

**Title:** Investigative interviews with victims of child sexual abuse: The relationship between question type and investigation relevant information

**Running Title:** Investigative interviews with victims of child sexual abuse

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## **Abstract**

This study examined the influence of question type during investigative interviews with victims of child sexual abuse and the number of items of Investigation Relevant Information (IRI) obtained during the interview. Twenty-one real-life police interview transcripts from an English police force were analysed across different age groups. As predicted, considerably more items of IRI were elicited from *appropriate* questions (e.g. *open, probing, and encouragers*) than *inappropriate* questions (e.g. *echo probes, closed, forced choice, leading, multiple and opinion/statement*). Also as predicted, the number of items of IRI elicited increased with the age of the child witness, with older children disclosing the most items of IRI, regardless of whether the abuse was recent or historic.

## **Introduction**

### ***Background***

Within any criminal investigation, collection of evidence from various sources is essential in order to achieve a successful prosecution (Holmberg, 2004). The basic investigative questions to be raised by interviewing officers in their decision-making process include: (i) is the information obtained from the child relevant to the investigation; (ii) are there other witnesses that require interviewing; (iii) is there any forensic evidence (e.g. medical, biological or electronic) that should be retrieved and analysed; (iv) is the child's account coherent and testable given any available or possible future evidence; (v) does the child require to be re-interviewed, (vi) has any suspect/s been identified, and; (vii) do any other children require protection? (Myklebust & Oxburgh, 2011). The evidential collection process is often an amalgamation of information sought from a range of different sources including technical or forensic evidence (e.g. CCTV or DNA/fingerprints) and eye witness testimony (including investigative interviews from the victim and any possible witness/es). However, in many child sexual abuse (CSA) cases, there is little technical or forensic evidence and, thus, the nature of the offence means that there are likely to be few (if any) witnesses; invariably, it is the child's word against the alleged offender/s. With no other evidence typically available, the implicit assertion in investigative interviews of children is to gain detailed and accurate responses from the child to evaluate the viability of criminal charges (Myklebust & Bjorklund, 2010). As a result, the outcome of conversations between

children and police interviewers are more significant than those of everyday conversations and may have far-reaching consequences.

Over the past two decades, a commensurate amount of interest has been paid to the study of the investigative interviews of child witnesses (e.g. La Rooy, *et al.*, 2005; Lamb, *et al.*, 2007; Myklebust, 2009; Pipe, *et al.*, 2004). The implications of this research has been widely utilised in attempts to improve the interviewing of children by providing a more structured interview approach, thereby enabling children every opportunity to provide information about the alleged offence. In the literature relating to interviews with children, several variables have been studied with interviewers' utterances always being seen as an important variable. Lamb *et al.* (1996a) were some of the first to examine the relationship between the type of investigative utterances and childrens' responses in child abuse interviews. They analysed 22 interviews conducted by Israeli investigators and observed five types of investigative utterances: (i) *open ended* or *invitational*; (ii) *facilitative*; (iii) *directive*; (iv) *leading*, and; (v) *suggestive*. As predicted by Lamb *et al.*, children who experienced *open-ended* questions provided responses that were approximately three times longer, and up to three times richer in investigation details, than responses to any of the three other types of utterances (e.g. *direct, leading* or *suggestive*). Lamb *et al.*, also found similar results relating to the number of details elicited from the children. Detailed psycholinguistic analysis of 45 interviews of 4 to 12 year old children by police investigators from the USA confirmed (as found by Lamb *et al.*) that *open-ended* questions yielded responses that were three times richer in relevant details than responses to *closed* questions (Sternberg, *et al.*, 1996). In another

USA study by Lamb, *et al.* (1996b), which focused on verbal responses in child abuse interviews, 24 children were interviewed by investigators. The average responses by the children were significantly more detailed when *open-ended*, compared to *closed* questions were used.

### ***Legal and procedural framework***

Due to significant advances in our knowledge of the psychological processes involved in police interviews with children, the legal and procedural frameworks that govern them have also changed. These changes have been designed to improve the usability of children's testimony in court (e.g. Home Office, 2002; 2007; 2011) and to facilitate the obtaining of the best evidence possible. Following the implementation of The Criminal Justice Act (1991) in England and Wales, video/DVD recorded interviews with children are now widely accepted as 'evidence-in-chief'<sup>1</sup> during criminal prosecutions (Westcott, *et al.*, 2006). Similarly, the UK's Home Office has produced a number of guidance documents aimed at providing best practice structure for investigative interviews, which have included the Memorandum of Good Practice (Home Office, 1994) and the Achieving Best Evidence (ABE) documents (Home Office, 2002; 2007; 2011). These publications have implemented both structure and guidance in terms of legal, procedural and technical aspects of the investigative interviewing of children and vulnerable witnesses (Westcott *et al.*, 2006).

