

# **Investigating the Forensic Interviewing of Children: Multiple Interviews and Social Support**

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## Dissemination of Findings

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## Abstract

Despite a burgeoning literature on the most effective ways to interview child victims/witnesses and resulting changes in interviewing guidelines in the UK, many children's cases still do not progress to court. The present thesis focuses on two under-researched aspects of interviewing that have the potential to improve children's informativeness and their willingness to support case progression; namely, multiple interviews and social support. Multiple interviewing entails formally interviewing a child more than once about an alleged event. Social support involves building rapport with a child to ease their anxieties about the interview. These techniques were addressed in four studies. The first comprised a survey of police officers and ascertained their opinions about and use of multiple interviews and social support. Officers reported conducting child interviews in a supportive manner. Their opinions of multiple interviewing were cautiously positive, including concerns over causing further distress to a child interviewee and the possibility that children might provide inconsistent details. The following studies addressed these risks. The second study analysed interviewer and interviewee behaviours in a real life sample of multiple interview transcripts. The findings showed first, second, and third interviews to be conducted similarly in terms of the amount of support provided, and question types used. Children also provided many new details in second and third interviews, and very few contradictions of their previous testimony. The third study comprised an experiment examining the current UK police guidelines' rapport-building phase in multiple interviews with children. Again, children provided many new details and few contradictions in multiple interviews, but there were no significant differences between the recall and well-being of children who had and had not experienced rapport-building. The final study examined how multiple interviewing and viewing the rapport-building phase of an interview affected mock-jurors' perceptions of a child witness, the interview, and the case. Multiple interviews resulted in more positive views of the child, whereas viewing the rapport-building led to more negative ones. Based on the previous chapters' positive findings regarding multiple interviewing, and some recent calls for the guidelines to be relaxed regarding the contexts in which multiple interviewing should be encouraged, a Study Space Analysis was conducted. However, this revealed that the literature is not yet sufficient for policy change to be enacted. In conclusion, multiple interviewing shows potential to be an effective way of obtaining additional, accurate

information from children, but an alternative, more effective technique for building rapport with, and providing social support to children may need to be developed.

# Chapter One

## Introduction

### 1.1 General Introduction

In the 1980s, a series of nursery school sexual abuse cases highlighted the intrinsic difficulties related to obtaining reliable evidence from child victims/witnesses. The Kelly Michaels and McMartin cases in the USA were based on children's testimony alleging sexual abuse, including satanic ritual and bizarre sexual practices. However, on closer inspection from psychologists, it became clear that a number of the interviewing techniques used with these very young children were extremely biased and likely to have created unreliable disclosures from the children (Bruck & Ceci, 1995; Garven, Wood, Malpass, & Shaw, 1998). Although some psychologists had been examining children's testimony prior to these cases, the extent of poor interviewing practices exposed in these cases (several hundred children were interviewed in the McMartin case; Garven et al., 1998) incited a renewed interest in this topic of research (Odegard & Togliola, 2013).

As a result of this renewed interest, a literature has formed identifying key techniques that encourage both accurate and inaccurate recall from children. Furthermore, these findings have been incorporated into interviewing guidelines and training worldwide. However, there is still more to be done. In the UK in 2012/2013, 73,900 children under 16 years old reported being the victim of sexual abuse (National Society for the Prevention of Cruelty to Children, 2014). However, only 18,700 offences of child sexual abuse were recorded by the police in the same time period, which in turn led to 3,600 defendants being brought to court on charges of child sexual abuse and 2,100 guilty verdicts being returned. These figures suggest that justice is not necessarily being served for the majority of child victims/witnesses. In many child sexual abuse cases, the child's testimony is the only source of evidence of an offence (Lamb & Brown, 2006). Thus, a possible contributory factor for low prosecution and conviction rates is that child interviews are still not providing strong enough testimony to proceed with cases. There are a number of interviewing techniques for which we do not yet fully understand the potential benefits and disadvantages. Further research into these may help improve prosecution and conviction rates for cases in which child testimony is so vital.

This thesis aims to address two such areas. The first is multiple interviewing, which entails interviewing a child victim/witness more than once about an alleged offence. As is discussed in detail in section 1.4, some guidelines discourage multiple interviews, but it nonetheless appears that they are conducted and furthermore with as yet very little guidance. Additionally, the research suggests that they may in fact be an effective way of obtaining extra information from children. The second area this thesis will address is that of social support (section 1.5). The literature currently focuses on ways to support children cognitively (i.e., aid them to recall accurate details of an event), but is less developed regarding how to provide children social support (i.e., make the interviewing process as pleasant as possible and thus possibly further enhancing recall). The interaction between these two areas is crucial. Children who are interviewed more than once may be in particular need of social support as they could find the repeated experience distressing, or alternatively, multiple interviews might allow the child to build a relationship with the interviewer and make them feel more comfortable about disclosing sensitive information. This thesis will, therefore, also address the overlap between these two areas.

This first chapter will introduce research that has been conducted in these two research areas. It will briefly describe aspects of child development that are most relevant to obtaining children's testimony; namely, their memory development, linguistic development, and certain aspects of social development. This will be followed by discussion of key findings from the interviewing literature which have been incorporated into professional interviewing guidelines. The areas relevant to the research that will be presented in this thesis will then be described in detail, including a review of the current use of multiple interviews and the findings from research that discourage and encourage their use. This will be followed by a review of the social support literature, which will incorporate a discussion of rapport-building and alternative interviewer-provided social support options. Finally, the chapter will place the current thesis into the context of such research; describing the research that has previously examined the overlap between social support and multiple interviewing, briefly explaining the new studies presented in the following five chapters and justifying why these new studies are required for the progression of the literature and interviewing practice.



## **1.2 Child Development**

Historically, it has been questioned whether children are able to remember events accurately enough for their testimony to be worthwhile for an investigation and/or a prosecution. In fact, it was a legal requirement in the UK, prior to the 1988 Criminal Justice Act, that juries were warned about making convictions based purely on the uncorroborated testimony of young children. However, in the 1980s, as more imaginative research methodologies were designed to overcome the developmental limitations that children face (for example, language), it became clear that children are able to remember events fairly accurately. In fact, some forms of memory have been displayed by children as young as six months old (Bauer, 2013).

With increased understanding of children's memory capacity, however, also came increased understanding of children's memory limitations. Many studies have found young children can recall events accurately, but older children's recall is generally more detailed (for example, Greenstock & Pipe, 1996; Imhoff & Baker-Ward, 1999; Lewy, Cyr, & Dion, 2015; Quas, Bauer, & Boyce, 2004; Roberts, Lamb, & Sternberg, 2004). This is thought to be caused by children's memories strengthening with age, but also through other developmental changes that affect a child's ability to recount, store or encode memories. The developments which affect both children's ability to create autobiographical memories and their ability to communicate them will now be discussed in detail in the context of forensic interviews.

Memory is usually considered to consist of three phases; encoding, storage and retrieval (Ceci, Fitneva, & Gilstrap, 2003). These phases involve different tasks in the memory process, but are not independent of each other (Kapardis, 2003). Encoding is the stage at which information from the external world is internalised. It is affected by attention (it is harder to remember details we do not pay attention to in the first place; Ceci et al., 2003) and other factors, such as stress (Semmler & Brewer, 2010). Storage of this encoded information then occurs. The information is transferred to short-term memory, and then, for some encoded information, into long-term memory. Storage is affected by a number of factors. For example, repetitions of the event; if we are repeatedly exposed to an event, our memory or script for what usually happens during this event gets stronger, but our memory of unique aspects of the event may deteriorate (Ashcraft, 2006a). Additionally, recall of the event can affect our storage of it; recalling an event multiple times can lead

to consolidation of the memory (Ceci et al., 2003). Our expectations can also affect storage; both details that fit with what we expect to happen and those that vastly differ from what we expect can sometimes be recalled more easily (Ashcraft, 2006a). Finally, retrieval is the process by which we recall these memories, which can be affected by cognitive and social factors, such as the context of the recall (it is often easier to recall an event if we are in a similar context to when it occurred; La Rooy, Malloy, & Lamb, 2011).

One development that affects memory at all three stages (encoding, storage, and retrieval) is that of knowledge (Lamb, Hershkowitz, Orbach, & Esplin, 2008). As children grow up, their knowledge of the world and their experiences increase. There are a number of theories that explain memory and how increased knowledge affects it. However, many of these have been discredited with time. One current theory is the fuzzy-trace theory. This theory involves two separate memory representations: gist and verbatim (Corbin, Wilhelms, Reyna, & Brainerd, 2013). Gist memory includes the general meanings related to the encoded information, in comparison to verbatim memory, which encodes the specifics about the event. Verbatim memories are key for forensic interviews in which ‘particularisation’ is encouraged, which entails a child recalling one specific event rather than memories of what normally happens (Brubacher & La Rooy, 2014). However, verbatim memories degrade quicker than gist memories for children of all ages and are therefore less likely to be recalled clearly (Corbin, et al., 2013). Children’s ability to remember both types of memories improves with age (Corbin, et al., 2013). As children get older, their understanding of events increases, and they are more able to extract the meaning of the event and thus create gist memories (Corbin et al., 2013). Furthermore, with a broader experience of events, children can start to create a global gist memory that incorporates events with similar meanings (or gists; Odegard & Togliola, 2013). However, the development of gist and global gist memories can have both negative and positive effects on children’s recall. Although children may be able to give more general details about a repeated experience, they may not be able to differentiate between the different repetitions, and they may also be vulnerable to incorporating in their recall suggestions that fit with their gist memory, but did not actually occur (Corbin, et al., 2013).

Another development that changes children’s memory with age is the decreasing rate of forgetting: younger children forget more quickly than older children (La Rooy, Lamb, &

Pipe, 2009). Forgetting is a failure at either the storage or retrieval stage. At storage, forgetting can occur either through memories disintegrating over time, or through new experiences 'overwriting' older memories (Brainerd, Reyna, Howe, & Kingma, 1990). Retrieval failures, on the other hand, involve the memory still being stored somewhere but unable to be brought into consciousness. In a series of studies, Brainerd et al. (1990) found storage failures to occur more often than retrieval ones for both children and adults, although storage failures did not appear to be as permanent as was thought, and 'restorage' was possible. Both forms of failure, however, appear to reduce with age, accounting for older children's slower forgetting rates (Brainerd et al., 1990). Thus, it is particularly important to interview young children shortly after an event to obtain their most elaborative and accurate recall.

Infantile amnesia also affects children's memory development. Adults are generally unable to verbally recall events from before the age at which they developed language skills (La Rooy, et al., 2011). Infantile amnesia suggests that even young children find it difficult to verbally recall events that occurred in the first years of life (Lamb, et al., 2008). For example, in Peterson and Rideout's (1998) study, children who were both verbal and non-verbal at the time of an injury involving a trip to the hospital were interviewed after six months. Children who were non-verbal at the time of the injury (under 25 months old) verbally recalled less than those who were verbal, despite having developed the necessary verbal skills by the time of the interview. Thus, children who were between 13 and 18 months old at the time of the accident recalled the least with only 16 correct details and five incorrect details reported six months later. Children who were between 20 and 25 months old reported approximately 72 correct and 39 incorrect details six months later, and those who were two years old at the time of the accident reported about 137 correct and 64 incorrect details. Theories attempting to explain infantile amnesia suggest that the development of language intrinsically changes children's memory systems and thus makes memories encoded prior to language more challenging to retrieve when attempting verbal recall (Lamb, et al., 2008). Other explanations suggest that the formation of long-term memories only begins when children start discussing their experiences with others (Nelson, 1993), either through organisation of memories, or through practice. Thus, the development of language may be profoundly connected to how one encodes, stores, and retrieves memories and pre-verbal memories may be particularly difficult for children to recall.

The development of language also has a fundamental effect on children's ability to communicate their memories. Although children's vocabulary develops quickly between the ages of two and three (Ceci, et al., 2003), their understanding of certain words can take a much longer time to develop. Importantly though, adults often overestimate children's understanding due to their increasing vocabulary (Lamb et al., 2008). Some key words and concepts that are crucial for forensic investigations have been shown to be difficult for children to understand. For example, Quas and Schaaf (2002) found that three and five year old children who had been touched by an adult in a play session rarely responded accurately to yes/no questions in which they were asked whether the man had touched them. Quas and Schaaf (2002) suggest this may be due to children's limited comprehension of the word 'touch', because some of the children spontaneously mentioned the adult's touches (e.g., that he wiggled their nose) in their free recall. Children often interpret words in a very literal fashion, so for example, 'touch' may not include 'wiggle', 'stroke', 'hit', or 'kiss' (Lamb et al., 2008). Other language concepts take longer to develop, such as temporal understanding. Adults appear to remember temporal aspects of an event by fitting them into their knowledge of other temporal patterns (Friedman & Lyon, 2005). For instance, they will remember the time of day an event occurred in relation to mealtimes (e.g., it happened before lunch so it was probably around 11am). Children, therefore, need to have developed knowledge of the meaning of temporal words (e.g., before, after), knowledge of temporal patterns, and have a sufficiently detailed memory of the event in order to accurately give information about its timing. Research suggests that although children obtain some of this knowledge between four and six years of age and are therefore able to include some temporal information in their recall, the development of temporal understanding continues until at least ten years old (Friedman & Lyon, 2005; Orbach & Lamb, 2007). Thus, children's ability to communicate their memories and specific details of their memories improves significantly with age, but this may happen more slowly than is expected and interviewers may overestimate their linguistic capabilities (Lamb, et al., 2008).

