
Asked and Answered: Questioning Children in the Courtroom

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In the present experiment, we analysed court transcripts in which children aged 5 to 13 years provided the key evidence in sexual abuse trials. We developed two separate coding schemes for lawyers' questions and children's responses. Consistent with past research, defence lawyers conducting cross-examination asked a higher proportion of complex, grammatically confusing, credibility-challenging, leading, and closed questions than prosecution lawyers. In responding to defence lawyers' questions, child witnesses rarely asked for clarification and often attempted to answer questions that were ambiguous or did not make sense. Furthermore, over 75% of children changed at least one aspect of their testimony during the cross-examination process. These findings have important implications for the way in which children are examined in court.

With increasing frequency, children are being called to act as witnesses in adversarial trials. This increase has resulted in an explosion of research into children's capacities to encode, store, and retrieve information. Accurate memories relating to the event in question, however, go only some of the way to ensuring that child witnesses provide reliable and accurate testimony. Child witnesses must also possess the linguistic competence necessary to comprehend and respond to courtroom questioning.

The concern that child witnesses will not be able to understand the questions posed to them in the courtroom context has been raised both by child advocates (Pipe & Henaghan, 1996) and by the children themselves (Sas, 1990). Some research has illustrated that this concern may be valid. Much of the questioning conducted by lawyers during legal trials has been shown to exceed the language capacities of children. A number of studies, for example, have indicated that many children are unfamiliar with or misunderstand legal

terms commonly used in the courtroom (e.g., Flin, Stevenson, & Davies, 1989; Saywitz, Jeanicke, & Camparo, 1990). Other studies have suggested that children are unable to comprehend many aspects of syntax that are commonly used in legal settings (e.g., Brennan & Brennan, 1988; Carter, Bottoms, & Levine, 1996; Saywitz & Snyder, 1993). Researchers have also raised concerns over the content and the pragmatic elements of courtroom questioning (e.g., Saywitz, 1995; Saywitz, Nathanson, & Snyder, 1993; Snyder & Linstedt, 1995; Walker, 1993).

Adding to the developmentally inappropriate nature of some courtroom questioning is the fact that children frequently have difficulty detecting whether or not they have understood a question (Carter et al., 1996; Markman, 1977, 1979; Singer & Flavell, 1981). Children who have not understood a question rarely seek clarification (Markman, 1977, 1979; Saywitz & Snyder, 1993), and are likely to attempt answers to complex, or

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even nonsensical, questions (Hughes & Grieve, 1980; Markman, 1979; Perry, McAuliffe, Tam, Claycomb, Dostal, & Flanagan, 1995; Pratt, 1990; Saywitz & Snyder, 1993; Waterman, Blades, & Spencer, 2000).

The research mentioned above, along with a number of well publicised sexual abuse trials involving inappropriate interviewing, has heightened awareness about the importance of interviewing child witnesses in a developmentally appropriate manner. Recently, a number of researchers have identified the most appropriate ways for prosecuting lawyers and evidential interviewers to question children (e.g., Saywitz, 1995). Changes to many legal systems have also made certain that children are interviewed in a manner that maximizes their chance of providing accurate testimony. In New Zealand, for example, strict guidelines for evidential interviewers ensure that children alleging abuse are interviewed in a non-biased, developmentally appropriate, way. Furthermore, a child's videotaped evidential interview may now be used in the courtroom in the place of live, direct evidence.

Despite changes to the policy and practice of direct evidence gathering and presentation, prosecutors and evidential interviewers are not the only professionals who interview child witnesses. During an adversarial trial, children who allege or witness crime are also interviewed by the defence lawyer acting for the accused, a process known as cross-examination. The defence lawyer's primary goal during cross-examination is to discredit the witness's testimony (Glissan, 1991). Although changes to legislation and practice in many countries have been aimed at making the testifying process more appropriate for child witnesses, little attention has been paid to the cross-examination procedure.