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<sup>1</sup> 'Evidence in Chief' enables the video or DVD recorded interview to be played to the court and admitted as evidence.

Much of the research that has fed into the production of these publications has come from psychological research (Sternberg *et al.*, 1996). Within the current ABE guidance (Home Office, 2011), it is recommended that interviews be structured using a number of stages to encourage children to recount details with a minimum level of prompting or leading from the interviewer. Following the initial rapport stage, where children are put at ease as much as possible by the interviewer, there should be a free-narrative phase. Ideally, interviewers should use predominantly *open* (e.g. *'Tell me about what happened'*) and *non-leading* questions (e.g. *'Can you describe for me whereabouts you were sleeping?'*) with minimal *closed* questions (e.g. *'Did you go out last night?'*) throughout the interview, where appropriate (Davies, *et al.*, 2000).

### ***Questioning styles***

The superiority of *open* questions in eliciting greater, more accurate and more truthful accounts has been echoed through a number of different research recommendations (e.g. Bull, 2010; Davies, *et al.*, 2000; Lamb, *et al.*, 1998; Lamb, *et al.*, 2009; Myklebust & Bjørklund, 2006; 2009; Oxburgh, Ost & Cherryman, 2010a; Oxburgh, Myklebust & Grant, 2010b; Poole & Lamb 1998). Such best practice is also promoted through investigative interviewing institutes such as the National Institute of Child Health and Human Development (NICHD; Lamb *et al.*, 2000b). They advocate the obtaining of information from children as a result of free recall (e.g. from *open* questions) rather than recognition prompts (e.g. *'Did it happen in the same way the second time he assaulted you?'*), which they argue results in three times more information being

obtained from the interviewee (Sternberg, *et al.*, 2001b). Other research has also suggested that information obtained from *open* questions is also more likely to be more accurate (Dale, *et al.*, 1978; Dent & Stephenson, 1979; Goodman & Aman, 1990; Goodman, *et al.*, 1991; Oates & Shrimpton, 1991; Orbach & Lamb, 2001 & Lamb & Garretson, 2003; Lamb, *et al.*, 2009).

However, despite the wealth of research identifying the benefits of *open* questions, the use of such questions during investigative interviews with child witnesses and adult suspects does not always occur in practice. Many have found that interviews contain mainly *direct*, *leading* and *suggestive* utterances (Aldridge & Cameron, 1999; Craig, *et al.*, 1999; Davies & Wilson, 1997; Lamb, *et al.*, 1996a; Lamb, *et al.*, 2009; Myklebust & Bjørklund, 2006; Oxburgh *et al.*, 2010a; Sternberg, *et al.*, 2001). Therefore, although interviewers may be aware of best practice guidelines (through training and empirical research) and the importance of using *open* questions, it appears that in practice, many do not use them (Aldridge & Cameron, 1999; Cederborg, *et al.*, 2000; Craig *et al.*, 1999; Myklebust & Bjørklund, 2006; Sternberg, *et al.*, 2001). The reason for this is, as yet unknown, although a number of researchers have suggested that the lack of a structured interview protocol in interviews may be a reason for interviewers using few *open* prompts (Orbach *et al.*, 2000; Sternberg, Lamb, Orbach, *et al.*, 2001) and that the key to ensuring that interviewers continually use *open* prompts is ongoing training and support for interviewers (Lamb, *et al.*, 2009). The present study has a particular focus on the types of questions that are used in investigative interviews, using a

sample of real-life interview transcripts with victims of CSA conducted in England and Wales.

### ***Investigation relevant information (IRI)***

Whilst *open* questions may well elicit longer, more truthful responses from children (Goodman & Aman, 1990; Goodman, *et al.*, 1991; Oates & Shrimpton, 1991; Bull, 1992; Fisher & Geiselman, 1993; Poole & Lamb, 1998; Orbach & Lamb, 2001 & Lamb & Garretson, 2003), this does not identify if the information provided is relevant to the overall investigation. In an attempt to ascertain what specific details were relevant to an investigation, Yuille and Cutshall (1986) categorised the elicited details and established three categories: (i) Person; (ii) Object and (iii) Action details.