A further issue that is particularly important for children's involvement in forensic interviews is suggestibility. Suggestibility in the forensic context refers to the extent to which a child will adjust their recall depending on external factors to their own memory. These external factors can be the interviewer's authority, others' testimony (i.e.,

conforming to others' views), or the child's own bias or stereotypes (Ridley, 2013). Suggestibility is generally considered negative within the forensic interview as children can change their answers from those based on their own actual recall of the event, to the suggested answer, irrespective of accuracy (Lamb et al., 2008).

Children's suggestibility is not a cognitive development in the same way as, for instance, language, but it is deeply connected to some developmental changes (London, Henry, Conradt, & Corser, 2013). Children's suggestibility is also often affected by factors related to the external context (such as how authoritative the interviewer is and these will be discussed in more detail in section 1.3). Some studies have found younger children to be more susceptible to suggestion than older children (for example, Cleveland, Quas, & Lyon, 2016; Fritsley & Lee, 2003; Pezdek, & Roe, 1995; Rocha, Marche, & Briere, 2013), but improvements with age are not necessarily linear. In some situations, children as young as three or four years old can resist suggestion, and in others, even adults may be susceptible (for example, Goodman, Bottoms, Schwartz-Kenney, & Rudy, 1991; Loftus, Miller, & Burns, 1978). One cognitive development that appears to be associated with suggestibility is 'theory of mind' (London, et al., 2013). 'Theory of mind' develops between the ages of three and six years old, and indicates a child's growing ability to understand that other people have different aims, thoughts, and desires than their own (Mitchell, 2003). With increasing age, children may attempt to interpret what these desires and thoughts might be, and this can be both beneficial and detrimental to children's suggestibility (Bruck & Melnyk, 2004). On one hand, children may understand that the interviewer holds different views of what occurred but that the interviewer's view may not be correct, and so they may reject the interviewer's suggestions. On the other hand, once children are aware of the interviewer's differing views, they may see these views as more valid than their own (due to the interviewer's position of authority) and so adjust their testimony to fit with these perceived desires. Research into this area has found conflicting results, indicating the relationship between theory of mind and suggestibility is complicated (Karpinski & Scullin, 2009; Melinder, Endestad, & Magnussen, 2006; Scullin & Bonner, 2006), with many further developmental interactions.

Another factor that has been found to affect suggestibility is children's source-monitoring abilities (Bright-Paul, Jarrold, & Wright, 2005; Giles, Gopnik, & Heyman, 2002; Thierry,

Spence, & Memon, 2001), and in some cases, this has been found to mediate the effect of ‘theory of mind’ on suggestibility (Bright-Paul, Jarrold, & Wright, 2008). Source-monitoring is the ability to remember where the detail you are remembering came from, be it internal (e.g., thoughts) or external (e.g., information reported by someone, or an event viewed with one’s own eyes, Corbin et al., 2013). For instance, as children’s memories become more detailed, they are better able to distinguish between memories that they recall from actually seeing the event take place, and ones that they recall from someone telling them about the event. Children, therefore, become more skilled at recalling only events they actually saw happen and when necessary excluding those that they heard about or found out about from another source. Another factor that appears to affect suggestibility is the strength of the child’s memory; the stronger the memory, the less suggestible children are (Holliday, Douglas, & Hayes, 1999; Pezdek & Roe, 1995). Thus, although there may be certain memories that are particularly strong for a child of any age (e.g., due to event repetition), children should generally become less susceptible to suggestion with age because their memories strengthen (as discussed above). In conclusion, suggestibility by no means follows a simple developmental trajectory, and the developmental changes discussed here are in no way an exhaustive list of the relevant changes. However, studies show an overall trend for children to become less suggestible with age through the interaction of a number of cognitive and social developments.

Children’s social development can also affect their performance in forensic interviews via routes other than their susceptibility to suggestion. Children’s understanding of how conversations work tends to develop with practice (Lamb et al., 2008). However, most child-adult interactions are heavily structured by the adult. The forensic interview, conversely, should be entirely led by the child as the sole source of information (Lamb & Brown, 2006). Hence, younger children may not understand what is required of them and therefore be unable to respond in as much detail without some structure imposed, such as more focused questioning (Brown & Lamb, 2015). In addition, children are used to merely recalling a relatively limited amount of information and the adult clarifying which of this information is of interest (Lamb & Brown, 2006), whereas in the forensic interview they are required to provide as much information as possible without knowing which details the adult is interested in (Lamb et al., 2008). Thus, children require some guidance and possibly practice in order to be able to understand what is expected of them during a forensic interview, and how to fulfil these expectations. As children grow up

and become more aware of different forms of conversational exchange, they may find it easier to adapt to the forensic interview setting.

In conclusion, there are a number of developmental changes that occur during a child's life which are relevant to the forensic interviewing context. Children's memories improve with age, as does their language, usually making it easier to obtain detailed information from a child about an event. However, children may not be as cognitively developed as they appear, and so interviewing should be conducted with this in mind. Additionally, children's knowledge of different types of communication and expectations held by adults also develop with age, and this can lead to both positive effects (children may become more aware of their role as the sole source of information and so become more detailed in their recall) and pitfalls (children may be more sensitive for social reasons to interviewer bias and acquiesce). Child interviewers must overcome these barriers in order to obtain the maximum amount of accurate information.

### **1.3 Child Interviewing**

According to the Coroners and Justice Act (2009), a child is legally defined as anyone under the age of 18. For the last quarter of a century, the research literature addressing ways to overcome the developmental challenges faced when interviewing children has grown enormously and had an increasing impact on the criminal justice system (Odegard & Togliani, 2013). Such research has mainly focused on two areas; experimental studies with samples of non-abused children comparing child interviewing techniques for recall of unique, often standardised events; and retrospective analyses of field interviews. An appreciation of both of these methods is vital for understanding how interviewing techniques work in theory and in practice. The first methodology allows researchers to determine how children react to specific interviewing techniques in a controlled laboratory situation. They often have planned the event the child is interviewed about, and so can precisely measure the child's accuracy. The latter methodology, on the other hand, is constrained by real life. The researchers are unable to fully determine the child's accuracy, and the interviews are affected by a number of confounding variables that are out of the researchers' control (such as interview quality). However, these field studies are crucial for understanding both interviewer and interviewee behaviours under conditions that cannot be ethically replicated in the laboratory (i.e., discussing an alleged

crime in which the child may have been extremely distressed psychologically, and possibly physically injured).

One of the key findings to have emerged from these types of research is the value of different question types. Open-ended questions, which elicit free recall from children, have been found to result in more accurate information than other question types (see Table 1.1 for examples of question types). Specific-closed questions are the next best option, but forced-choice, multiple, or leading questions are thought to be increasingly poor question types for obtaining accurate information from children. This has been corroborated by numerous studies (Brown, Lamb, Lewis, Pipe, Orbach, & Wolfman, 2013; Lamb et al., 2003; Lamb, et al., 2008; Roberts, et al., 2004; Sternberg et al., 1996; Sternberg et al., 1997), and two fairly recent studies are described here. Horowitz (2009) conducted a study with 25 five to seven year olds and 25 ten to 12 year olds. They all experienced counterbalanced blocks of open-ended questions, mixed questions (a yes/no question followed by an open-ended question), and direct questions (assorted wh- and yes/no questions) about some slides that they had been shown. Children's responses to open-ended questions were generally of higher quality than those in response to direct or mixed questions; they provided more details generally, fewer inaccurate details and more unprompted details. However, when children were prompted about a specific slide in the mixed or direct question blocks (i.e., 'Was there a picture of a kangaroo?'), they were more likely to recall this information (the kangaroo picture) than when they received no prompts in the open-ended questions. Younger children provided less information to open-ended questions than older ones. Horowitz's (2009) study highlights the issues related to interviewing children: although open-ended questions are effective for obtaining the most accurate information, children's verbosity increases with age, and so with younger children it is often necessary to use other question types (possibly at the expense of some accuracy) to obtain a richer amount of recall.

Lamb, Orbach, Hershkowitz, Horowitz, and Abbott's (2007) study of 43 transcripts of real child interviews also found advantages of open-ended questions. In these interviews, children provided more information to open-ended questions than any other question types, and 12 to 13 year olds provided more information than either nine to 11 year olds, or three to eight year olds. In addition, the authors compared the information provided by the child interviewees with that provided by the perpetrators in order to ascertain



Table 1.1

*Description of Question Types (Ministry of Justice, 2011) as reported by Waterhouse, Ridley, Wilcock, & Bull (2016)*

Question Type	Description	Example	Use in Investigative Interviews ✓: Use ✗: Avoid
Open-ended	Allows interviewee to give free recall, and control what information they disclose.	“Tell me everything that happened.”	✓
Specific-closed	Asks for a more narrow account of a specific aspect of the event, including wh- questions (i.e., who, what, when).	“Who was in the room?”	✓
Forced-choice	Includes a number of choices from which the interviewee should select their answer.	“Would you like tea or coffee?”	✗
Multiple	Asking a number of questions in one utterance, or for information about more than one subject.	“Did you see him? Where was he? What was he wearing?” “What did they look like?”	✗
Leading	Questions that suggest one answer is correct (regardless of whether it is or not), or include information that has not previously been mentioned by the interviewee.	“You did see the gun, didn’t you?” “Where was the gun?” (when the interviewee has not mentioned a gun)	✗

accuracy. Although the majority of details were neither confirmed nor denied by the perpetrators in their interviews, information provided by children in response to open-ended questions was more likely to be confirmed than that provided in response to focused prompts (specific-closed, forced-choice and leading prompts). Lamb et al. (2007) also found that open-ended questions were most effective at obtaining central details (i.e., details that were ‘plot-relevant’ and described the event itself, rather than peripheral details, such as clothing descriptions), followed by specific-closed questions, with leading and forced-choice resulting in the fewest central details. Thus, open-ended questions appear to be the most effective for obtaining accurate and elaborative information from children, regardless of age. However, younger children are less likely to provide all of the details they remember in response to open-ended questions, and so other question types are usually necessary. The research also suggests that specific-closed questions are the most reliable alternative to open-ended questions, and that leading and forced-choice questions should be avoided.

It is thought that this style of interviewing (i.e., relying on open-ended questions and using few leading and forced-choice questions) is effective as it encourages the use of ‘free-recall memory’ processes, rather than ‘recognition memory’ processes (Orbach & Pipe, 2011). ‘Free-recall’ involves an active search of one’s memory to find information regarding the event, whereas option-posing, closed, and leading questions merely involve selecting the answer that best fits one’s memory, or, as often occurs with leading questions, selecting the answer that the interviewer seems to want to hear (Orbach & Pipe, 2011). Younger children may, therefore, be providing fewer details in response to open-ended questions because their memories are less detailed, or they find retrieval more difficult (as discussed above). Their ability to respond to closed question types may be because these questions provide specific cues which aid retrieval, or they may just provide a limited choice of answers between which the child can choose or guess. The literature suggests that although children can be very accurate in response to option-posing (particularly yes/no) questions when they know the answer, they will attempt to respond to an option-posing question even if they cannot possibly know the answer (Waterman, Blades & Spencer, 2004) and younger children are particularly prone to responding to option-posing questions when neither of the options is accurate (Peterson & Grant, 2001). Thus, younger children’s reduced informativeness (i.e., the number of

details they provide) in response to open-ended questions may be due to its reliance on 'recall' rather than 'recognition' strategies.

An alternative reason for why young children do not respond as fully to open questions is that they may not be used to the conversational context of the forensic interview.

Research that has included giving children a practice interview and encouraging them to recall an (innocuous) event with the level of detail required in a forensic interview has found this to be effective. Children who gave a practice narrative at the beginning of interviews tended to go on to recall more information in the main interview (Roberts, Brubacher, Powell, & Price, 2011). This has also been found to be the case in real interviews; children recalled more information in response to open-ended questions in the substantive phase of the interview (i.e., the phase during which the alleged crime is discussed) if they had experienced a practice narrative than if they had not (Price, Roberts, & A. Collins, 2013). Younger children's lower response rate to open-ended questions may, therefore, be a combination of both social issues and memory ones.