Several aspects of the cross-examination interview make it potentially problematic for child witnesses. First, unlike prosecution lawyers and evidential interviewers, defence lawyers conducting cross-examination are permitted to use leading questions, in which the desired answer is suggested or disputed facts are assumed. Children's acquiescence to misleading questions is a well-documented phenomenon (see Ceci & Bruck, 1993, for a review).

Second, children in the courtroom tend to rely on everyday conversational conventions, where the prevailing atmosphere is likely to be one of politeness, acceptance, and sincerity. As a result, they may expect a degree of sincerity that is not present

during cross-examination. Even if children become aware of this conflict between their expectations and reality, they are likely to find it confusing and difficult to deal with, especially when the apparent sincerity of a defence lawyer may not remain constant within the testifying period (Snyder & Lindstedt, 1995).

Finally, the unique structure of the cross-examination interview may hinder a child's ability to provide reliable and valid testimony. Contrary to interactions outside the courtroom, where adults readily provide a framework for children's recollections (Nelson, 1993), children's narratives in the legal setting are far less supported. During cross-examination, the defence lawyer asks questions in such a way as to structure and control the information to be recounted (Glissan, 1991). Structural cues that children rely on, such as those that signal a change in conversation topic, are seldom present during the cross-examination process (Brennan & Brennan, 1988).

The few studies that have looked at defence lawyers' questions during cross-examination have invariably found that the language they use is inappropriate for children (e.g., Brennan & Brennan, 1988; Davies & Seymour, 1998; Perry et al., 1995; Walker, 1993) and even adults (Perry et al., 1995). Davies and Seymour (1998), for example, conducted a study of New Zealand court transcripts of sexual abuse trials involving a child complainant. Many of the linguistic structures used during cross-examinations were deemed to be inappropriate for children, including questions involving more than one part, questions involving inappropriate use of negatives, questions phrased in the passive tense, tagged questions, and ambiguous questions. These questions were asked more frequently by defence lawyers than by prosecuting lawyers or evidential interviewers.

Studies examining children's question comprehension and clarification-seeking have also suggested that cross-examination may pose particular problems for the child witness. Waterman et al. (2000), for example, found that children's willingness to answer nonsensical questions may depend on whether the question is open (and thus has an unlimited range of responses) or closed (and thus has a restricted range of responses). In the Waterman et al. study, 5- to 8-year-old children attempted to answer 75% of nonsensical closed questions (e.g., "Is a box louder than a knee?"), but only a small proportion of nonsensical open

questions (e.g., "What do bricks eat?"). In other words, children were far more likely to answer nonsensical questions when the required response was merely "yes" or "no". Given that defence lawyers conducting cross-examination frequently ask children questions that require only "yes" or "no" answers (Davies & Seymour, 1998), Waterman et al.'s findings raise the possibility that children may be particularly prone to answering questions that they do not understand during the cross-examination process.

The recently-documented tendency of cross-examining lawyers to ask developmentally inappropriate questions, in conjunction with children's tendency to attempt answers to these types of questions, will inevitably result in inaccuracies, and therefore inconsistencies, in children's statements. These inconsistencies may occur, for example, when a child responds to part, but not all, of a long, complex question, or recognises the question as a yes/no question and offers a response. Contradictions to earlier testimony in these cases will occur not because children are purposefully lying, but because they are attempting to use a skill that they do not possess (Saywitz et al., 1993). Unfortunately for these children, the highlighting of inconsistencies in a witness's statement is a fundamental goal of cross-examination (Glissan, 1991). Such contradictions may therefore decrease the child's credibility in the eyes of the jury, and have undue influence on the outcome of the case.

The extent to which children become inaccurate in response to cross-examination questioning is not yet known. Despite an increasing number of studies looking at the actual questions used by defence lawyers in the courtroom, studies have yet to fully examine children's responses to these questions. This gap in the literature raises the following research questions: Can children understand, monitor their comprehension, and produce sufficient responses to make their stories understood during cross-examination? Or, do the types of questions commonly used during cross-examination result in confusion, suggestibility, and inconsistency in the child witness?