Using Yuille and Cutshall's (1986) findings, various researchers (e.g. Lamb, *et al.*, 1996b; Lamb *et al.*, 2007; Milne & Bull, 2003; Oxburgh *et al.*, 2010a) have utilised and adapted this technique and incorporated the 'investigation relevant details' aspect into their studies. Invariably, these studies have incorporated the same three aspects and coded them each time the interviewee conveys them as 'new' details (Lamb *et al.*, 1996b; Milne & Bull, 2003). Lamb *et al.* (2007) found that more central details (e.g. sexual actions, force used etc.) were provided from children using free recall questions (e.g. *open*) as opposed to focused prompts, thereby negating the belief that only *closed* or *forced choice* questions can be used to elicit sensitive or investigation relevant information (IRI). The current study will develop these findings, but from a UK

perspective and will enhance this coding scheme using the headings of (i) *Person*, (ii) *Action*, (iii) *Location*, (iv) *Item* and (v) *Temporal* details. This will enable us to ascertain (i) who did what, (ii) how it happened, (iii) the location of where it happened, (iv) any items that were used and (v) the time that it happened. Previous studies have analysed CSA interviews from a number of countries including Estonia (Kask, 2008), Finland (Korkman, *et al.*, 2006; 2008), Israel (Lamb *et al.*, 2007), Norway (Myklebust, 2009; Myklebust & Bjørklund, 2009) and Sweden (Cederborg *et al.*, 2000), and where the legal and procedural frameworks that govern the investigative interview are different from the UK and other countries. However, research is limited that has combined both question style and IRI using an English sample of CSA cases (Sternberg, *et al.*, 2001; Lamb, *et al.*, 2009; Krähenbühl, 2010). We aim to contribute to these limited research findings.

Regardless of the countries the interviews are conducted within however, interviewing children is complex. As children grow older, the length, informativeness, and complexity of their recall memory increases (Fivush, 1997, 1998; Poole & Lamb, 1998; Saywitz & Camparo, 1998; Schneider & Pressley, 1997) with the vocabularies of young children often more limited and less descriptive than those of older children and adults (Brown, 1973; Morison, *et al.*, 2000; Walker, 1999). Indeed, Lamb, *et al.* (2000) demonstrated that the proportion of substantive investigative utterances eliciting new details from children can increase with age.

Davies *et al.*, (2000) found that whilst *open* questions were more effective for children aged 12-14 years, younger children provided more information in response to

specific, yet *not leading* or *closed* questions. One reason for this might be the natural and often unconsciously provided support (or ‘scaffolding’) to a child’s narrative production by an adult (see Reynolds & Evans, 2009 for a review). Young children in their normal day-to-day interaction with adults rely on degrees of ‘scaffolding’ to provide narratives and it can be argued that at some stages of their development, as in the Davies *et al.* study (op.cit), the youngest children may be unable to produce a narrative without appropriate ‘scaffolding’. The danger of adult ‘scaffolding’ in interview situations is contamination of memory (Loftus, 1979; Schooler & Loftus, 1993; Lamb *et al.*, 2008). With no effect of open questions to the youngest children, the Davies *et al.* (2000) result will be of operational importance to the interviewers in their planning and preparations of questions for their interviews, with the most effective categories of questions being different for young and old children respectively.

Davies *et al.* (2000) found that only 2% of open questions were utilised, yet whilst their study analysed question type and amount of details elicited from those questions, it did not assess whether or not those details were actually related to the investigation and thus, more likely to help progress the case through the investigation and court process. Within the literature, there is however, some debate as to whether different utterance types not only illicit more details from children, but also whether this is different for children of different ages. A number of studies have found that younger children are more likely to respond inaccurately to *suggestive*, *closed* and *forced choice* questions (Bruck, *et al.*, 1995; Ceci & Bruck, 1995; Goodman & Aman, 1990). Similarly, although younger children tend not to be able to recall as many details as older children (Lamb, *et*

*al.*, 1996b), they are not necessarily less accurate (Oates & Shrimpton, 1991). Thus, the current research will examine the impact of age on both the information elicited from the child and the length of their interviews.

In summary, the main aim of the present study is to analyse the mean proportion of *appropriate* questions (e.g. *open*, *probing/identification* and *encouragers/acknowledgers*) and *inappropriate* questions (e.g. *echo probes*, *closed*, *forced choice*, *multiple*, *leading* & *opinion/statement*) asked throughout the sample. We predict that there will be significantly more *inappropriate* questions asked than *appropriate* questions and our second prediction is that *appropriate* questions will elicit more items of IRI than *inappropriate* questions. The third prediction is that older children will elicit more items of IRI than younger children. Finally, we predict that older children were more likely to give longer investigative interviews than younger children.