Leading questions have been found to be the least effective at obtaining accurate information, but interviewers can use other techniques to imply that there is a correct answer other than a leading question. For example, the interviewer may introduce peer pressure by stating that the child's friends had all given a particular response, which suggests that that is the correct one (Lamb, Malloy, & La Rooy, 2011). Alternatively, children may just acquiesce to what they believe the interviewer wants to hear due to perceiving the interviewer as authoritative or as more informed than they are (see section 1.5.4). Thus, research has shown there is a clear hierarchy of question types when it comes to the accuracy and level of detail they elicit from child interviewees.

Based on this literature, guidelines have been created for investigative interviewers. A number of different guidelines are in existence and used to a greater and lesser extent worldwide (for example, the Scottish Executive guidelines, 2011; and the National Institute of Child Health and Human Development's interviewing protocol, henceforth NICHD, for further information, see Lamb, La Rooy, Malloy, & Katz, 2011). In England and Wales, the guidelines for interviewing children originated with the Memorandum of Good Practice (Home Office and Department of Health, 1992). The guidelines have been updated regularly (Davies, Bull, & Milne, 2016), and the most recent version is contained

in ‘Achieving Best Evidence in Criminal Proceedings: Guidance on interviewing victims and witnesses, and guidance on using special measures’ (henceforth ABE; Ministry of Justice, 2011).

Although there are some minor differences between these interviewing protocols, they agree on the relative value of different question types, and advocate a phased or stepped approach to interviewing. Interviewers are encouraged to build rapport with the child (see section 1.5.1) prior to commencing the substantive section of the interview (the phase during which the alleged offence is discussed). The substantive phase of all interviews is recommended to be introduced via non-leading questions, which focus the child on the alleged offence without introducing details of the allegation (Orbach & Pipe, 2011). Only if the child does not mention the allegation in response to open-ended questions should the interviewer resort to more specific prompts. The interviewer should encourage the child to give a free narrative of the alleged event, during which the interviewer should use facilitative prompts (such as echoing the child’s last comment) to support the child to give as full and detailed an account as possible. This should be followed by further open-ended prompts and, where appropriate, specific and closed questions. However, wherever possible, interviewers should always return to asking the child open-ended questions. The use of leading/misleading questions is discouraged (Ministry of Justice, 2011). This “funnel-shaped hierarchical structure” (Orbach & Pipe, 2011, p. 152) of question types reflects the findings from investigative interviewing research.

The ABE guidance (Ministry of Justice, 2011) also addresses the planning and evaluation stages of interviewing as well as the interview itself. However, the remainder of the current chapter will focus largely on the guidelines and research related to conducting the interview, and in particular conducting multiple interviews and providing social support within these interviews.

#### **1.4 Multiple Interviews**

One of the ABE guidelines’ aims is to help interviewers provide cognitive support to children attempting to recall events (Ministry of Justice, 2011). Cognitive support is that which aids children to provide a more detailed and accurate report of events. A somewhat controversial form of cognitive support is multiple interviews, in which children may provide additional details about an event.

Multiple interviewing is when a child is formally interviewed more than once about an alleged crime. The majority of past research refers to this as ‘repeated’ interviewing. However, this thesis will refer throughout to ‘multiple’ rather than ‘repeated’ interviews because of the implication that ‘repeated’ interviews involve repetition of identical questions. Instead, multiple interviews involve eliciting recall of the same event again, but not with exactly the same questions. Furthermore, the term ‘multiple’ interviewing is also different from ‘extended’ interviewing. Extended interviewing does involve the child being interviewed about the same event over a number of different interviews. However, extended interviewing involves a series of interviews that have been planned in advance in order to aid disclosure, build rapport over a number of meetings and to incorporate different phases in the different interviews (for example, the first interview comprising rapport-building only, or asking the child to recall different aspects of the same event in separate interviews; National Children’s Advocacy Centre, see section 1.4.2). In addition, extended interviewing procedures can incorporate aims other than obtaining investigative leads and testimony for court, such as making therapy/treatment judgements (see discussion of the Extended Forensic Evaluation in section 1.4.2). Multiple interviews refers to a situation where each interview comprises a full, stand-alone interview with no further interview planned at the beginning of the interview.

Re-interviewing children has often been discouraged in psychological research (Ceci & Bruck, 1993; Leichtman & Ceci, 1995, Loftus, 2005), and the ABE guidelines (Ministry of Justice, 2011) state that children are only to be interviewed for a second time under certain circumstances. These are when:

- there is not enough time to fully discuss the information revealed during the first interview;
- other witnesses or sources reveal new information that needs to be discussed with the child;
- the child tells someone that they have further information to give the police; and when
- in preparation for trial the alleged offender reveals new information that has not been discussed in the first interview with the child.

These strict rules on when a second interview is appropriate are in place to (a) avoid the potential for increased suggestibility (due to imperfect interviewing) in later interviews, (b) reduce the risk of interviewer's increased confirmation bias, and (c) prevent unnecessary, possibly distressing, extra interviews for child victims/witnesses. Each of these possible disadvantages will be discussed in the context of the research, followed by discussion of the possible advantage of multiple interviewing, namely reminiscence and hypermnesia (section 1.4.1).

From early studies of multiple interviews, researchers developed the notion that when children are interviewed more than once, they are likely to give more incorrect information in later interviews. One of the key studies in support of this was conducted by Leichtman and Ceci in 1995. In this study, 176 children aged three to six were interviewed five times about a staged event in which a stranger visited their classroom for a very short time (about two minutes). Children were interviewed once a week for the four weeks after the stranger's visit and then a final time ten weeks after the visit. Children's prior knowledge of the stranger ('Sam Stone') was manipulated, along with the suggestiveness of the interviews they experienced. Thus, one group was read stories prior to Sam Stone's visit describing him as a clumsy but affable character. The second group were not read these stories, but had two inaccurate events imbedded into the questions they were asked in the first four interviews (for example, 'Was Sam Stone happy or sad that he got that bear dirty?', a leading question implying Sam Stone got a bear dirty when he had not). The third group experienced both the pre-event stories and the suggestive interviews. The final, control, group did not hear the stories and received entirely neutral interviews (i.e., including no leading questions). All children's final interviews were neutral (i.e., included no leading questions) and their responses to this interview were analysed. Children in the control group recalled very few inaccurate details in either their free recall or in response to prompts about the suggested events, and remembered a number of Sam Stone's actions correctly. Children who had only heard the stories about Sam Stone were the next most accurate in their recall, followed by those who had just received suggestive interviews. The group that heard stories and had suggestive interviews were the least accurate. Additionally, both groups that experienced suggestive interviews were inaccurate not only in their responses to prompting questions about the suggested events (e.g., 'I heard something about a book. Do you know anything about that?'), but also in their free recall. Thus, children were adapting their free recall to

fit the repeated adult suggestions. On the basis of this and similar research (Bruck, Ceci, & Hembrooke, 2002; Melnyk & Bruck, 2004), multiple interviewing came to be seen as a risky technique (La Rooy, Katz, Malloy, & Lamb, 2010).

However, more recently, it has been argued that the risk of children's increased inaccuracy in multiple interviews is entirely related to poor interviewing and not intrinsic to multiple interviewing itself (Faller, Cordisco-Steele, & Nelson-Gardell, 2010; La Rooy, et al., 2010). Instead, it is argued that, if carried out correctly (as all investigative interviews should be), repeat interviews could allow children to recall more information of interest to the investigation. The research has generally supported this (see section 1.4.1), and Leichtman and Ceci's (1995) control group also suggests this to be the case; when interviewed neutrally without other forms of suggestion (i.e., stereotyping) children recalled Sam Stone's brief visit accurately.

On the other hand, one criticism of multiple interviews relates to aspects of the investigation which may make it harder to conduct multiple interviews according to best practice; namely, confirmation bias. Confirmation bias is the tendency to attempt to obtain, interpret and preferentially evaluate information so that it fits with existing views and information that does not fit current beliefs is, conversely, either ignored or not sought out (Ask & Granhag, 2005). Confirmation bias is thought to influence investigations in a number of ways (Ask & Granhag, 2005), including interviewing. The Scottish Executive guidelines (2011), for example, warn interviewers that suggestions that fit with the interviewer's beliefs may be introduced and strengthened across multiple interviews (as in Leichtman and Ceci's study, 1995). Furthermore, interviewers may not have developed their opinions/expectations as firmly in first interviews as in subsequent ones. As the investigation progresses, so probably does the interviewers' understanding of the alleged crime and the supporting evidence, and thus their beliefs about what occurred may also strengthen (Smith & Milne, 2011). Therefore, they may be more biased, and thus more suggestive, in later interviews compared to earlier ones.

One study has examined how pre-interview information may lead to more biased interviewing styles. In White, Leichtman, and Ceci (1997), three to five year old children were interviewed one and two months after taking part in a game event. A social worker and a teacher conducted all the interviews (one all the first interviews and the other all the

second ones). Prior to the interviews, the interviewers were given reports about each child and the things that might have occurred during the game event. These reports included inaccurate details. The quality of the interviewers' interviews were severely affected by this information. They asked direct questions to children about most of the events included in the reports (e.g., 'Did you...'), but did not ask questions about events that were not included in the report. Although these interviewers were not trained investigative interviewers, White et al.'s study (1997) demonstrates how interviewing techniques can be unduly influenced by what the interviewer believes to have happened.

However, the limited research that has compared investigative interviewers' interviewing styles across multiple interviews with child victims/witnesses has produced mixed findings (see Table 1.2). When interviewers conduct multiple interviews using the NICHD protocol, they seem to use a similar proportion of leading questions and the same or proportionally more open-ended questions in second interviews than they do in first interviews (Hershkowitz & Terner, 2007; Katz & Hershkowitz, 2012). This interviewing style is very structured and so the interviewer has a more rigid plan of what kinds of questions they will ask. Examinations of multiple interview transcripts with non-NICHD interviewing protocols have produced less consistent results (Cederborg, La Rooy, & Lamb, 2008; Patterson & Pipe, 2009; Santtila, Korkman, & Sandnabba, 2004). In some, interviewers used more suggestive (or leading) questions in second and subsequent interviews than in first interviews (Patterson & Pipe, 2009; Santtila et al., 2004), whereas others used fewer suggestive questions, despite having received little interview training and no supervised interviewing experience (Cederborg et al., 2008). There were also differences in the use of open-ended questions in second and subsequent interviews, with some interviewers using a greater proportion, some the same, and some a smaller proportion of them in comparison to their first interviews (Patterson & Pipe, 2009; Cederborg et al, 2008; and Santtila et al., 2004 respectively). Thus, the changes in interviewers' questioning style between first and subsequent interviews do not appear to be reliable, or obviously caused by increased interviewer bias. However, they may be related to the level of planning conducted prior to the interview. The NICHD is a very structured, scripted interviewing protocol, and so interviewers may be more consistent in what they say, whereas those conducted with less structured protocols may have more flexibility for bias to affect their interviewing styles (e.g., Santtila et al., 2004).



Table 1.2

*Interviewer behaviour change from studies examining multiple interviews of child victims/witnesses*

Study	Country	Age in Years	N	Number of Interviews	Reason for Multiple Interviews	Question Type Proportion (+, <b>0</b> , - : Increase, no change, or decrease with interview number)	
						Open-ended	Leading
Cederborg, La Rooy, & Lamb (2008)	Sweden	4 - 18 with intellectual disabilities	19	2+	Real Cases - Not reported, but not standardised	<b>0</b>	-
Hershkowitz & Turner (2007)	Israel	6 – 13	40	2	Experimental	+	<b>0</b>
Katz & Hershkowitz (2012)	Israel	5 – 14	56	2	Experimental	<b>0</b>	<b>0</b>
Patterson & Pipe (2009)	New Zealand	3 – 6	24	2-4	Real cases - Diagnostic assessment procedure	+	+
Santtila, Korkman, & Sandnabba (2004)	Finland	M = 6, SD = 18.46 months	7	2-6	Real cases - Not reported, but not standardised	-	+

Another criticism of multiple interviews is the concern that they might cause increased distress to child victims/witnesses. Forensic interviews can be distressing for children, and even, in some extreme cases, make the child feel re-victimised (Plotnikoff & Woolfson, 2001). For example, in Tedesco and Schnell's (1987) questionnaire study of 48 child victims, the number of interviewers they experienced was negatively correlated with their perceptions of how helpful the investigation process was. However, Tedesco and Schnell (1987) did not analyse whether the total number of interviews was related to children's perceptions, or just the use of new interviewers. Furthermore, in cases that cause the child particular distress, multiple interviews may be less unpleasant for children as they are able to meet the interviewer more than once and build a trusting relationship with them prior to disclosure (La Rooy, et al., 2010). Disclosure may not occur in the first meeting for a number of reasons, including the child being too embarrassed, or afraid, but also because they do not understand the concept of a forensic interview (Carnes, Nelson-Gardell, Wilson, & Orgassa, 2001). Leander's (2010) analysis of a small sample of multiple field interviews with child victims/witnesses found children to be less avoidant and made fewer denials of sexual information in second and third interviews than the first interview. She concluded that this was due to increased rapport with the interviewer and confidence in the interview setting. Leander suggested this conclusion was supported by the pattern of children's disclosure; children were not reluctantly disclosing with yes or no answers, they were most informative in response to cued recall questions in all their interviews. Thus, rather than providing details mainly in response to recognition questions, children were willing to elaborate upon their answers, providing free recall details on cued topics. Although there were only ten children in Leander's (2010) sample, the abuse for each case had been verified, which suggests that this later disclosure was accurate. Thus, multiple interviews may actually allow the child to form a relationship with the interviewer, making them feel more comfortable about disclosure than a single interview would. More research is vital in this area. However, as discussed in section 1.5.4 below, measuring children's comfort during interviews is very difficult, both ethically and methodologically.

