that the oft-reported finding that older children report more information than younger children may be driven primarily by the additional episodic information reported by older children than by younger children – a finding with implications for enhanced retrieval of legally-relevant information from child victims/witnesses. Further research addressing how interviewers can improve the amount of episodic information all children can report - without posing highly specific questions - is clearly desirable.

Caveats

The present study was a naturalistic examination of forensic interviews, and we were thus unable to equally distribute case characteristics like allegation type and age across conditions. That we found such strong relations in spite of such variability, however, gives support to the existence of the reported relations. Similarly, our focus on real-world interviews precluded information about the accuracy of children's allegations. Nevertheless, additional systematic research on these and other characteristics of children and their allegations may yield some very interesting results. Such queries may provide the groundwork for recommendations to forensic interviewers about posing effective questions to children alleging various types of crimes against them.

Conclusion

The present findings make it clear that the properties probed by interviewer questions are closely related to the properties of children's responses. Further, characteristics of the case (e.g., frequency of alleged abuse) may influence interviewers' selection of questions. It is noteworthy that the children were highly responsive to the way in which interviewers posed their questions (i.e., responding with episodic information when asked episodic questions). Awareness of this responsiveness should facilitate improved training for interviewers: If investigators seek episodic information from children, as they often do, it is clear that training programs should focus on

prompt selection tendencies and developing strategies for posing non-suggestive, episodically-focused questions.

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Table 1.

Case characteristics.

		Single allegation	Repeated allegation
Type of abuse	Physical	6	32
	Sexual	9	2
	Other	2	0
Mean age		9.81 (<i>SD</i> = 3.31)	8.80 (<i>SD</i> = 3.07)

Table 2.

Mean number (standard deviations) of prompt and detail type

Allegation	Interviewer prompts		Child responses	
	Generic	Episodic	Generic	Episodic
Single	48.00 (23.11)	51.53 (32.39)	463.59 (278.43)	570.06 (368.00)
Repeated	68.18 (45.06)	28.24 (22.00)	811.91 (694.40)	351.03 (306.23)

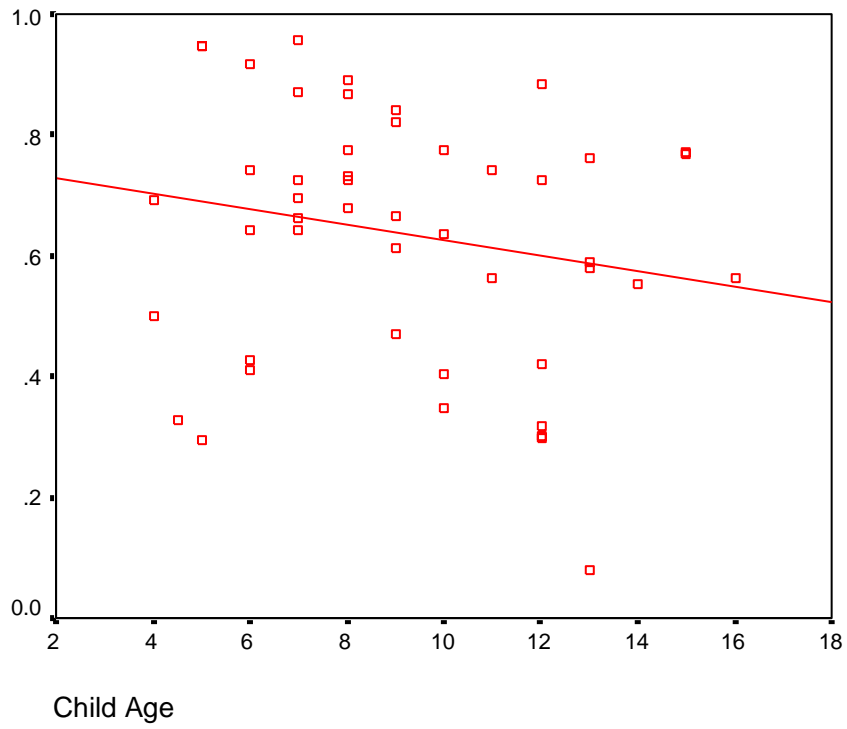


Figure 1.

Proportion of interviewer prompts that were generic in relation to children's ages.