## **Method**

### ***Design***

The study utilised an independent measures design with the first Independent Variable (IV1) being question type with nine levels (*open*, *probing/identification*, *encourager/acknowledgement*, *echo probe*, *closed*, *forced choice*, *leading*, *multiple* and *opinion/statement*) (see Table 1 for a full breakdown). The questions were then incorporated into *appropriate* questions (*open*, *probing/identification* and

*encourager/acknowledgement*) and *inappropriate* questions (*echo probe, closed, forced choice, leading, multiple and opinion/statement*). Echo probe questions were coded as inappropriate as they would often just repeat what the child had said, rather than ask anything new. IV2 was child age with three levels (5-8 years, 9-12 years & 13-15 years). These age groupings were expanded from those used in other similar research (e.g. Davies *et al.*, 2000) to incorporate children aged 15. IV3 was interview length, with three levels (short < 20 minutes; medium 21 – 40 minutes; and long > 41 minutes). The Dependant Variable (DV) was Investigation Relevant Information (IRI) consisting of five levels (*Person, Action, Location, Item and Temporal*) (see Table 2 for a full breakdown). Analysis carried out on the data consisted of a series of ANOVA tests.

### ***Sample***

All interview transcripts (N=21) were obtained from one English Police Force and comprised a random sample relating to allegations of CSA. All transcripts were obtained from cases that had been to court and subsequently closed. The final verdicts of the case were not made available to the researcher. The interviews in the sample were conducted between 2006 (n = 7) and 2007 (n = 14) by officers who had received specialist training in the ABE technique (Home Office, 2002) and all interviewing officers had completed the National Detective Training course<sup>2</sup>. Two interviewing officers (29%) were also trained as Sexual Offence Liaison Officers<sup>3</sup>. Officers who conducted the interviews had a mean age of 38 years (SD = 7; range 29 to 46) and there were 7 female interviewers.

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<sup>2</sup>A six week course in England and Wales that trains officers to investigate serious crime.

<sup>3</sup> Officers who have been specially trained to investigate sexual crime.

Ninety-five per cent of interviewees (n = 20) were female with a mean age of 11 years (SD= 3; range 5 to 15). The nature of the alleged offences the children were interviewed about ranged from rape to sexual touching. Recent abuse was classified as having occurred within a month of the offence being reported to the Police. All other offences were classified as historic (n=4).

Within the youngest age group of children (n=7), whose ages ranged from 5 to 8 years, all were female and had reported recent abuse which was extrafamilial (perpetrated by someone not directly related to the child). Within the second age group (n=8) whose ages ranged from 9 to 12 years of age, all were again female with one child reporting historic abuse, the remainder reported recent abuse (n=7). The majority of offences in this category were intrafamilial (where the offender was a family member). (n=6) with two children reporting extrafamilial abuse (n=2). The final age group (n=6) contained children aged from 13 – 15 years (female (n=5); male (n=1)). There was an even split between those reporting historic and recent abuse. Four children reported intrafamilial abuse and two reported extrafamilial abuse .

### *Coding*

Interviews were transcribed in full and key details obtained from the transcripts included the child's gender and the age group each child fell within (5 – 8 years, 9 – 12 years & 13 – 15 years). To ensure anonymity, a pseudonym for each child was used. Furthermore, the total length of time (in minutes) of the complete interview was utilised

(mean = 40.18 minutes, *SD* = 33, range 15 to 120). The transcripts were then coded for the following:

- 1) **Question styles** - these were broadly categorised into *appropriate* questions (*open, probing/identification, encourager/acknowledgements*) and *inappropriate* questions (*echo probe, closed, forced choice, leading, multiple and opinion/statement*). Exemplars of the various question types (adapted from Oxburgh *et al.*, 2010a) are provided in Table 1. The number and type of questions were also calculated for each interview.

\*\*\*\*\* Table 1 about here \*\*\*\*\*

Although anecdotal evidence from serving police officers suggests that *echo-probe* questions are a good form of questions to ask in interviews (and on the face of it, appear to be *appropriate*), it was the considered opinion of the authors that although this type of question might be considered a useful and effective conversation management technique, the questions were actually *closed* in reality and thus were deemed *inappropriate* for the purposes of this study (see table 1 for an example).

- 2) **Investigation relevant information (IRI)** – The transcripts were coded each time an investigation relevant detail was mentioned by the interviewee in accordance with the IRI coding scheme (Table 2) and totalled. Items were coded each time

the interviewee introduced the information on the first occasion. Previously discussed or repeated information was not re-coded (Lamb *et al.*, 2007; Milne & Bull, 2003; Oxburgh *et al.*, 2010a).

\*\*\*\*\* Table 2 about here \*\*\*\*\*

Three raters independently coded the transcripts (n= 21) for Question Type and IRI with an inter-rater reliability coefficient of .96, indicating a high level of agreement. Any differences between the three raters were resolved by discussion.

## **Results**

The aims of this study were to examine the types of questions asked in interviews and the impact question type had on the amount of IRI elicited from children during the interviews. We also wanted to establish whether the age of the child had an impact on the number of IRI details that were disclosed and the length of their investigative interview.