#### **1.4.1 Reminiscence and Hypermnnesia**

The possible benefit of multiple interviews is the opportunity for obtaining new, accurate information about the alleged event. Recalling information during a second recall opportunity that was not previously recalled has been found to be a common phenomenon

in the memory literature for over 100 years (Erdelyi, 1996). This phenomenon is called reminiscence, and it can entail completely new information, such as recalling a further incident of abuse, or elaborations on previous ones, such as adding that the perpetrator's hair was long, having only previously mentioned it was brown. Hypermnnesia occurs when the amount of information reminisced exceeds the amount of information not repeated (Erdelyi, 1996). This leads to an apparent improvement in recall of the event with a subsequent recall attempt.

One possible explanation of why reminiscence occurs (and subsequently hypermnnesia in some cases) is that of encoding specificity. This is the concept that everything that is encoded at the time of the event can act as a cue to other information about the event (La Rooy, et al., 2011). Thus, recall at another time can involve different cues from the first recall attempt and thus produce new recall. Additionally, retrieving information itself can provide further cues, and so a first recall attempt may in itself subsequently trigger further recall (La Rooy et al., 2011).

Studies that have examined children's behaviour in multiple forensic interviews have consistently found children to reminisce (Hershkowitz & Terner, 2007; Katz & Hershkowitz, 2012; Leander, 2010), including children with intellectual disabilities (Cederborg, et al., 2008). This has been found across a variety of countries and delays between interviews. However, in real forensic interviews of children, although new information is provided, the percentage of new information recalled is not consistent; ranging from 17% in Cederborg et al. (2008) to 43% in Katz and Hershkowitz (2012) and 65% in Hershkowitz and Terner (2007). This could be explained by two key differences between Hershkowitz and colleagues' studies (2007; 2013) and Cederborg et al.'s (2008) study. These are the length of delay between the interviews (a maximum of half an hour vs. 51 days respectively) and their samples (typically-developing five to 14 year olds vs. four to 18 year olds with intellectual disabilities). Both of these aspects of the methodologies could affect the relative likelihood of children recalling new information and whether they decide to repeat information from previous interviews or not.

Hypermnnesia, on the other hand, has not been found to occur in field studies (Hershkowitz & Terner, 2007; Katz & Hershkowitz, 2012; Santtila, et al., 2004). Leander's (2010) study found that the number of new pieces of information provided by

children in multiple interviews appeared to be consistent across first, second and third interviews. However, information repeated from previous interviews was not coded, so we cannot be certain whether hypermnesia was occurring. Furthermore, this study had a small sample size (only ten children were interviewed more than once), and so hypermnesia does not appear to be a common occurrence.

Other studies have examined children's recall over multiple forensic interviews using different coding schemes, examining children's disclosure of the crime or sensitive details and their levels of avoidance. For instance, in Azad and Leander's (2015) sample of 21 children who had been interviewed two or three times, children avoided and omitted details less in second than first interviews. DeVoe and Faller (1999) also found some children (11% of 77 five to ten year olds) to disclose in second interviews having previously been unwilling to do so. Children, therefore, seem to be more likely to disclose details of their abuse in multiple interviews than single ones.

Block, Foster, Pierce, Berkoff, and Runyan (2013) conducted a cost-effectiveness analysis on the basis that second interviews result in more disclosures. From their calculations, they concluded that the economic benefits of conducting two interviews with every suspected child victim of sexual abuse outweighed the price of the additional resources required for multiple interviewing. They estimated that standardising second interviews would lead to an increase in convictions of 6.1% (based on averages taken from the multiple interviewing research). Furthermore, although they estimated the multiple interview policy to involve a further \$100,000 investment per conviction, they also estimated that this could (somewhat conservatively) lead to six fewer children being victimised and thus medical and lost productivity savings of \$600,000 (\$100,000 per child; Block et al., 2013). This suggests the benefits of possibly more numerous convictions outweigh the economic costs of multiple interviewing.

Although studies of real interviews are helpful for determining whether children reminisce in multiple interviews, it is usually not possible to know whether this reminiscence is accurate. This makes it difficult to determine how useful such reminiscence could be for interviewers attempting to determine the truth and find useful evidential leads. Thus, experimental studies are crucial alongside field ones in order to examine accuracy in a controlled environment.

In La Rooy, Lamb, and Pipe's (2009) thorough review of the experimental literature, there was much variation in the findings of studies of children's recall across multiple interviews. In the studies they reviewed, slightly less than half found the number of correct pieces of information provided by children in response to free recall and open-ended questions to decrease with the number of interviews. However, the other half found either increases or no change in the number of correct details provided by children. The number of errors children included in their free recall responses increased with interview number in approximately half of the studies that measured this factor. In seven of the ten studies that looked at the overall accuracy of children's free recall, accuracy was found to decrease with interview number. No new studies seem to have been published since this review that have compared the number of correct details, errors, or accuracy of children's overall responses to open-ended questions across multiple interviews. Although currently results are quite mixed, they suggest that even with best practice interviews children provide less accurate information in second and subsequent interviews than in the first.

Conversely, La Rooy et al. (2009) pointed out that their review was least conclusive for interviewing research that used stressful events (such as injuries) as the to-be-remembered event, suggesting that a child's emotional response may affect their recall in multiple interviews. Furthermore, both the delay between interviews and the initial retention interval (i.e., time between the event and the first interview) also seem to affect the efficacy of multiple interviews, with longer delays reducing the amount of information children recall (La Rooy et al., 2009). Additionally, in terms of the forensic value of multiple interviews, the important point is not whether they are more useful than initial ones, but rather the extent to which they might involve recall of new, accurate information.

Children have regularly been found to reminisce in experimental studies (Bruck et al., 2002; Fivush, McDermott Sales, Goldberg, Bahrick, & Parker, 2004; La Rooy, Pipe, & Murray, 2005; 2007; Salmon & Pipe, 1997; 2000). The accuracy of this reminiscence has, however, also been found to vary. La Rooy, et al. (2007) found information that five and six year olds mentioned in their first interview and repeated in a second interview six months later was extremely accurate (and in many cases, entirely accurate). In contrast,

new information in second and third interviews (conducted with a 24-hour break between them) was 58% accurate and the total information provided in second and third interviews was 76% accurate on average, in comparison to 94% accuracy in initial interviews. Other studies have also found repeated information to be the most accurate (Peterson, Moores, & White, 2001; Salmon & Pipe, 2000), and the accuracy of new information to decrease with further interviews (Peterson, et al., 2001). In a more recent study, 37 three to 12 year old maltreated children recalled their removal from their home (at which a researcher was present to determine child accuracy) both one week and three months after the event (Baugerud, Magnusson, & Melinder, 2014). Reminiscence at the three-month interview was high; only 32% of three to four year olds' free recall was repeated, 48% of seven to ten year olds', and 47% of 11 to 12 year olds'. The accuracy rates of this new information were very high for all age groups (94%, 98% and 99% accuracy respectively). Children's responses to focused questions (wh-) were also mainly novel (22% to 36.5% was repetition) and accurate (79% to 87% was accurate). Thus, although the accuracy of new information appears to vary somewhat, multiple interviews conducted with relatively short delays appear to elicit accurate, new information.

Some theories suggest that multiple recall attempts act as rehearsal and so consolidate the memory one has for an event and strengthen the memory trace (La Rooy et al., 2009). A possible benefit of this is that because the memory trace may be stronger, children could be less suggestible in repeated recall attempts. On the other hand, repeated suggestive interviewing (as discussed above) could be particularly risky for use with children, and so consolidation may not protect against the social pressures related to suggestibility. The literature is, again, inconsistent on this. From La Rooy et al.'s (2009) review, 16 of the 30 experiments with multiple suggestive interviews led to children providing less accurate information through agreeing with interviewers' suggestions and incorporating them into their own recall. However, La Rooy et al. (2009) argue this is explained by the use of multiple suggestive techniques in some of these studies (for example, suggestive questioning, and peer pressure), and long delays between interviews in others (i.e., ten weeks to a year). Thus, they suggest that some suggestive techniques are more detrimental across multiple interviews than others. For example a further 12 of the 30 studies used misleading yes/no questions as their only suggestive technique and found errors did not increase across interviews (La Rooy et al., 2009).

Studies published since the review have also found mixed results. Akehurst, Burden, and Buckle's (2009) study of 105 nine to 11 year olds found children incorporated misinformation in their responses to closed wh- questions more frequently just after they had been exposed to the misinformation than when questioned a second time three months later. This is despite being exposed to the misinformation on the same day as the to-be-remembered event (a video of a dentist visit), leaving little time for forgetting. Conversely, when asked questions about an activity that did not occur during the to-be-remembered event, the 29 four year olds in Melinder, et al.'s (2010) sample, were more accurate in first than second interviews. In their first interview, two weeks after the medical examination they were interviewed about, children gave more correct rejections (i.e., correctly stated the activity did not occur) than when they were interviewed a month later. Rocha et al. (2013) also found children to be more suggestive at a second interview than first. Sixty-eight four to 12 year olds were interviewed on the same or following day as a dental appointment, and then again six to eight weeks later (by telephone). These interviews contained only forced-choice questions but children were less able to make correct rejections (when neither choice was correct) in second than first interviews. Thus, the benefits and disadvantages of multiple interviewing do not appear to apply to all forms of multiple interviewing, varying with delay length, and possibly question type. Further research is necessary to determine the parameters within which multiple interviews can be most helpful to investigations.

Reminiscence (and hence, hypermnesia) can be useful for an investigation as details provided in the new testimony may include crucial investigative leads and testimony (as shown in La Rooy, et al., 2010). However, such benefits of repeat interviewing are not without drawbacks. Perceived inconsistencies (such as recalling different information in each interview) can negatively affect mock-jurors' perceptions of children's believability (Leippe, Manion, & Romanczyk, 1992; Quas, et al., 2005), and barristers actively search for and try to create inconsistencies due to this negative perception. Furthermore, they frequently highlight any inconsistencies during cross-examination in an attempt to demonstrate witness unreliability (Burrows & Powell, 2014; Fisher, Brewer, & Mitchell, 2009). However, inconsistency can take several different forms (Krix, Sauerland, Lorei, & Rispens, 2015). Contradictions are a form of inconsistency that indicate that some of the child's testimony is inaccurate (Lamb & Fauchier, 2001). When a child directly contradicts her/himself, at least one of the pieces of information provided must be

inaccurate; for example, if a child states that the perpetrator had blue eyes in one interview, and brown eyes in another. This does not, on the other hand, necessarily mean the entire account is inaccurate (Fisher et al., 2009).

Another form of perceived inconsistency can be reminiscence (La Rooy, et al., 2010). Despite the literature that has found reminiscence to be largely accurate (Gilbert & Fisher, 2006; La Rooy et al., 2007), children's reminiscence may still negatively affect jurors' opinions of the child's testimony. Fisher et al. (2009) found that this form of inconsistency was not a good indicator of unreliable testimony, and that instead, the quality of the interview (e.g., types of questions asked) gave a better indication of the accuracy of the child's responses. Thus, if multiple interviews are conducted using best practice, they do not necessarily cause the child's testimony to decrease in accuracy (even though they may appear inconsistent) and can lead to children remembering new, accurate information about the event. With the advent of empirically-evidenced guidelines, some of the reasons for avoiding second interviews (e.g., children's increased 'suggestibility' or a concern over inconsistent testimony) may now be out-dated. Changing juror instructions and incorporating expert witness testimony on the subject of inconsistency may be effective at reducing jurors' inaccurate use of this as an indicator of unreliability (Fisher et al., 2009).