The present experiment examines both the language used by prosecution and defence lawyers when examining children in the courtroom and the children's responses to these styles of questioning. To this end, we examined court transcripts in which child complainants of sexual abuse were examined and cross-examined. We individually

coded the lawyers' questions and the children's responses into categories so that the proportions of different types of lawyers' questions, as well as the types of child responses elicited by these questions, could be ascertained.

Method

Court Transcripts

To obtain suitable transcripts of examinations and cross-examinations of child sexual abuse complainants, written permission for the experiment was first obtained from the Chief District Court Judge of New Zealand. Following this, all District Court Judges in New Zealand were contacted by letter explaining the purposes of the research and requesting copies of court transcripts in which children aged up to 13 years alleging sexual abuse gave evidence. After all identifying information had been removed, suitable transcripts were sent to the authors.

Transcripts of 18 examinations-in-chief and re-examinations, and 21 cross-examinations were obtained (examinations-in-chief and re-examination questions were not available for 3 of the transcripts). This resulted in a total of 600 examinations-in-chief and re-examination questions, and 2935 cross-examination questions for analysis. The number of cross-examination questions is significantly larger than those asked during examinations-in-chief and re-examinations because many of the children provided much of their direct evidence via videotape and transcripts of these interviews were not available. The mean age of child witnesses in these transcripts was 9.5 years ($SD = 2.12$ years, range = 5 to 13 years).

Coding

Each question asked by defence and prosecuting lawyers was classified into one or more of seven categories (see Table 1). Five of these categories (Complex Questions, Grammatically Confusing Questions, Credibility-challenging Questions, Leading Questions and Closed Questions) comprised the basic types of inappropriate questions reported in past studies of cross-examination questioning (e.g., Brennan & Brennan, 1988; Davies & Seymour, 1998; Davies, Henderson, & Seymour, 1997). Two additional categories were included to assess the use of questions that did not fall into the five categories mentioned above. Questions falling into these two categories were considered to be

Table 1
Coding Categories for Lawyers' Questions

Question Category	Example
1. Complex Questions (COMP) Inappropriate Negation Embedded Clauses Complex Vocabulary Complex Concepts for Children Unannounced Change of Topic Two or more questions	"So neither of your brothers weren't there?" "Is that the lady who you told about [X] touching you?" "Is it your evidence that ... ?" "How tall was he?" For example, change from talking about details of abuse to school "Did you go to the beach and then did he take you to the shops?"
2. Grammatical Confusion (GRAM) Ambiguous Question Grammatical Error Fumble	"Was she in the kitchen?" when previously discussing mother and sister. "Did she ate something?" "Could you ... was there a window?"
3. Questioning Credibility (CRED)	"I don't think that's what really happened."
4. Leading Question (LEAD)	"And you went somewhere else after that?"
5. Closed Question (CLOS)	"Was it a cold day?"
6. Appropriate Question (APPR)	"Can you tell me what [X] was wearing?"
7. Reference to Earlier Testimony (EARL)	"You said before that ... "

appropriate (Appropriate Questions) or neutral (References to Earlier Testimony).

Children's responses to the lawyers' questions were individually coded into one or more of 9 categories (Table 2). These categories were designed to assess the cognitive strategies that children used to respond to the lawyers' questions. As such, the categories included adaptive strategies (e.g., indicating uncertainty, asking for clarification, giving clarification), and well as potentially unhelpful strategies (e.g., silence, complying with leading, changing earlier testimony).

Results

Two experimenters independently coded 25% of the transcripts, yielding an inter-observer reliability of 89% ($\kappa = 0.84$).

Because full transcripts of examinations-in-chief and re-examinations were not always available, the absolute number of questions that were coded differed notably across lawyer (defence or prosecution). As such, proportions of each question category were calculated separately for each lawyer. This was done by dividing the total number of questions in a given category by the total number

of questions asked by that lawyer. Because some of the lawyers' questions could be assigned to more than one question category, the sum of the seven category proportions for lawyers' questions was greater than 1.0.