### ***General results***

Across the sample, 22% (n=4) of the interviews related to historic abuse, whilst the remaining interviews related to a recent episode or period of CSA. All offenders within the sample were male with, with 95% (n=20) of them being known to the victim

before the abuse occurred. In total, there were 29% of cases (n=6) where the offence was considered intra-familial and 71% (n=15) where the offence was extra-familial. Of those in the latter category, 43% (n=9) of offenders were teachers and 29% (n=6) were a friend of the family.

### ***Questioning styles***

We predicted that there would be significantly more *inappropriate* questions asked compared to *appropriate* questions. Across the sample (N=21), there was a total of 4,226 questions identified (M = 201, SD = 115). Analysis revealed there was an almost even split between *appropriate* questions (M = 49.72, SD = 9.85) asked and *inappropriate* questions (M = 50.27, SD = 9.85) as shown in table 3. Thus, ANOVA revealed a non-significant difference of each question type asked (F (1,19) = 0.328,  $p > 0.05$ ), resulting in our prediction not being supported.

\*\*\*\*\*Table 3 about here\*\*\*\*\*

Of the questions categorised as *appropriate*, the most frequently asked questions in this category were *probing/identification* (M = 30.84, SD = 8.2) and *encourager/acknowledgement* questions (M = 12.03, SD = 9.38). *Open* questions were asked considerably less (M = 6.86, SD = 2.27) overall.

### ***Investigation relevant information***

We predicted that *appropriate* questions would elicit more items of IRI than *inappropriate* questions. Although there were even numbers of both categories asked, *appropriate* questions accounted for 79% of all the IRI details elicited. A one-way ANOVA confirmed our prediction that *appropriate* question types significantly increased the mean number of IRI details elicited from the children ( $F(2,18) = 4284.1, p < 0.05$ ).

In terms of *appropriate* questions, *probing/identification* questions overwhelmingly accounted for the largest number of IRI details, eliciting a mean of 40 items ( $SD = 14.8$ ; see table 4). Similarly, *encourager/acknowledgements* and *open* questions elicited a considerable number of IRI details with a mean of 20.6 ( $SD = 17.9$ ) and 18.4 ( $SD = 9.7$ ) respectively. Conversely, *inappropriate* questions elicited far fewer items of IRI with *closed* questions eliciting a mean of 9.01 ( $SD = 7.07$ ), with all the remaining question types eliciting, on average, less than five items of IRI. Moreover, the total number of questions within the interviews had no effect on the amount of IRI revealed by the child ( $F(19,1) = 4.616, p > 0.05$ ), rather, this was determined by the specific type of question asked.

\*\*\*\*\*Table 4 about here\*\*\*\*\*

We predicted that older children would elicit more items of IRI than younger children. Age was analysed using ANOVA with three levels: 5 – 7 years ( $n = 7$ ), 8 – 11 years ( $n = 6$ ), 12 – 15 years ( $n = 8$ ).

\*\*\*\*\*Figure 1 about here\*\*\*\*\*

As outlined in figure 1, the mean number of IRI conveyed by the youngest children aged 5–8 years ( $M = 89.9$ ,  $SD = 30.2$ ) was considerably less than the mean number of details elicited from older children in the 13-15 year age group ( $M = 355.3$ ,  $SD = 222.5$ ). ANOVA showed that the age group of the child had a significant effect on the amount of IRI elicited ( $F(2,18) = 7.125$ ,  $p = 0.05$ ). This confirms our prediction that as age increased, the mean number of items of IRI children disclosed also increased.

Our fourth prediction was that older children would give longer interviews than younger children. ANOVA indicated that length of the total interview also had a significant effect on the amount of IRI elicited ( $F(18,2) = 25.472$ ,  $p < 0.05$ ). Long interviews (those 41 minutes or over) generated an average of 435.8 IRI details ( $SD=165.3$ ) whereas medium length interviews (those between 21 – 40 minutes elicited an average of 142.9 IRI details ( $SD = 16.4$ ) and short interviews (those 20 minutes or less) only elicited an average of 81.9 IRI details ( $SD = 27.9$ ).

In summary, the results indicated that the use of *appropriate* questions (mainly *probing/identification*) produced four times as many items of IRI as *inappropriate*

questions. This was despite the fact that both *appropriate* and *inappropriate* questions were asked at the same frequency across the interviews. Furthermore, the amount of IRI obtained from the child witnesses increased with both the age of the child and the length of the interview. However, the amount of IRI elicited was not affected by the number of questions asked.

## **Discussion**

Research exploring the nature of information elicited from children in CSA interviews is crucial for investigators to stand the best chance of obtaining as much IRI as possible from the child during the interview (Bull, 2010; Lamb, *et al.*, 2009; Oxburgh, *et al.*, 2010b).