#### **1.4.2 Multiple Interviewing in Practice**

Although in many countries multiple interviews of child victims/witnesses are conducted (for example, Portugal and Scotland; Peixoto, Ribeiro, Fernandes, & Almeida, 2015, Plotnikoff & Woolfson, 2001), they are generally not pre-planned. Instead, including in the UK, multiple interviews are normally conducted as and when they are necessary. Video-recording of initial investigative interviews has been introduced as a Special Measure for child interviewees and is encouraged in order to reduce the need for re-interviewing (Wilson & Davies, 2000). However, in some parts of the world including the USA, pre-planned multiple interviews are conducted. These usually take the form of 'extended' interviews (i.e., going through the same steps as a single interview, but spreading them over a number of separate occasions; Carnes, et al., 2001). They are frequently conducted by practicing professionals, such as clinical psychologists or social workers, and mainly with children suspected of being victims of sexual abuse. These interviews often involve some assessment of children's therapeutic needs as well as



attempts to obtain information about the alleged abuse. However, although these are conducted in a number of countries (for example, in Ireland in Dublin's Children's Hospital, Lacey & Nunkoosing, 2014; and in Northern Ireland at the Child Care Centre in Belfast, R. Bull, personal communication, December 12, 2013), details regarding their processes or any evaluation of them do not appear to have been published.

One example of extended interviewing practice that has been written about is the USA's National Children's Advocacy Center's Extended Forensic Interview Protocol (henceforth EFI, formerly known as the Extended Forensic Evaluation; National Children's Advocacy Center, 2014). Of the 700 Child Advocacy Centers in the USA, over 50 use this protocol (Connell, 2009). It recommends five sessions with children, each of approximately 50 minutes, although fewer or more interviews can be conducted as necessary. All the interviews are ideally completed within a week or two (National Children's Advocacy Center, 2014). Children are referred for extended interviewing if their initial investigative interview has been in some way unsuccessful: either because the child did not disclose abuse but other factors suggest they have been victimised, such as the child's behaviour; or because the full extent or nature of abuse was not disclosed; or because the information gathered suggested abuse but needed further clarification (Carnes, et al., 2001). The forensic aims are, therefore, to determine the likelihood of abuse and who the likely perpetrators are, to gather information to aid the understanding of child protection and law enforcement professionals, to allow the child to disclose over time, and to assess the extent and nature of abuse (Carnes, et al., 2001). Other aims of the protocol are therapeutic; to gather information on the child's social and behavioural development to aid treatment decisions, and to establish a foundation for such treatment to be based on.

The EFI (described above) sets out suggested session plans starting with a rapport-building and developmental assessment session with the child (Carnes, et al., 2001). The second session should involve assessment of their social and behavioural development, with discussion of the alleged abuse only starting in the third session. The third, fourth, and fifth sessions involve discussion of the alleged abuse using techniques recommended in the published interviewing research (i.e., the earlier sessions involve open-ended questions and each session introduces more specific questions as necessary). The final, fifth session also involves a closure phase (Carnes, et al., 2001).

In an evaluation of the interviewing protocol, Carnes et al. (2001) found the majority of outcomes to be 'successful' (64% of 147 children's extended interviews), insofar as the interviewers came to a clear decision as to whether the abuse had or had not occurred. In 36% of cases, on the other hand, this was still unclear after the interview process. Carnes et al. (2001) suggest that these outcomes are reliable because 73% of cases in which it was decided the abuse was likely to have occurred went on to be upheld in court. However, Connell (2009) argues that this is not an independent decision; if a case has been supported by the National Children's Advocacy Center, jurors may view it as a stronger case and be more likely to give a 'guilty' verdict.

Although the EFI theoretically involves best practice interview techniques, there has been no independent research to determine whether these are being put into practice (Connell, 2009). Additionally, the dual role of the interview (obtaining forensic information and assessing therapeutic needs) has been criticised for producing neither forensically-sound, nor therapeutically helpful interviews, and there are a number of practices encouraged in the guidelines which do not fit with the empirical literature (Connell, 2009). For example, interviewers are encouraged to interview the child's non-offending caregiver and the alleged offender (when necessary), and to obtain information from law enforcement and child protection services prior to conducting their interviews of the child. This is contra to advice that suggests interviewers should have as little information about the alleged offence as possible to reduce the risks of confirmation bias or contamination of the child's testimony (Smith & Milne, 2011), which may be particularly risky for multiple interviews (as discussed above). Thus, although multiple or extended interviewing practices are already in use in some countries, there has been minimal evaluation of these procedures, and the protocols used may not necessarily fit with the best practice emerging from the empirical literature.

### **1.5 Interviewer-Provided Social Support**

As previously mentioned, investigative interviews can be a traumatic experience for children. They often involve recounting memories to a complete stranger of experiences that may have been distressing and confusing for the child. Such an interview could cause the child to feel embarrassed and anxious and, if carried out in an unsympathetic way, the child could even feel re-victimised by the experience. In Hershkowitz,

Horowitz, and Lamb's (2005) study, only 65% of children in 26,446 child interviews conducted in Israel disclosed abuse. This reluctance to disclose may be caused by children being uneasy in the interviewing context (Katz, 2015). Leander, Christianson, Svedin, and Granhag (2007) in their Swedish survey found that law enforcement professionals often perceived children's emotional barriers to disclosing cases of sexual abuse (e.g. feelings of discomfort, fears of being misunderstood or not believed) to be greater than their cognitive barriers (e.g., developmental barriers such as their reduced understanding of language and vocabulary). Thus, there is some evidence to suggest that criminal justice professionals are aware of the need to support children during investigative interviews. However, the guidelines provided and the empirical evidence regarding social support in child interviews are still in their early stages.

Social support has been defined as "social interaction or communication that fosters a feeling of well-being in the target" (Davis & Bottoms, 2002, p. 186). In the psychological literature, social support has often been examined as an interviewer-provided characteristic of the interview, and so verbal and non-verbal supportive interviewer behaviours (including rapport-building) will be examined in this chapter. However, here we face a confusion in terminology within the literature (Saywitz, Larson, Hobbs, & Wells, 2015). It is not entirely clear how social support and rapport relate to each other; is rapport-building one of many options for providing social support to a child interviewee, or are socially supportive behaviours all involved in creating (and maintaining) rapport? The majority of the literature appears to support the first interpretation, including rapport-building as one of many manipulations to create a supportive interview. The literature that has examined rapport-building alone will be discussed further below, as well as that which has included rapport-building as one form of socially supportive behaviour among other behaviours. Although the mental well-being of the child is important, it is also important for the investigation that the information provided during the interview is accurate, therefore, social support will be discussed in regards to both its effects on children's emotions and on the accuracy and informativeness of their event recall.

### **1.5.1 The 'Achieving Best Evidence in Criminal Proceedings' Guidelines**

The ABE guidelines (Ministry of Justice, 2011) address the interviewer-interviewee relationship and interviewer demeanour in a number of ways. Firstly, they emphasise the

importance of a rapport-building phase at the beginning of the interview (e.g., creating a positive relationship with the interviewee, see section 1.5.3 below for more details). Additionally, they state that the interviewer should “try not to appear too authoritative, but should be confident and competent as a means of reassuring the witness that they can be relied on” (Ministry of Justice, 2011, p.74) to avoid interviewees being compliant rather than providing their own memories of the event. They also mention avoiding an authoritative demeanour to decrease interviewee acquiescence and to reduce the power imbalance between the interviewer and interviewee. ABE suggests that interviewers should communicate sympathy and respect towards the witness and, where necessary, reassurance too. Furthermore, in regards to very young and psychologically disturbed children, ABE suggests that a “warm demeanour and social support from a familiar adult” (p. 177) may make the interview experience less daunting. Finally, interviews may, according to ABE, include an interview supporter or intermediary. The interview supporter’s role is solely to provide emotional support for the interviewee, whereas the intermediary’s role is to aid communication. Although intermediaries are not meant to directly provide support, their work making the interview questions appropriate for the child may indirectly cause the child to be less anxious. The present thesis, however, will focus on interviewer-provided social support.

Although the inclusion of these guidelines makes sense from an ethical/moral point of view (the child might have been through a traumatic experience, so the disclosure of this trauma should be as easy and comfortable as possible), the research supporting such guidelines is scarce and not always consistent in its findings.

### **1.5.2 Theories of Social Support**

There are a number of theories for why support could help children recall more information in interviews. One is that building rapport and being supportive eases the interviewee’s anxiety and thus allows them to draw on greater cognitive resources to recall the pertinent information (Ministry of Justice, 2011). This is supported by the theory of cognitive busyness and the concept that anxious people will expend cognitive resources on negative thoughts (Ridley & Gudjonsson, 2013), rather than the task at hand. According to discrepancy detection theory (Tousignant, Hall, & Loftus, 1986), detecting discrepancies between the information supplied in questions and the information in one’s memory is more cognitively taxing than free recall, which would mean support may have

preferential effects on children's responses to recognition questions (such as option-posing and leading) but not free recall questions (such as open-ended ones). This is generally found to occur within the limited literature currently available (see sections 1.5.3 and 1.5.4), although it is less clear if this effect of support is mediated by anxiety.

Another theory that could explain this same finding is that of resistance efficacy (Davis & Bottoms, 2002). This theory states that by reducing the perceived authority differential between the interviewer and interviewee (e.g., by the interviewer being less authoritative and giving the child some control within the interview), the child's resistance efficacy, or "perceived self-efficacy for resisting an interviewer's suggestions," (Davis & Bottoms, 2002, p. 185) will increase. This may mean that the child is more confident about contradicting the interviewer and thus more resistant to leading questions.

A further reason for social support resulting in children providing more information is purely that children like the interviewer and are more motivated to disclose. Qualitative interviews with child victims support this argument; six to 18 year olds reported feeling that it was important that they liked their interviewer in order to be able to talk openly with them (Westcott & Davies, 1996a).

A final explanation suggests that rapport does not improve children's recall through a socially supportive route, but instead a cognitive one. Aspects of rapport are similar to a practice recall phase, and so children who experienced the rapport-building phase may just be more used to responding in full to open-ended questions than those who did not experience it (Roberts et al., 2011).

The only published study that has conducted statistical analyses attempting to determine how social support aids children's recall seems to be that by Davis and Bottoms (2002). In their sample of 81 six and seven year olds, they found that children were more accurate in response to leading questions in supportive interviews, and explored two hypotheses for why this happened. The first was that it was caused by support increasing children's resistance efficacy. However, children's resistance efficacy scores only seemed to mediate the relationship for older (6.5 to seven year olds), and not younger children (six to 6.5 year olds). Davis and Bottoms (2002) also found that their alternative hypothesis, decreased anxiety, was not the mediating factor. Children were significantly less anxious

in supportive interviews than in non-supportive ones, but this did not mediate the relationship between support and reduced suggestibility. Thus, there is no one theory that explains the beneficial effect of social support that is clearly evidenced by the existing literature.

### **1.5.3 Rapport**

As a psychological phenomenon, rapport is difficult to define (Saywitz, et al., 2015). Tickle-Degnen and Rosenthal (1990) describe rapport as consisting of three components: mutual attentiveness (paying attention to and being involved in what the other person is saying), positivity (mutual friendliness), and co-ordination (both parties should be able to work together). They argue that although co-ordination is less important for meetings that occur early in the relationship (as child interviews regularly do), all three components must be present. In the context of a forensic interview, rapport has been thought of as leading to a more comfortable relationship between the interviewer and interviewee, which improves the atmosphere (R. Collins, Lincoln, & Frank, 2002). Thus, rapport is an interpersonal phenomenon, and one conversational partner's intention to build rapport with the other will not necessarily result in rapport (Abbe & Brandon, 2013). Furthermore, rapport is not permanent; even once rapport is built, it can increase or decline during the interview (Saywitz, et al., 2015), and so rapport maintenance is vital (Walsh & Bull, 2012; see section 1.5.4).

The ABE guidelines encourage rapport-building in order to create a positive atmosphere, reduce the interviewee's anxiety, and free up cognitive resources for recalling the key event (Ministry of Justice, 2011). ABE stipulates that the interviewer asks the interviewee some neutral questions to build rapport. The aim is for the child to be able to positively talk about one or more 'neutral' events to build a bond between the interviewer and interviewee. They also encourage the use of active listening, therefore including Tickle-Degnen and Rosenthal's (1990) concepts of positivity and mutual attentiveness in the interview from the beginning. The benefits of rapport-building have been said to include easing children's anxieties about the interview, including making the interviewer appear less authoritative, giving the child an opportunity to practice responding to open-ended questions, and allowing the interviewer to assess the child's verbal skills and emotional state (Roberts, et al., 2004).