Proportions of each category of child response were calculated in a similar way. Again, although each response could be assigned to more than one of the nine response categories, it should be noted that some of children's responses could not be assigned to any category. As a result, the sum of the nine category proportions for children's responses did not equal 1.0.

Lawyers' Questioning Style

The first analyses were designed to compare the styles used by prosecuting lawyers (during examinations-in-chief and re-examinations) and defence lawyers (during cross-examination), and to determine whether the style of either group of lawyers differed as a function of the child's age. To conduct these analyses, children were assigned to one of two age groups: 10 years of age or older ($n = 11$, mean = 11.4 years, $SD = 1.4$ years), and under 10 years of age ($n = 10$, mean = 7.8 years, $SD = 1.3$ years).

Table 2

Coding Categories for Children's Responses

Response Category	Example/Explanation
1. No Response (NOR)	Child remains silent, lawyer either asks question again or continues.
2. Uncertainty (UNC) Expresses Uncertainty Not certain when asked Baulk	"I don't know." Lawyer: "Can you remember ..." Child: "No." "I don't know ... Yes."
3. Seeks Clarification (SCL)	"I don't know what you mean."
4. Gives Clarification (GCL)	Provides more detail than requested.
5. Uses Complex Language (CPX)	As coded in lawyer category (COMP).
6. Misunderstanding (MIS)	Child's response inappropriate, indicating misunderstood question.
7. Complies (COM)	"Yes" to a Leading or Closed Question.
8. Resists (RES)	"No" to a Leading or Closed Question.
9. Changes Story (CHG)	Contradicts evidence given previously.

The proportions of questions in each category were subjected to a 2 (Child Age) \times 2 (Lawyer) \times 7 (Question Category) Analysis of Variance (ANOVA) with repeated measures over Question Category. There was no main effect of age and age did not enter into any significant interaction. There was a main effect of lawyer, $F(1, 35) = 25.95, p < .01$ and a main effect of question category, $F(6, 210) = 45.55, p < .01$. These main effects, however, were qualified by a significant Lawyer \times Question Category interaction, $F(6, 210) = 34.00, p < .01$. This interaction is shown in Figure 1.

To evaluate the Lawyer by Question Category interaction, each Question Category was subjected to a one-way ANOVA across Lawyer. There was a significant effect of lawyer for each question category, but the direction of the difference differed across categories. On the one hand, defence lawyers asked a greater proportion of complex, $F(1, 37) = 18.51, p < .01$, grammatically confusing, $F(1, 37) = 6.98, p < .05$, credibility-challenging, $F(1, 37) = 43.01, p < .01$, leading, $F(1, 37) = 36.57, p < .01$, and closed questions, $F(1, 37) = 10.41, p < .01$ (see Figure 1, Inappropriate Questions). On the other hand, prosecution lawyers asked a greater proportion of appropriate questions, $F(1, 37) = 98.97, p < .01$, and made a

greater proportion of references to children's earlier testimony, $F(1, 37) = 16.49, p < .01$ (see Figure 1, Appropriate or Neutral Questions).

Children's Responses

The second analyses were designed to assess children's responses to the lawyers' questions as a function of lawyer and child age. The proportion of children's responses in each category were subjected to a 2 (Child Age) \times 2 (Lawyer) \times 9 (Response Category) ANOVA with repeated measures over Response Category. Once again, there was no main effect of age and age did not enter into any significant interaction. There was a main effect of lawyer, $F(1, 35) = 52.51, p < .01$, and a main effect of response category, $F(8, 280) = 113.87, p < .01$. These main effects, however, were qualified by a significant Lawyer \times Question Category interaction, $F(8, 280) = 3.88, p < .05$. This interaction is shown in Figure 2.