### ***Questioning Styles***

Our study concluded that type of question asked by the interviewer had a significant impact on the number of IRI details that were elicited from the child. Indeed, the use of *appropriate* questions would tend to indicate that it is the type of question asked which is more important in obtaining a higher amount of IRI, rather than how many questions are asked of the child during the interview.

In relation to question type, the results did not confirm our prediction as there were the same number of *appropriate* questions asked overall than *inappropriate*. Due to

previous research findings suggesting that the use of *open* questions did not always occur in practice (Aldridge & Cameron, 1999; Craig, *et al.*, 1999; Davies & Wilson, 1997; Lamb, *et al.*, 1996a; Myklebust & Bjørklund, 2006; Oxburgh *et al.* 2010a; Sternberg, *et al.*, 2001a), we expected to find more *inappropriate* question types.

However, our study found that on average there was an appropriate to inappropriate ratio (AIR) of 1:1, which means that for each *appropriate* question asked there were the same number of *inappropriate* questions asked. This AIR is somewhat higher than previous research (e.g. Oxburgh *et al.*, 2010a) who found that for every one *appropriate* question asked, there were three *inappropriate* questions<sup>4</sup>. Other researchers have looked at the open to closed ratio (OCR) of questions and found far more *closed* questions being asked than *open*. In their pioneering study using a US sample Fisher, *et al.*, (1987) had an OCR of 1:9, meaning that for every one *open* question asked, there were nine *closed* questions, whilst Myklebust (2009) found an overall OCR of 1:10 in investigative interviews of children in Norway.

Given the considerable amount of research literature that has promoted the use of *open* questions to encourage free recall to produce longer, more accurate and more detailed accounts from children (Dale, *et al.*, 1978; Dent & Stephenson, 1979; Goodman & Aman, 1990; Goodman, *et al.*, 1991; Oates & Shrimpton, 1991; Orbach & Lamb, 2001; Lamb & Garretson, 2003) it is promising that so many *appropriate* questions were used in the investigative interviews within this sample. However, it has to be noted that within the *appropriate* questions asked; only 7% were coded as being *open*. Similarly,

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<sup>4</sup> This research considered interviews with adult suspects rather than child victims.

Davies, *et al.* (2000) also found that *open* questions only contributed to 2% of the total interview in their study. Other studies worldwide have also found limited use of open questions in investigative interviews (Cederborg *et al.*, 2000; Kask, 2008; Korkman *et al.*, 2006; 2008; Lamb *et al.*, 1996b, 1996c; Myklebust & Bjørklund, 2006; Westcott, *et al.*, 2006).

Within those *appropriate* questions, our study found that interviewers tended to ask more *probing/identification* questions than *open* questions. It was found that often an interviewer would initially ask an *open* question such as “Tell me what you have come to talk to me about today”. The child may then answer, “About what suspect did to me last year”. The interview may then seek to expand on that *open* question with a *probing/identification* question that encourages the child to elaborate further. For example “What did the suspect do to you?” Effectively this is not an *open* question as it focuses the child in terms of utilising the Who, What, Where, When, Why and How (5WH) format. Some researchers may argue this is not therefore an *open* question *per se* (Oxburgh *et al.*, 2010a). However, it is argued that by using the words ‘what he did’, the interviewer is probing the child further to give a more detailed response to that *open* question. It also gives the child a point of reference with which to start to explore what is likely to be a long and detailed event or series of events.

Disagreement over what constitutes an *open* question is found throughout research in this area. Different studies have used different coding schemes, which make discussion of these research findings difficult (Oxburgh, *et al.*, 2010a; Oxburgh *et al.*

2010b). Cederborg *et al.* (2000) code their question type in terms of invitation utterances using *Tell*, *Explain* and *Describe* questions. They then have directive utterances that they argue re-focus the child's attention using the 5WH model. This coding frame is also used by a number of other research studies (Lamb *et al.*, 1996a; Lamb *et al.*, 1996b). Others such as Westcott *et al.* (2006) have split invitational categories of: i) can you/did you *open* questions (e.g. can you tell me what happened), ii) solely *open* questions (e.g. tell me what would normally happen), iii) can you/did you specific questions (e.g. can you describe for me sort of how you were sleeping) and iv) specific questions (e.g. tell me a bit more about why you slept downstairs; Westcott *et al.*, (2006). However the specific use of the 5WH questions provided by Westcott *et al.* (2006) are, in reality, *open* questions and just help the child to give some indication of where to start.