However, in practice, rapport-building has sometimes been found to be conducted poorly. Studies of real investigative interviews have found that training is not translated effectively into practice. Westcott and Kynan (2006), for example, in a sample of seven to 12 year old children's interview transcripts, found that rapport was often carried out in a 'list-like' manner rather than being used as an opportunity for the interviewer and interviewee to bond. Furthermore, in child protection agency interviews with suspected victims of child sexual abuse, Wood, McClure, and Birch (1996) often found interviewers were 'mechanical' in their rapport-building; resorting to questions with brief answers (e.g., "What's your favourite subject?") and responding in a lukewarm fashion. Davies, Westcott, and Horan (2000) found that interviewers spent only a short time building rapport with children, with 28 of their 36 interview sample involving rapport-building of less than ten minutes. Ineffective rapport-building may jeopardise the value of the rest of the interview. Walsh and Bull's (2012) investigation of rapport in field interviews with adult suspects found skilled rapport-building early in interviews (identified by an interviewer appearing relaxed and conversational and having a 'harmonious' approach to the interview) to be strongly associated with skilled interviewing in later aspects of the interview (and that such rapport was associated with 'desirable' interview outcomes). Without proper rapport, children may feel the interviewer is not genuinely interested in what they have to say. This, in turn, might lead to some of the negative effects of non-supportive interviewing found in the experiments discussed in section 1.5.4.

Despite most interviewing guidelines emphasising the necessity of building rapport in child interviews, there exists very little experimental research addressing whether it is effective at either making children feel more comfortable or helping them provide more details about an event. In fact, a recent review found only three experimental studies that fit such criteria (Saywitz et al., 2015). Despite this, another recent review of the research has suggested that rapport-building results in a "clear and robust" benefit to child witnesses and that the evidence is strong enough to be included in expert testimony in courts (Vallano & Schreiber Compo, 2015, p.96). The likely reason for these two reviews to have come to such vastly contradictory conclusions is based in their definitions of rapport-building research. Vallano and Schreiber Compo's (2015) review included discussion of rapport-building research and social support research, whereas Saywitz et al. (2015) expressly excluded studies which included rapport-building as one of many socially supportive behaviours (for discussion of these, see Section 1.5.4). Thus, the

literature associated solely with rapport-building may not result in the same confidence described by Vallano and Schreiber Compo (2015).

Examining the research that has specifically looked at rapport-building (and not other forms of social support) in child interviews, there is very little literature that includes a no rapport-building comparison. To the author's knowledge, the only study comprises K. Collins' (2012) unpublished, doctoral thesis. In her research, she found that a rapport-building phase consisting of open-ended questions about a neutral subject (as is currently recommended in ABE; Ministry of Justice, 2011) had no statistically significant effects on 94 six to 14 year olds' recall or their suggestibility in comparison to no-rapport (contrary to studies using adult participants that found rapport-building improved recall in comparison to a no-rapport condition, Vallano and Schreiber Compo, 2011). In contrast, a play rapport-building phase (in which the child and interviewer completed a play task together, such as a jigsaw) led to children providing more detailed and accurate information in a subsequent mock forensic interview, and responding correctly to misleading questions more frequently. K. Collins (2012) also examined children's self-reported state anxiety and their heart rate variability and did not find these to differ significantly between rapport conditions, suggesting that the effects of play rapport were not due to a decrease in children's anxiety. Thus, the use of rapport-building as it is somewhat vaguely described in ABE (Ministry of Justice, 2011) does not seem to have improved children's recall in K. Collins' (2012) study.

Other studies have compared the use of different rapport styles on children's recall without a control condition (Brown, et al., 2013; Roberts, et al., 2004; Sternberg, et al., 1997). In an experimental study with 144 three to nine year olds, Roberts et al. (2004) found that children's accuracy rate was greater for those that had experienced rapport-building using open-ended questions than those that had experienced rapport-building with direct questions (i.e., specific-closed and forced-choice). In particular, children who experienced open-ended question rapport-building provided more accurate information in response to leading questions. Brown et al. (2013) studied five to seven year olds responses to rapport-building. They created three conditions; children experienced an open-ended rapport-building phase with an open-ended question practice interview, an open-ended rapport-building phase with no practice interview, or experienced a rapport-building phase and practice interview consisting of wh- and yes/no questions. The



differences in their pre-substantive phases had no effect on children's overall informativeness, but children who had experienced an open-ended rapport-building session and an open-ended question practice interview gave the most details in response to invitations. The authors suggested that practice of answering open-ended questions about a neutral event may make children more efficient in their responses, if not more informative overall. Sternberg et al. (1997) compared similar rapport-building techniques (rapport with open-ended questions vs. rapport with direct questions) with a sample of 51 suspected child sexual abuse victims. In this study, four to nine year olds with whom interviewers had built rapport using open-ended questions provided more details and words in response to the first substantive question and subsequent open-ended questions than children who had experienced direct rapport. The authors for all these studies concluded that open-ended rapport-building should be encouraged. However, they all used rapport-building comparisons that could be argued to be measuring children's practice in answering open-ended questions rather than the level of rapport built. Furthermore, none of them included a control condition in which the child experienced no rapport-building. Given that K. Collins (2012) found open-ended rapport-building to have no effect on children's recall in comparison to a no rapport-building condition, it could be that, instead of open-ended rapport-building providing an enhancement in children's recall, direct rapport-building may be detrimental to children's recall. This has also been suggested regarding the effects of poor rapport-building on adults' interviewing performance (Vallano & Schreiber Compo, 2015).

Overall, the efficacy of rapport for improving children's psychological well-being in the interview setting and increasing their recall has not been sufficiently investigated and the research thus far suggests that rapport-building as is currently recommended may not be very effective. Additionally, none of the studies that have addressed rapport-building here have discussed rapport maintenance.

#### **1.5.4 Supportive Verbal and Non-Verbal Behaviours**

One option for maintaining rapport throughout an interview is to incorporate supportive behaviours in the substantive phase. Supportive verbal and non-verbal behaviours have been found, like multiple interviews, to be hazardous in combination with suggestion. Supportive behaviours can be used to encourage specific details that the child provides (Hershkowitz, 2011). For example, if a child starts to talk about the suspected

perpetrator, an interviewer's sudden renewed interest and frequent smiles and nods may alert the child to the idea that this topic of conversation is of particular interest to the interviewer. The child may, therefore, start to elaborate on this topic, and may provide accurate but also inaccurate information in an attempt to please the interviewer. In an attempt to avoid this situation, interviewers may not be supportive towards children in interviews. However, it is possible to provide non-suggestive support by encouraging children's general performance rather than the specific, such as by saying 'You are really helping me to understand' (Hershkowitz, 2011). The rest of this section discusses forms of these non-suggestive supportive behaviours.

A handful of studies have attempted to determine which behaviours affect children's perceptions of an adult and their likability (which may be associated with perceived rapport, Rotenberg, et al., 2003). Almerigogna, Ost, Akehurst, and Fluck (2008) found eight to ten year old children rated interviewers who used certain non-verbal behaviours (in this case, smiling and not fidgeting) as more friendly and less strict, bored, or stressed than those who did not show these behaviours. Smiling has also been perceived positively by younger children: Rotenberg, et al. (2003) found three to five year old children's ratings of adult likability (but not trustworthiness) were slightly higher if the adult smiled frequently. Additionally, when interacting with an adult who smiled a lot, children made fewer non-verbal expressions of nervousness while they were being read a story, and disclosed more personal information when asked. However, Rotenberg et al (2003) also found that children's shyness affected their interpretation of adult behaviours (specifically, how much the adult gazed at the child). Shy children perceived adults' increased gaze as less trustworthy than children who were not shy. The reverse was true for adults who looked at the children less frequently. Thus, children's interpretations of behaviours that adults may use to communicate supportiveness may not be as straightforward as expected, and may depend on the child.

Other studies have used smiling and eye contact along with other behaviours such as body postures, and vocal intonations to vary how supportive interviews appear (Almerigogna, Ost, Bull, & Akehurst, 2007; Carter, Bottoms, & Levine, 1996; Goodman, et al., 1991; Imhoff & Baker-Ward, 1999; Quas, et al., 2004; Quas & Lench, 2007). These are all behaviours that are not mentioned in the ABE guidelines (Ministry of Justice, 2011), however, they could be taught to investigative interviewers and have been found to

decrease six to ten year old children's anxiety in some experiments (Almerigogna et al., 2007; Davis & Bottoms, 2002).

Most experimental studies that investigate the effects of supportive interviewing have used a methodology that involves children watching a video or a live staged event. The children are then interviewed about the event or video in a supportive or non-supportive manner (i.e., without any of the behaviours described above). These interviews often involve free recall, misleading questions to test how support affects children's suggestibility, and direct questions which are often standardised so the effects of supportive behaviours on children's recall can be directly examined. Most of these studies, much like the rapport-building ones, have examined the effects of support on children's informativeness and accuracy in interviews in response to different question types. Supportive behaviours have only been found to affect responses to open-ended questions in four studies. In Goodman et al.'s (1991) study, three to seven year olds received reinforcement (indiscriminate praise, snacks, and the interviewer was friendly, warm, and smiling) or no reinforcement from interviewers. Reinforcement was found to improve children's accuracy by decreasing the number of inaccurate statements they made in their free recall of the event (a stressful vaccination). Bull, Paterson, and Vrij (2003) also found positive effects of support on free recall; children in their supportive interviewing condition (who experienced an interviewer who introduced themselves using their first name, smiled, maintained eye contact, and wore informal clothes) provided more correct free recall and details in response to open questions than children in the unsupportive condition. However, Goodman, Sharma, Thomas, and Considine (1995) found that supportive strangers (i.e., strangers who made statements which indicated supportiveness or rapport-building, such as references to the children's feelings, or praising the child) who interviewed four year old children obtained less accurate free recall information than strangers who made fewer supportive statements when interviewing. Goodman et al. (1995) suggested this was because the interview was unstructured; interviewers may have been more supportive to uncooperative children (although the opposite has been found in some research, Hershkowitz, Orbach, Lamb, Sternberg, and Horowitz, 2006) and so the relationship may have been due to the child's uncooperativeness rather than the interviewer's supportiveness. Quas, Rush, Yim, and Nikolayev's (2014) study, however, also found (168) children to provide more free recall correct details about a stressful task to non-supportive than supportive interviewers.

Although both seven to eight year olds and 12 to 13 year olds said a similar amount to both supportive and non-supportive interviewers, they used more cognitive internal state language (information about their interpretation and understanding of the event) and gave fewer details of what actually happened in response to supportive interviewers (Klemfuss, Milojevich, Yim, Rush, & Quas, 2013). Conversely though, more studies have found support (in the form of the interviewer introducing themselves and building rapport, making eye contact, having a relaxed body posture, warm vocal intonations, and smiling frequently) to have no effect on three to 12 year old children's free recall (Carter et al., 1996; Davis & Bottoms, 2002; Quas et al., 2004; Quas, Eisen, & Rivers, 2000; Quas, Wallin, Papini, Lench and Scullin, 2005). The differences between these studies may be explained by the use of a separate rapport or introductory section at the beginning of the interview in these latter studies. This may have tired the children and meant that they put less cognitive effort into their retrieval of the event during the free recall phase of the interview. However, it appears that increasing interviewers' supportive verbal and non-verbal behaviours is unlikely to have negative effects on children's free recall and certain forms of support could in fact improve children's accuracy.

Studies that have examined the effect supportive behaviours have on children's responses to suggestive questions have also produced mixed findings. Some studies have found supportive or non-authoritative interviewing to lead to five to 14 year old children responding with more accurate and/or fewer inaccurate answers to misleading questions (i.e., questions that include misinformation and/or imply an incorrect response is accurate; Almerigogna et al., 2007; Almerigogna et al., 2008; Bull & Corran, 2003; Carter et al., 1996; Davis & Bottoms, 2002; Goodman et al., 1991; Quas et al., 2014; Quas et al., 2005). These studies have used a range of socially supportive techniques, from an interviewer who builds rapport, makes eye contact, smiles, speaks in warm intonations, has a relaxed body posture and sometimes provides reinforcement, to an interviewer who merely smiles and does not fidget, to one who has an open body posture, an informal tone of voice and friendly facial expression. Other studies have found supportive interviewing (including indiscriminate praise, the interviewer being friendly and warm, smiling, giving the children snacks, rapport, energetic tones, and proximity to the child) to lead to increased errors and/or decreased correct answers to misleading questions in three to four year olds (Goodman et al., 1991; Quas, et al., 2000). The findings regarding support and leading questions (i.e., questions that imply a preferred response but that response is in

fact accurate) are also mixed. Bull and Corran (2003) found negative effects of non-authoritative interviews; seven to 11 year olds gave fewer correct answers to leading questions in this condition than in the authoritative condition. However, other (larger) studies have found support to have no effect on responses to correctly leading questions (Carter, et al., 1996; Davis & Bottoms, 2002). Imhoff and Baker-Ward's (1999) study found support (snacks, indiscriminate reinforcement, eye contact, a friendly attitude and a relaxed body posture) to have no effect on three to four year old children's responses to either correctly leading questions or misleading questions. However, they argued that this may have been caused by their non-supportive condition being somewhat supportive (e.g., occasional smiles and encouragement), meaning that their two conditions were more similar than in other studies. Thus, their non-supportive condition may not have triggered the necessary levels of stress for support to appear effective in contrast. Overall, these findings suggest that the effect of supportive interviewing on the recall of children younger than five is inconsistent. However, with older children, supportive interviewing seems to have positive effects on their responses to leading and particularly misleading questions.