To evaluate the Lawyer by Response Category interaction, the proportion of children's responses in each response category was subjected to a one-way ANOVA across Lawyer. There was a main effect of lawyer on children's provision of extra information, $F(1, 37) = 4.68, p < .05$, child misunderstandings, $F(1, 37) = 5.08, p < .05$, compliance

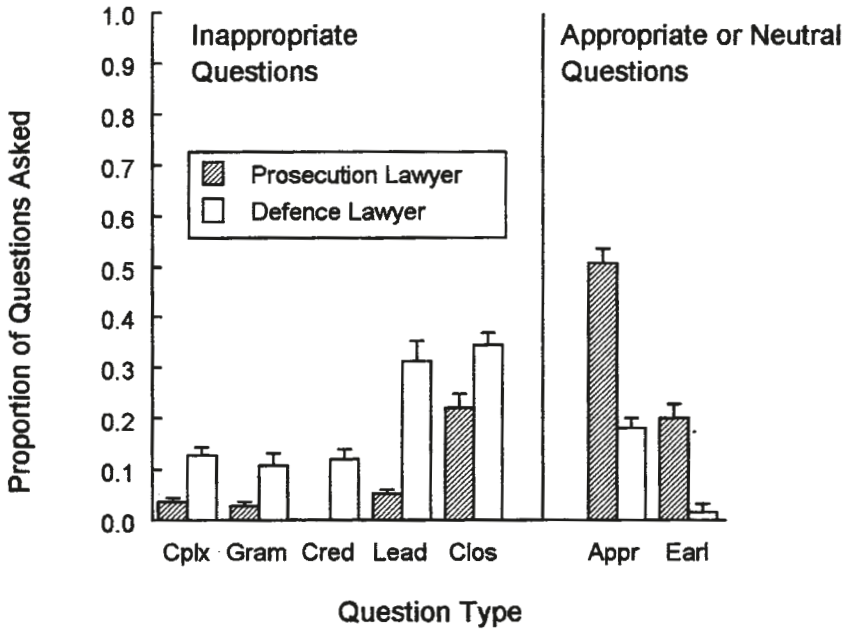


Figure 1

Proportion of questions (+ 1 SE) asked by prosecution and defence lawyers, as a function of question category (Cplx = complex questions; Gram = grammatically confusing questions; Cred = credibility-challenging questions; Lead = leading questions; Clos = closed questions; Appr = appropriate questions; Earl = references to earlier testimony).

to leading or closed questions, $F(1,37) = 8.39$, $p < .01$, resistance to leading or closed questions, $F(1,37) = 7.34$, $p < .05$, and changes to earlier testimony, $F(1,37) = 21.94$, $p < .01$. Children exhibited a greater proportion of these responses following questions by defence lawyers relative to questions by prosecution lawyers (see Figure 2). Notably, 76% of children in the present study made changes to one or more of their earlier statements under cross-examination. Of these children, the number of changes made ranged from 1 to 16 ($mean = 3.56$, $SE = 0.86$). None of the children in the study made changes to their earlier testimony in response to questioning by prosecution lawyers. Ninety-five per cent of changes during cross-examinations were made in response to leading questions, credibility-challenging questions, or combinations of both. Only 5% of changes made during cross-examinations were preceded by

appropriate questions.

Lawyer–Child Interactions

The next stage of the analysis was to determine whether the differences in the proportions of children’s responses to prosecuting and defence lawyers’ questions were due to differences in the questions per se, or to children’s reactions to the lawyers themselves. There are several reasons why children could potentially respond differently to prosecution lawyers and defence lawyers: for example, children are likely to be more familiar with the prosecuting lawyer.

For the purpose of this analysis, the data were organised into “couplets”, each containing one lawyer’s question and the child’s response to that question. In this way, children’s responses to specific types of questioning could be examined. Proportions of particular question-response combinations were