### ***Investigative relevant information***

The results in relation the effect of question type or IRI confirmed our prediction, with *appropriate* questions eliciting more items of IRI than *inappropriate* questions. Most notably, *probing/identification* questions, elicited the most IRI (40%) of all the question types. Similarly, whilst *open* and *encourager/acknowledgement* questions were not the most frequently asked, they still produced large numbers of items of IRI. *Open* questions only contributed to 7% of the questions asked overall, yet elicited 18% of the total IRI details. Equally, *encourager/acknowledgement* questions were only asked as 12% of the total number of questions, but resulted in 20% of the overall IRI details. This appears to

corroborate Sternberg *et al.*'s (1996) findings showing that *open* questions and free recall prompts resulted in three times as much information being disclosed. This contrasted with *closed* questions, which were asked with greater frequency (23%), yet only yielded 9% of the total IRI. These appropriate questions were substantially more effective in eliciting more than four times as many items of IRI in comparison to *inappropriate* questions. Furthermore, although their sample focused on suspect interviews, Oxburgh *et al.* (2010a) also found that more items of IRI were elicited using *appropriate* questions.

We noted that within the interviews, questioning often began within an initial *open* question such as “Explain that to me” and, after the child had begun their explanation and stopped for a natural pause, the interviewer often encouraged them to continue with an *encourager/acknowledgement* (e.g. “Mmm-hmm” or “Right”). The child invariably went on to provide further items of IRI. However, due to the coding scheme adopted for the present study, these IRI details will then have been shown as having been derived from an *encourager/acknowledgement* question type, despite the fact that the initial question was, in actual fact, an *open* one. Thus, the use of *open* questions could indeed be higher, depending on how they are coded.

Our predication that older children would disclose more items of IRI than younger children was supported by the results. Children within the 13 – 15 age group revealed significantly more items of IRI than those within the other two groups. In relation to the effect of child age, the findings appear to mirror those found in past research. Despite the slight difference in age groupings in order to account for 15 year old children, those in

the oldest age group 13 – 15 disclosed the largest number of IRI details. This appears consistent with Davies *et al's.*, (2000) findings who found that older children within their 12 – 14 year old age group derived longer and richer responses. Similarly, Lamb *et al.* (1996b) found that younger children did not recall as many details as older children, although this did not necessarily mean that the details provided by younger children were any the less accurate (Lamb *et al.*, 2008).

Finally, the fourth prediction of this research was older children would give longer interviews than younger children. Our findings supported this prediction, with the older children providing much longer interviews than the younger children. We argue that this is attributable to the fact that as a child's age increases, so too does the length, informativeness and complexity of their recall memory (Fivush, 1997, 1998; Poole & Lamb, 1998; Saywitz & Camparo, 1998; Schneider & Pressley, 1997). Indeed, although the vocabularies of young children may be more limited (and may not be able to offer as detailed a description as older children or younger adults), previous research indicates their accounts are not necessarily less accurate (Oates & Shrimpton, 1991). What is perhaps more influential is the need to avoid *suggestive*, *closed* and *forced choice* questions where younger children are more likely to respond inaccurately (Bruck, *et al.*, 1995; Ceci & Bruck, 1995; Goodman & Aman, 1990).

### ***Study limitations and future directions***

Further research should explore whether the larger number of *appropriate* questions asked within this study is unique to this sample, or whether more recent CSA interviews contain more *appropriate* question types in line with the ABE Guidance (Home Office, 2007). The sample used in the study was relatively small (N=21) and only utilised one English Police Force. However, given the nature of this type of research and the sensitivity of the data, this was considered a reasonable sample size (Oxburgh *et al.*, 2010a). Furthermore, whilst one of the main strengths of this research is that it utilises real-life interviews with victims of CSA in England and Wales, there are also limitations. Firstly, there is no way of establishing whether the items of IRI disclosed by the children are actually true (Milne & Bull, 2003). Unlike studies that have shown children a video, or have set up an event for them to witness (e.g. Dent & Stephenson, 1991) and then interviewed them about that video or event, it is not possible to determine the veracity of the children's accounts when using real-life data.

Secondly, it is not possible to interpret the transcripts on more than a literal level, thus potential influential factors such as tone of voice, non verbal behaviour (such as body language etc) cannot be analysed (Milne & Bull, 2003; Santtila *et al.*, 2004; Westcott *et al.*, 1991). This is something other researchers such as Lamb *et al.*, (1996b) have been able to analyse by obtaining the video tape (or DVD) of the interview itself. Future research needs to explore this area further to investigate whether or not it is the question type that impacts on the number of IRI details disclosed by the child, or whether

there are other non-verbal behavioural factors that may also influence this. However, due to the sensitive and complex nature of CSA cases, access to such research material can be very difficult to obtain.