Finally, some studies that have not differentiated between question types have found children's responses, as with leading and misleading questions, to also improve in supportive interviews under some circumstances. Quas et al. (2005) examined five and six year old children's suggestibility as an individual difference by testing their likelihood to acquiesce to suggestion and change their answers to questions under external pressure using the Video Suggestibility Scale for Children. They found that children who were generally more likely to acquiesce to suggestion made more errors and had a lower proportion of correct answers in response to specific questions (i.e., wh- and yes/no questions) in non-supportive interviews only. Contrastingly, in the supportive interviews, there were no significant differences in recall between children who were generally highly susceptible to suggestion and those who were not. Quas and colleagues (2004; 2007) have also examined four to six year olds' overall accuracy in interviews which included misleading questions and non-leading closed-ended questions (such as 'How many boys were there?'). Quas et al. (2004) found that children with high autonomic reactivity (i.e., those who responded physically to stressful environmental stimuli) gave more accurate responses in supportive interviews (including rapport, smiles, eye contact, verbal encouragements and warm vocal intonations) than in non-supportive ones.

Conversely, they found that children with low autonomic reactivity gave fewer accurate responses; answering 'I don't know' to questions more often in supportive than non-supportive interviews. However, when Quas and Lench (2007) examined the effect of arousal at encoding and retrieval (by taking children's heart rates) they found that increased heart rate at the time of the interview had no effect on five and six year olds' recall in supportive interviews (created as in Quas et al., 2004), but was related to more errors and fewer correct answers to questions in non-supportive interviews. These somewhat contradictory results imply that the relationship between autonomic reactivity, supportive interviewing, and children's recall is in need of further examination.

An alternative way of providing support in interviews is for the child to be interviewed by someone they know rather than a stranger. Studies have used peer and parental interviewers in order to examine the effects of the interviewer-interviewee relationship on children's recall. Although parental interviews are not a practical solution to improving children's recall, when interviews are standardised, it does allow a clear comparison of opposite scales of interviewer-interviewee relationships (i.e., the very close parent-child bond vs. the unformed stranger-child one). Goodman et al. (1995) found four-year-old children to answer abuse-related misleading questions more accurately when they were asked by their mothers than when asked by female strangers. They argued this was because children were more comfortable with their mothers and less embarrassed by the abuse-related questions. However, Ricci, Beal, and Dekle (Experiment 2; 1996) found no differences in five to six year olds' responses to suggestive questioning when interviewed by their parent or by an unfamiliar researcher. On the other hand, they found that research assistants' (blind) ratings of children's comfort in the interview situation (assessed by their non-verbal behaviour) were positively correlated with their interview performance in that children who appeared to be more comfortable responded correctly to direct questions more often than less comfortable children. Therefore, the parent-child relationship may not in itself cause the child to feel more comfortable in the interview, which may explain the conflicting findings regarding children's responses to leading questions. Thus, although parents were used in these studies to represent an extremely comfortable interviewer-interviewee relationship, this comfort does not necessarily continue with the change in roles (parent-child to interviewer-interviewee).

In contrast to studies comparing parent and stranger interviews, studies that compare peer interviews with adult interviews can examine the interviewer-interviewee relationship by manipulating the power imbalance. Once again, this is not a practical option for child interviews, but child-to-child interviews should remove the suggestibility caused by any power differential the child perceives between themselves and the interviewer, allowing comparison of the effects of extremely contrasting levels of power imbalance. In a study by Westcott and Davies (1996b), social workers read transcripts of interviews with eight to 17 year old children. The interviewers were either children of the same age or adults, but the social workers were not aware of which they were reading. The social workers rated the child-to-child interviews as less intimidating and more conversational than adult-to-child interviews and the adult interviewers as more powerful, controlling and patronising than the peers. Additionally, children's recall in the child-to-child interviews was no different to their recall in the adult-to-child interviews, although adults elicited more contextual information. This suggests that what children may lack as interviewers (for example, the children may not have been sure of the purpose of the interviews), they make up for by being less intimidating. However, the interviews in this experiment were not standardised. Therefore, we cannot assume that the differences are caused only by the differing social aspects (e.g., power imbalance) of the interviews. Instead, these results may be caused by the differences in adult and child interviewing techniques. For example, adult interviewers asked more closed questions than peer interviewers.

While the experimental research reviewed above does largely sanction the use of supportive behaviours in child interviewing, practice based solely on laboratory results is risky. There are limitations to how well experiments imitate real-life situations such as the investigative interview of a child. Ethically, it is not possible or desirable purposely to expose children to real crimes in order to study their recall under differing interview conditions. However, this lack of ecological validity is particularly difficult when considering the effects of support on children's eyewitness recall. It is debatable whether the experience of recalling a clip from a children's movie to a researcher within a known, safe environment (as in Almerigogna et al.'s study, 2007) is comparable in any way to the experience of recounting their experiences as a victim of abuse or neglect to a police officer within an unknown environment (such as an interviewing suite at a police station) in terms of the child's anxiety and therefore, possibly, their need for social support. Furthermore, the use of non-maltreated children may also limit applicability bearing in

mind some research has found aspects of maltreatment to affect children's ability to build a trusting relationship (Eltz, Shirk, & Sarlin, 1995; Saywitz et al., 2015).

Thus, field studies are invaluable and so it is unfortunate that very few address support in such investigative interviews. Teoh and Lamb's (2013) field study looked at the effect of verbal support on five to 15 year olds' informativeness and verbosity. They coded 75 transcripts of interviews with children in sexual abuse cases for supportive (e.g., non-suggestive positive reinforcement, such as 'You are telling very well') and non-supportive interviewer utterances (e.g., coercive comments, such as 'We cannot help children who do not talk') and the number of words they said in an interview phase (i.e., pre-substantive and substantive). They found that children gave more new, forensically-relevant information in supportive than non-supportive interviews, but provided less of this information in interviews where the interviewer spoke more. On the other hand, Lewy et al. (2015) analysed 90 interview transcripts and found that supportive comments were not associated with greater disclosure, but that non-supportive comments were related to limited disclosure. Non-supportive comments (such as bargaining with the child, controlling them, or doubting what they say) were negatively related to the average number of forensically-relevant details four to 13 year old children provided per utterance. However, it is difficult to determine whether interviewers became non-supportive in reaction to limited child disclosure or vice versa. Child reluctance, expressed verbally by refusing to cooperate or elaborate, by digressing or being confrontational, was also found to be negatively correlated with child disclosure.

In another field study, focusing on the differences between interviews in which the child disclosed abuse versus those in which the child did not, Hershkowitz et al. (2006) found that four to 13 year olds who experienced more verbally supportive interviews (i.e., those with more non-suggestive positive reinforcements, more addressing of the child in a personal way, more reference to the child's emotions, and more facilitators) gave more informative responses than those that had less support. Additionally, interviewers were found to be more supportive in the substantive phase of the interview (i.e. the phase in which the crime itself is discussed) to disclosing children than to non-disclosers. Possibly in response to this lack of support, non-disclosing children were increasingly uninformative and resistant to interviewers' questions in this phase. However, interviewers were equally supportive to all children in the pre-substantive phase. This



suggests that interviewers might respond to uncooperative children by being less supportive when discussing the crime, as mentioned above.

In order to address interviewers' difficulties with non-disclosing children, and in particular the challenges related to continuing to provide social support to such children, Hershkowitz and colleagues modified the structured NICHD protocol (Hershkowitz, Lamb, & Katz, 2014). This revised version emphasises instructions on how to behave supportively in a non-suggestive manner and to build rapport effectively (Hershkowitz, Lamb, Katz, & Malloy, 2015). A number of studies have compared interviews conducted by interviewers before and after their training on this revised version (Ahern, Hershkowitz, Lamb, Blasbalg, & Winstanley, 2014; Hershkowitz et al., 2014; Hershkowitz, et al., 2015). This revised version was found to be effective at increasing the number of supportive comments and decreasing the number of unsupportive comments made by interviewers during the rapport-building and transition phases of the interviews without affecting the interview quality (i.e., the question types used in the interviews; Hershkowitz et al., 2015). However, interviewers did not provide any more supportive comments in the substantive phase than they did using the standard protocol. Nevertheless, in a study of 426 transcripts from cases of corroborated, intra-familial abuse, children interviewed using the revised protocol disclosed abuse significantly more frequently than those interviewed using the standard one (Hershkowitz et al., 2014). Children who are involved in these sorts of cases are thought to be particularly reluctant (due to the probably close nature of their relationship with the perpetrator) and so this is a very important finding. The majority of the cases included involved physical abuse, so unfortunately these findings cannot be reliably generalised to other forms of abuse (Hershkowitz et al., 2014). Ahern et al. (2014) examined the pre-substantive phase of a sub-sample of interviews with disclosers in the revised and standard conditions in more detail, to determine whether interviewers were specifically targeting children's verbal expressions of reluctance with support. Although interviewers were more supportive in general using the revised protocol, they did not respond to interviewees' reluctant comments with supportive ones. However, when children were provided with support after making a reluctant comment, their subsequent comment was more likely to be cooperative, but only in the revised protocol interviews and not the standard ones. Ahern et al. (2014) suggested this could be due to children becoming accustomed to supportive comments and coming to rely on them. Alternatively, they suggested that some of the

children who disclosed in the revised protocol interviews might not have disclosed had they been interviewed with the standard protocol. Therefore, they argue, some of these children may be particularly reluctant, and possibly significantly more so than those children in the standard protocol sub-sample.

Although all of the interviews used in Hershkowitz and colleagues' studies (2006; 2014; 2015; Ahern et al., 2014) were cases which were highly credible and in the majority corroborated by additional strong evidence, the veracity of their disclosures cannot be totally certain. Thus, these children may not have been providing extra accurate information in the interviews but giving more information to please their friendly interviewer and fill in the pauses in the conversation. In addition, all the field studies that have been discussed only assessed verbal support. The interviewers' non-verbal behaviours may not have been consistent with their verbal ones and so their overall level of supportiveness may not have been accurately assessed. Indeed, interviewer support may be equally (or more) strongly indicated by non-verbal than verbal behaviour. However, these real-life findings in conjunction with the experimental studies (reviewed above) do indicate the possible efficacy of friendly and unthreatening verbal behaviours in child interviews.

On the other hand, in the laboratory setting, supportive non-verbal behaviours, such as smiling, eye contact, a relaxed body posture and warm vocal intonations, do seem to have been examined in more depth. These behaviours appear to have positive effects on the recall of children over five years old (e.g., Almerigogna et al., 2007; Almerigogna et al., 2008; Bull & Corran, 2003; Carter et al., 1996; Davis & Bottoms, 2002; Goodman et al., 1991; Quas et al., 2014). The research with children under five is less consistent (e.g., Goodman et al., 1991; Goodman, et al., 1995; Quas, et al., 2000), although negative effects are rarely found and are mainly in response to leading questions (Goodman et al., 1991; Quas, et al., 2000) that should not be used in ABE interviews. Thus, these behaviours do not appear to be particularly hazardous for use in child investigative interviews.

Finally, further research is needed to determine *how* supportive interview behaviours are affecting children's recall. Although theories such as reducing children's cognitive busyness or increasing their resistance efficacy have been suggested, the research is

inconsistent, with anxiety inconsistently being found to mediate the relationship between support and recall.

### **1.6 Multiple Interviews and Social Support**

Research examining the use of social support in multiple interviews is scarce. However, given that one of the criticisms of multiple interviews is that it may cause children additional, unnecessary distress (Plotnikoff & Woolfson, 2001), the overlap between these two areas of research seems particularly relevant.