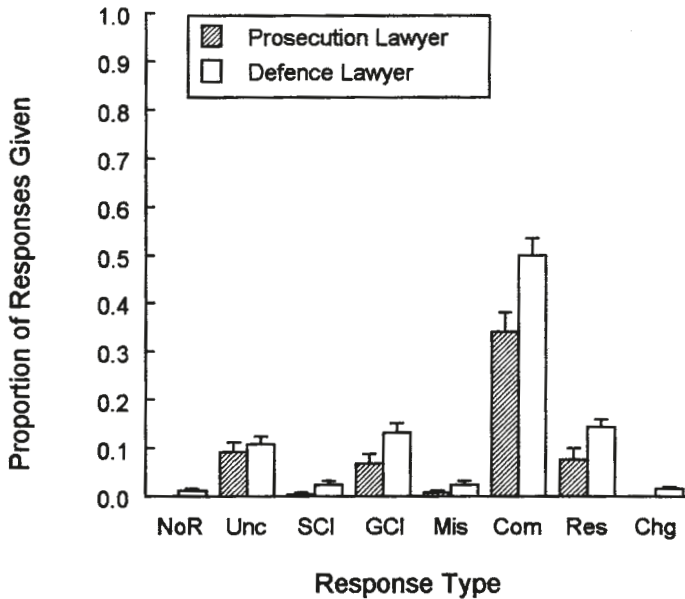


Figure 2

Proportion of children's responses (+ 1 SE) to prosecution and defence lawyers, as a function of response category (NoR = gives no response; Unc = indicates uncertainty; SCI = seeks clarification; GCl = gives clarification; Mis = misunderstands question; Com = complies with leading or closed questions; Res = resists leading or closed questions; Chg = changes earlier testimony).

then calculated separately for each transcript. Details of these combinations appear in Table 3 (see Table 1 and Table 2 for coding definitions of lawyers' questions and children's responses).

The response categories listed in Table 3 were subjected to a series of separate 2 (Child Age) \times 2 (Lawyer) ANOVAs.

Lawyer effects. There was a main effect of lawyer on the proportion of grammatically confusing questions to which children gave extra information, $F(3, 25) = 6.38, p < .05$ (see Table 5.3, Category 13). Children were more likely to provide extra information to grammatically confusing questioning from the defence lawyer (mean = 0.15, $SE = .04$) than the prosecution lawyer (mean = 0, $SE = 0$), but the absolute difference was very small. There were no main effects of lawyer for any of the remaining 13 variables.

Age effects. There was a main effect of child age on the proportion of complex questions to which the child sought clarification (see Table 3, Category 8), $F(3, 25) = 4.66, p < .05$. Older children (mean = 0.151, $SE = .07$) were more likely than younger children (mean = .004, $SE = .004$) to ask lawyers to clarify these types of questions, but, again, the absolute difference was very small. There was no main effect of age group for any of the remaining 13 variables. There were also no significant Lawyer \times Child Age interactions for any variable.

Length of Questioning

Because full transcripts of examinations-in-chief and re-examination were not always available for each child complainant, it was not possible to compare the total number of questions asked by defence and prosecuting lawyers. It was possible, however, to assess whether the number of questions

Table 3
Question-Response Categories

Category	Lawyer Question	Child Response
1	Leading	Complies
2	Leading	Resists
3	Closed	Complies
4	Closed	Resists
5	Reference to Earlier Testimony	Complies
6	Reference to Earlier Testimony	Resists
7	Complex	Misunderstands
8	Complex	Seeks Clarification
9	Complex	Gives Clarification
10	Complex	Indicates Uncertainty
11	Grammatical Confusion	Misunderstands
12	Grammatical Confusion	Seeks Clarification
13	Grammatical Confusion	Gives Clarification
14	Grammatical Confusion	Indicates Uncertainty

asked during cross-examination was related to the child witness's age. The number of questions asked during cross-examinations ranged from 21 to 405 (mean = 139.8, $SD = 21.4$). A one-way ANOVA across Child Age revealed no effect of this variable on the number of questions asked during cross-examination. Furthermore, there was no significant Pearson's Product-Moment correlation between child age and number of questions asked during cross-examination.

Discussion

The present experiment was designed to examine both the language used by defence lawyers when cross-examining children, and the responses of the children to this style of questioning. Defence lawyers conducting cross-examination asked children a higher proportion of complex questions, grammatically confusing questions, credibility-challenging questions, and closed/leading questions, as compared to prosecuting lawyers conducting direct examination. Children exhibited high rates of misunderstanding and compliance with leading and closed questions, and a low rate of clarification-seeking. Furthermore, over 75% of children changed at least one part of their earlier testimony during cross-examination.