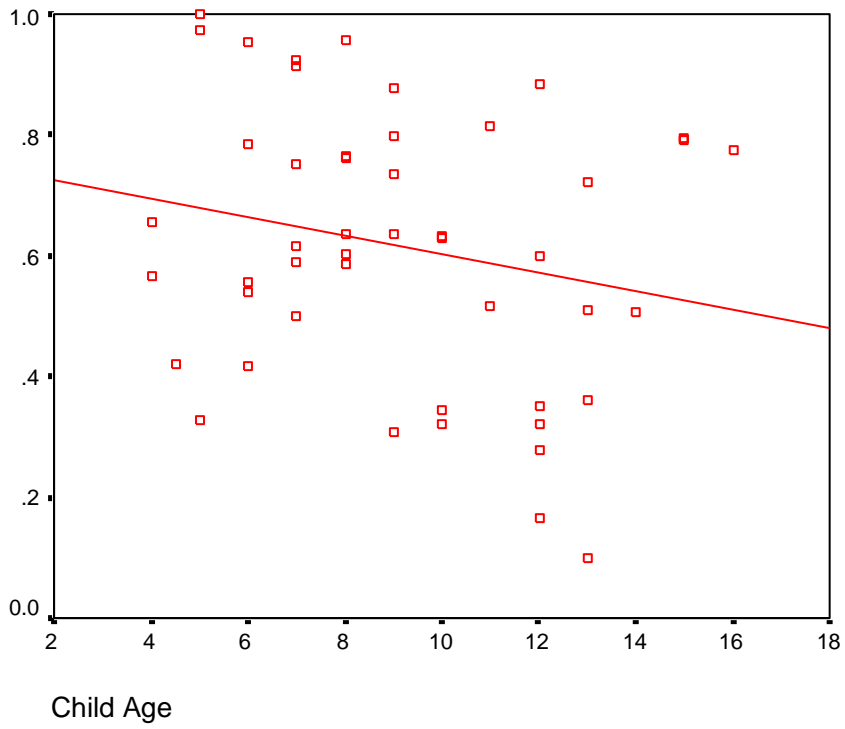


Figure 2.

Proportion of children's response that were generic in relation to children's ages.

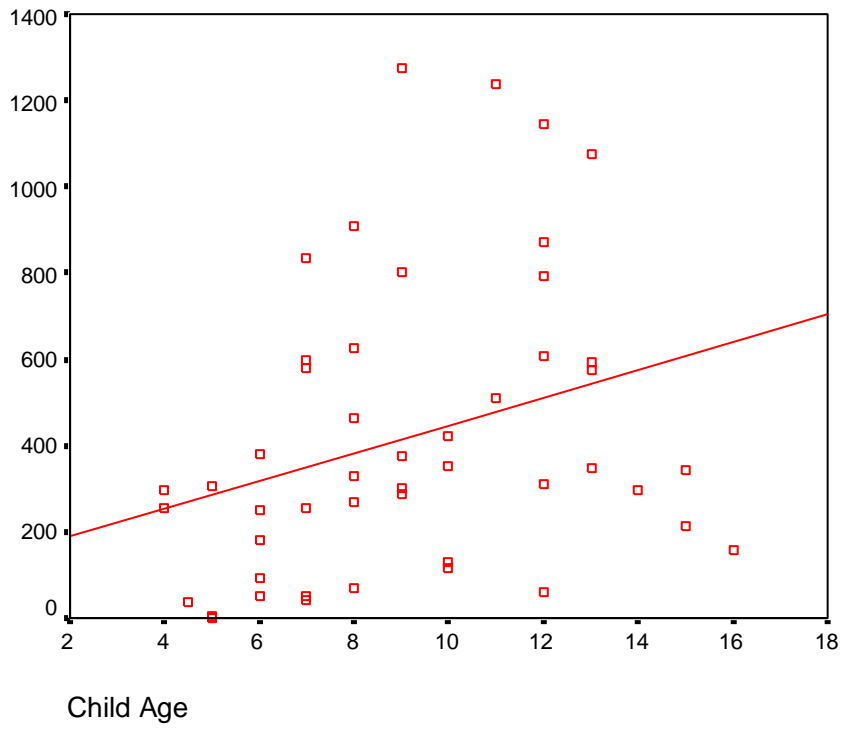


Figure 3.

Mean number of episodic details reported by children in relation to children's ages.