### ***Implications for practice***

This research has identified that the use of *appropriate* questions are four times more likely to produce items of IRI than the use of *inappropriate* questions. Based on the findings, we argue this is the case regardless of the number of questions asked. Thus, interviewers should be confident that using *appropriate* questions will elicit the greatest number of IRI details to assist in the investigative process. These findings, however, are derived from one specific way of coding question types (adapted from Oxburgh *et al.*, 2010a) and there is currently no single consensus within research literature as to what constitutes an *appropriate* or an *inappropriate* question (Davies *et al.*, 2000; Myklebust & Bjørklund, 2006; Poole & Lamb, 1998).

This issue is identified by Oxburgh *et al.*, (2010a) who argue that whilst many researchers have identified that *open* questions yield longer, more detailed and more accurate responses from witnesses and suspects than *closed* questions, there still remains ‘significant discrepancies amongst academic researches and practitioners over how to best describe types of questions’ (pg. 2). Thus, if both these and future research findings are to be directly applicable to CSA interviewers in practice, there needs to be a clearer distinction of what constitutes an *appropriate* question in order to encourage interviewers

to use such questions with confidence to encourage the maximum possible disclosure from the witness during interview.

### ***Conclusions***

This study aimed to fill the current gap that exists in terms of the impact of question type on the nature of IRI details elicited from children in CSA interviews using an English Police Sample. Analysis indicated that use of *appropriate* questions by interviewers elicits significantly higher amounts of items of IRI *than inappropriate* questions. Whilst further research using real life interviews from Police Forces is needed to fully explore these findings, this current paper has provided a springboard to facilitate further work.

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**Table 1** - Example of question type used by interviewing officers include appropriate and inappropriate.

Question Type		Example
Appropriate	Open	<i>'Tell me about that then'</i> <i>'Explain to me how that happened'</i> <i>'Describe the bedroom to me'</i>
	Probing/Identification	<i>'How did you come to be laid on the bed?'</i> <i>'Then what happened?'</i>
	Encourager/ Acknowledgement	<i>'Okay' 'Right' 'Um humm'</i> <i>'Yeah, carry on'</i>
Inappropriate	Echo	<b>Child</b> – <i>'I think it was after that'</i> <b>Interviewer</b> – <i>'You think it was after that'</i>
	Closed	<i>'Did you see him?'</i>
	Forced Choice	<i>'Were you inside or outside?'</i>
	Leading	<i>'So XXXXX must have taken you straight into the bedroom did he?'</i>
	Opinion/ Statement	<i>'Okay, that's fine'</i>
	Multiple	<i>'When you say you saw him come into the bathroom, was the door locked? Can you remember what was he wearing? Did he say anything to you?'</i>

**Table 2 – Investigation Relevant Information Coding Scheme (Oxburgh et al., 2010)**

<b>Investigation Relevant Information</b>	<b>Code</b>	<b>Code Explanation</b>
<b>Person</b>	P	Information of persons mentioned by the child through the interview e.g. <i>'he was Mummy's boyfriend Stuart'</i>
<b>Action</b>	A	Information given by the child that relates to some form of action e.g. <i>'he would tell me to take my clothes off'</i> .
<b>Location</b>	L	Information given by the child as to any locations relevant to the investigation. This may relate not just to their location at the time of the offence, but also before during and after the offence as well as the location of others e.g. mummy, brother, friend etc.
<b>Item</b>	I	Information given by the child about items or objects that are mentioned by the child e.g. items used during the commission of offences e.g. <i>'vibrator'</i> or a phone given to the victim by the offender as part of the grooming process.
<b>Temporal</b>	T	Information relates to any reference the child makes to time. For example, <i>'it was about eight o'clock'</i> or <i>'Last Christmas'</i> etc.

**Table 3** – Percentage of Interviewer Question Types Utilised in Interview

	<i>Type of Question</i>	<i>Percentage</i>	<i>SD</i>	<i>Total (%)</i>
Appropriate	Open	6.68	2.27	50%
	Probing/Identification	30.84	8.20	
	Encouragers/Acknowledgers	12.03	9.38	
Inappropriate	Echo Probe	1.65	1.71	50%
	Closed	23.19	8.17	
	Forced Choice	2.24	1.74	
	Multiple	1.81	7.79	
	Leading	1.69	2.32	
	Opinion/Statement	19.70	5.42	

**Table 4:** Percentage of IRI resulting from different question types

	<i>Type of Question</i>	<i>Mean</i>	<i>SD</i>	<i>Total (%)</i>
Appropriate	Open	18.4	9.7	79%
	Probing/Identification	40.0	14.8	
	Encouragers/Acknowledgers	20.6	17.9	
Inappropriate	Echo Probe	0.77	2.18	19%
	Closed	9.01	7.07	
	Forced Choice	2.52	2.18	
	Multiple	4.52	4.62	
	Leading	0.24	0.55	
	Opinion/Statement	4.96	3.90	

Figure 1: Mean number of IRI details elicited across age group