Lawyer's Questions

Notably, children's age had no effect on the types of questions asked by either prosecuting or defence lawyers. Because prosecuting lawyers asked children a high proportion of simple, appropriate questions, it was not expected that these lawyers would moderate their questioning depending on the age of the child. Defence lawyers, on the other hand, asked a large proportion of complex questions, and did not appear to make allowances for the child witness's developmental level.

Some of the differences between the questioning styles used by prosecution and defence lawyers in the present study were anticipated. For example, during cross-examination, lawyers are permitted to use leading questions (Glissan, 1991). As such, it was expected that defence lawyers in the present experiment would ask child witnesses more leading questions than prosecuting lawyers. Likewise, challenges to children's credibility are also typically limited to defence lawyers. Defence lawyers' higher use of complex and grammatically confusing questions in the present study, however, is not accounted for by differences in legal practice or counsel's viewpoint.

The present finding that defence lawyers ask children significantly more inappropriate questions than prosecuting lawyers is highly consistent with previous research (e.g., Brennan & Brennan, 1988; Davies & Seymour, 1998; Flin, Bull, Boon, & Knox, 1992; Goodman et al., 1992; Perry et al., 1995; Walker, 1993). In their study, Davies and Seymour

(1998) found that New Zealand defence lawyers asked a higher proportion of negative rhetorical questions, multifaceted questions, and ambiguous questions than prosecuting lawyers. In a similar study conducted in Australia, Brennan and Brennan (1988) also found that defence lawyers conducting cross-examination frequently used multifaceted questions, unclear or confused expressions, and inappropriate use of negatives. Both of these studies concluded that there was a clear mismatch between courtroom language and the language capabilities of the children being questioned.

There are two main ways to account for the difference between defence and prosecution lawyers' use of complex and grammatically confusing questioning. First, defence lawyers' increased use of inappropriate questions may be entirely unwitting. Unlike prosecuting lawyers who may specialise in representing child witnesses, lawyers who represent adults charged with criminal offences may have a limited knowledge of what constitutes appropriate questioning for children. Furthermore, cross-examination questions typically rely on the witness's response to the previous question, and therefore tend to be more unplanned than direct questioning. In both of these cases, defence lawyers may accidentally ask children a higher proportion of inappropriate questions than that asked by prosecution lawyers.

Second, inappropriate questioning by defence lawyers may not always be accidental. It has been suggested that defence lawyers use this kind of questioning to deliberately confuse their witnesses (Davies & Seymour, 1998; Perry et al., 1995). Given the finding that children are more suggestible when they are asked questions that confuse them (Davies & Noon, 1991; Goodman & Aman, 1990), employing complex language would serve a purpose for the defence lawyers, whose aim is to challenge the opposing witness's credibility.

Children's Responses

The analysis of children's responses to the lawyers' questions suggested that, on a cognitive level, children do not cope well with the cross-examination process. First, despite defence lawyers' frequent use of confusing, complex, and ambiguous questions, children seldom requested additional clarification. This finding is highly consistent with past research (e.g., Markman, 1977, 1979; Saywitz & Snyder, 1993). Children may not have been aware that they did not understand a given question (Carter et al.,

1996), or may have been too nervous or fearful to request clarification (Saywitz & Snyder, 1993).

Furthermore, children frequently misunderstood the questions posed to them during the cross-examination process. Notably, the proportion of child misunderstandings in the present experiment is likely to have been underestimated. Misunderstandings were only coded when it was clear from the child's response that the question had been misinterpreted. Given defence lawyers' frequent use of ambiguous questions requiring only a "yes" or "no" answer (e.g., "was she crying?"; when potentially talking about a child's mother *or* teacher), it is likely that many further misunderstandings occurred in the transcripts, but were not apparent from children's responses. As Walker (1993) suggests, just because a child gives *an* answer to a question, this does not mean that he or she is giving *the* answer.

Overall, the composition of children's responses was not contingent on children's age. Older children (> 10 years), however, were more likely than younger children (< 10 years) to seek clarification for complex questions asked by either lawyer. This finding is highly consistent with past research (Hughes & Grieve, 1980; Markman, 1977, 1979; Perry et al., 1995; Pratt, 1990; Saywitz & Snyder, 1993; Waterman et al., 2000). One likely explanation for this finding is that younger children may have insufficient metacognitive skills to judge whether or not they have understood a question. Carter et al. (1996) have suggested that children below the age of 8 years cannot reliably detect non-comprehension.

Children's differential reactions to the lawyers' questions in the present experiment were largely due to the type of questions asked. Analysis of question-response couplets indicated that many of the differences in the way that children responded to defence or prosecution lawyers were due to differences in the lawyers' questioning styles, rather than nonverbal aspects of interviewing (e.g., the lawyer's viewpoint, the lawyer's verbal tone, or the speed or volume of the lawyer's voice). The only contingency that differed with respect to lawyers was the proportion of grammatically confusing questions to which children gave additional information.

The finding that children's responses depend largely on the type of questions asked, and not the lawyer posing them, is encouraging, as it suggests that cross-examination can be made more appro-

appropriate for children merely by changing the types of questions deployed. Had children responded differently to prosecution and defence lawyers, regardless of the types of questions asked, it may prove more difficult to make cross-examination more appropriate for the child witness.

Issues in the Examination of Court Transcripts

The use of court transcripts in the present experiment had both advantages and disadvantages. On a positive note, all court cases are routinely transcribed by a court stenographer. In this way, it was possible to obtain and study a large number of transcripts in a relatively short time. Furthermore, geographical and temporal constraints would have made it impossible to attend each individual case studied in the present experiment. Finally, studying transcripts meant that a hard copy of each interview was readily available, should recoding or closer inspection be necessary.

Despite its advantages, there are disadvantages to studying court transcripts. Many of these have been outlined by Walker (1993). First, when studying transcripts, we have no information about the emotional tone taken during the questioning (e.g., aggressive, nurturing, sarcastic, accusatory), the clarity of the intonation, and the speed of speech. Furthermore, many helpful cues, such as pauses and hesitations, are unavailable. Take, for example, the question "What were you thinking at that time? Did you go into your bedroom and think?" If the child did not respond to the first part of this question, it may be appropriate that the lawyer would continue, perhaps with a more specific question. On the other hand, no pause between these two questions would constitute inappropriate questioning.

Further adding to difficulties in analysing transcripts is the fact that verbal interaction in the courtroom is frequently transcribed so as to be readable, and as such may not be completely verbatim (Walker, 1993). The extent to which stenographers correct adult and child speech errors is difficult to determine, but indicates that the proportion of lawyers' grammatically confusing questions may have been underestimated in the present study.

Studying court transcripts also meant that it was not possible to ascertain the length of child cross-examinations in the present experiment. The number of questions asked during cross-examinations, however, ranged from 21 to 405. Allowing approximately 10 seconds for each question to be

asked and answered, cross-examinations were estimated to be between 3 and 70 minutes in duration. This duration is consistent with data obtained overseas (e.g., Davies & Noon, 1991; Flin et al., 1992).

Finally, it is impossible to evaluate the accuracy of children's testimony when examining court transcripts. Even if conviction information had been available in the present study, we cannot assume that children whose testimony led to conviction were accurate, or that children whose testimony did not lead to a conviction were not telling the truth. Given the finding that 75% of the children in the present study changed at least one part of their testimony during cross-examination, measures of accuracy are paramount. If a child changed part of his or her testimony under cross-examination, it follows that this child has made an inaccurate statement at some point during the testifying process. Because changes could be made towards or away from the truth, it is imperative to examine whether cross-examination has a negative effect on children's accuracy. We have recently developed a laboratory analogue of cross-examination so that children's accuracy before and after this process can be ascertained.

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