One study that did examine social support in multiple interviews with children is that of Goodman et al. (1991) who interviewed half of their sample twice (35 children), once two weeks after the event (a vaccination) and again four weeks after. The other half of their sample were only interviewed once after four weeks. Half of the children in each condition experienced a ‘reinforcement’ interview(s), which involved the interviewer giving them cookies and juice before the interview, being warm and friendly, smiling at the child, and praising them (non-suggestively, such as saying ‘You’ve got a great memory’). The other half experienced a ‘non-reinforcement’ interview, in which the interviewer was more distant and did not do the things described in the ‘reinforcement’ condition. The three to four year olds and the five to seven year olds were less suggestible (i.e., answered leading questions more accurately) in their second than their first interviews, and their responses to abuse questions did not change across interviews. This was the case for both children in the ‘reinforcement’ condition and those in the ‘non-reinforcement’ one. Children who were older gave fewer incorrect statements in their recall, as did children in the ‘reinforcement’ conditions, regardless of whether it was their first or second interview. Thus, reinforcement appears to be somewhat effective at reducing children’s inaccuracies across first and second interviews, and multiple interviews appear to be effective at further improving children’s accuracy by reducing their suggestibility (but see section 1.4).

Other studies in this area with child participants are lacking. However, one study with adults (Madsen & Holmberg, 2014) has suggested that rapport can have positive effects on adults’ psychological well-being but that the specific form of these effects changes over multiple interviews. Thus, in the first interview, being interviewed by a ‘humanitarian’ interviewer reduced interviewees’ anxiety in comparison to a pre-

interview test of anxiety. Adults who experienced a ‘non-rapport’ interview, on the other hand, had no differences between their pre- and post-test anxiety scores. In the second interview, interviewer style did not affect interviewee anxiety, but rapport increased interviewees’ ‘sense of coherence’ from its pre-interview level. ‘Sense of coherence’ was defined as the participants’ perceptions of how much their life experiences made cognitive sense (i.e., were clear, ordered, and consistent), how manageable their experiences were in terms of resources available and the demand for them, and their meaningfulness (i.e., whether it was worth expending resources on the experience, and how much their lives made sense emotionally; Madsen & Holmberg, 2014). Thus, supportive interviewing in multiple interviews with adults appears to have positive effects on their psychological well-being, but through different psychological mechanisms than single interviews.

The current thesis aims to add to this limited literature in the ways detailed below.

### **1.7 Thesis Rationale**

From the above literature review, social support and multiple interviewing can both be seen to be topics of interviewing research that have attracted fairly limited interest, and some controversy. Both have been supported empirically as ways of improving child interviews, but have been faced with criticisms which may relate more to implementation issues (i.e., suggestive multiple interviewing and suggestive support) than inherent flaws in these two methodologies. Additionally, the guidelines regarding these two areas are particularly vague and so research is necessary to make recommendations which can be introduced into practice. The literature addressing the interaction between these two topics is even more restricted, and this thesis aims to add to both literatures independently as well as address this overlap.

To achieve this, the thesis will describe four studies that have been conducted, followed by a further literature review (a Study Space Analysis). Each of these studies has been designed to acquire novel information about multiple interviewing and social support. Specifically, how they are both perceived by UK police officers, how they are currently conducted, how they may be improved, and how they may be perceived in court.

Study one addresses this first aim through a questionnaire to police officers. Officers with experience of interviewing children were questioned regarding their opinions on and use of the guidelines for conducting child interviews generally, as well as how they felt these applied to multiple interviews. In addition, officers were asked for their approach to first and second interviewing (i.e., supportive in some manner or not), and the appropriateness of multiple interviews. Information regarding how often multiple interviews are conducted in the UK since the introduction of video-recorded interviewing is scarce, and studies of officers' opinions of multiple interviewing are non-existent. However, this information is important for understanding how current child interviews are conducted and why they are conducted in such a manner.

How officers believe they conduct child interviews and how they are actually conducted may differ. Therefore, the second study examined how multiple interviews with children in the UK are actually carried out. A sample of transcripts of multiple interviews were analysed for interviewer and interviewee behaviours to determine whether they changed across multiple interviews. Interviewer behaviours that were examined included their provision of social support and their use of different question types. This latter area allows investigation into whether interviewer bias does increase with multiple interviews. No prior studies have compared UK samples of first, second, and third interviews with children.

The third study attempts to examine how social support should be provided in multiple interviews through an experimental study with eight to ten year old participants. This study involved manipulation of how much rapport-building children were exposed to across first, second, and third interviews, and analysis of their recall, self-reported anxiety, and perceived rapport in response. By including a no-rapport control condition, this adds to the extremely limited literature that has looked at whether rapport-building as described by ABE (Ministry of Justice, 2011) improves children's performance and/or well-being in interviews compared to a no-rapport condition.

Although it is crucial that interviewing techniques have positive effects on children's comfort and/or recall in interviews, it is also important that the use of multiple interviews and social support does not have negative effects on court outcomes. In the UK, child interviewees' initial investigative interviews may be used as their evidence-in-chief in

court. Therefore, the final experimental study addressed mock-juror perceptions of multiple interviews and social support by manipulating videos to appear to depict one single interview or two, and to include rapport-building or not. Very little research (as discussed in the introduction to chapter five) has examined whether viewing rapport-building affects juror perceptions of the child's testimony, and none has looked at whether presenting multiple interviews to jurors would affect their opinions.

Finally, a Study Space Analysis has been conducted on the experimental literature on multiple interviews. This form of literature review reveals where there are gaps and strengths in the literature. Proponents of multiple interviewing have suggested that interviewing guidelines should be more inclusive of multiple interviews (La Rooy, et al., 2010). This Study Space Analysis was conducted in order to determine whether the existing literature base is sufficiently broad enough in its remit to warrant policy changes.

## **Chapter Two**

### **Police Perceptions of their Use of Child Interviewing Techniques and Training for Single and Multiple Interviews**

#### **2.1 Introduction**

In the first chapter, the existing literature on child interviews and in particular the use of multiple interviews and provision of social support within them was reviewed. As can be seen from this review, our understanding of how interviewers conduct multiple interviews, the approach they take to child interviewing, and their opinions of the recommended methods, guidelines and training is extremely limited. This chapter describes a survey of police officers from England and Wales designed to address these gaps in our knowledge.

Surveys of police officers' perceptions of the guidelines and training they receive can be extremely useful for determining the use of particular techniques and the reasons for their use, misuse, and disuse (e.g., Carson & La Rooy, 2015). Techniques that officers believe are not effective for obtaining information may be less likely to be applied in practice (Brown, Lloyd-Jones, & Robinson, 2008; Dando, Wilcock, & Milne, 2008), which could explain why training can often make less difference to police officers' interviewing behaviours than would be predicted (Sternberg, Lamb, Davies, & Westcott, 2001). If researchers and trainers are aware of the negative perceptions that may be leading to reduced use of recommended and empirically-supported techniques, then these perceptions can be directly addressed in training and guidelines and thus, hopefully, modified.

A number of focus groups and surveys of police officers have been conducted in order to ascertain their views on various aspects of child interviewing (e.g., Aldridge & Wood, 2000; Davies, Marshall, & Robertson, 1998; Kebbell & Milne, 1998). Those conducted in the last ten years, however, have mainly been conducted in non-UK countries (e.g., Australia; Powell, Wright, & Hughes-Scholes, 2011). Those that have been conducted in the UK in the last ten years have used Scottish samples (K. Collins, Doherty-Sneddon, & Doherty, 2014; La Rooy, Lamb, & Memon, 2011; Carson & La Rooy, 2015) and none of

the studies so far have addressed police perceptions of multiple interviewing or social support in child interviews.

Multiple interviewing, as explained in the previous chapter, is somewhat controversial. The literature suggests that multiple interviews may be effective for obtaining additional, accurate information from child interviewees (e.g., La Rooy, Pipe, & Murray, 2007). However, the guidelines discourage multiple interviews (Ministry of Justice, 2011), and practitioners may not be keen to interview a child more than once because of the risk of the interviewee providing inconsistent testimony, which may be poorly perceived in court (Burrows & Powell, 2014; Fisher, Brewer, & Mitchell, 2009). Despite the discouraging guidelines, there is some research to suggest multiple interviews occur (e.g., in Scotland, Plotnikoff & Woolfson, 2001), but very few studies have examined how these interviews are conducted (Cederborg, La Rooy, & Lamb, 2008; Patterson & Pipe, 2009; Santtila, Korkman, & Sandnabba, 2004). Furthermore, none have looked at how officers feel about multiple interviews or to what extent they feel sufficiently trained to conduct second or third interviews. Ascertaining police officers' perceptions of multiple interviewing, and of how they would and do conduct second interviews of children is therefore crucial for understanding what multiple interviewing of children consists of in England and Wales.

A further area of interest is rapport-building. In one study, 99% of 91 surveyed police officers perceived rapport-building as 'quite' to 'always' effective in helping children describe their experience (La Rooy et al., 2011). Another study addressing perceptions of the Cognitive Interview found that rapport-building was one of the techniques most often used by police officers and perceived as effective (Dando, et al., 2008). Furthermore, for child interviewers, rapport-building has been found to be viewed as the most useful aspect of the Enhanced Cognitive Interview (Wheatcroft, Wagstaff, & Russell, 2014). More detailed information regarding interviewers' opinions of rapport-building was obtained by K. Collins et al. (2014). They conducted a qualitative analysis of interviews with 19 Scottish child interviewers (police officers and social workers) and determined that they viewed rapport-building as a communication tool with three key components: assessment of the child, adjustment, and change in the child's psychological state. However, further information regarding police officers' perceptions of rapport-building with child interviewees and the training they receive on the subject is missing in the literature.



The usefulness of rapport-building as described in ABE (Ministry of Justice, 2011) could be limited by the interviewer's existing relationship with the interviewee; if the interviewer has had prior contact with the child, they may not feel that they need again to discuss neutral events to get to know one another. For example, in some investigations in Northern Ireland, interviewers have carried out 'clarification interviews' days prior to the formal investigative interview and may have established rapport in such 'clarification' meetings (R. Bull, personal communication, December 12, 2013). However, these meetings may also provide an opportunity for the child to be exposed to misinformation. Thus, the present study will also examine whether interviewers have often met the child prior to the formal interview, and if so, what form this contact takes.

### **2.1.1 The Present Study**

Due to the lack of previous research that has looked at police officers' perceptions of child interviewing techniques in England and Wales, no hypotheses were put forward with the exception that officers would view rapport-building as somewhat effective for obtaining information from children. However, the current study also aimed to determine:

- Police opinions of the guidelines and training available to them for child interviews.
- Police contact with the child victim/witness prior to the formal interview.
- Police usage and opinions of second interviewing of child victims and witnesses.
- The attitude they take towards child interviewees in first and second interviews.

## **2.2 Method**

### **2.2.1 Sample and Procedure**

Seventeen police forces were contacted to take part in the study. These forces were chosen because it was possible to obtain contact information for one of their officers, either through existing contacts, Twitter, or shared group membership (i.e., the International Investigative Interviewing Group's membership directory). Forces that agreed to take part were asked to distribute by email a link to the online questionnaire available via the surveying software, Qualtrics. Word document versions were sent to forces that had difficulty accessing this software. Suggested wording for the recruitment email was sent to the police contact explaining that the study aimed to obtain police

officers' anonymous opinions of the current guidelines and training they received for conducting child interviews. Links to the questionnaires and a brief introductory paragraph were also included online on the College of Policing's Research Map.

### **2.2.2 Materials**

Initially, the questionnaire was designed (with advice from a research-active police staff member) as one long questionnaire. However, after the pilot (see details below) and a first failed attempt to obtain responses, the questionnaire was split into one short questionnaire (see Appendix A) and an optional follow-up questionnaire in which officers were asked to expand upon their answers (see Appendix B). These final questionnaires are described in more detail below. The first questionnaire obtained mainly quantitative answers, and the optional follow-up questionnaire obtained mainly qualitative answers. The questions addressed the key areas of interest to the research (i.e., interviewing approach in first and second interviews, use and opinions of ABE phases for first and second interviews, details of second interviews and reasons for conducting them). Both questionnaires began with a briefing page in which the aims of the study were explained, as well as the storage of the resulting responses, and options for withdrawal. Participants were only allowed to continue if they gave consent for their responses to be used in the study and stated that they had formally interviewed a child victim or witness. A debriefing page at the end of both questionnaires gave participants more details about the study.

**First Questionnaire.** The first questionnaire was split into five sections: (i) About you, (ii) About your experience, (iii) First interviews, (iv) Second interviews, and (v) Interviewing Interventions. However, the final section is not relevant to the rest of this thesis because the following chapters focus on multiple interviewing and social support, rather than intermediaries, interview supporters, and other interviewing interventions. Therefore, this final section's responses will not be described in detail. It is, however, still included in the full questionnaire in Appendix A.

*About You.* This section asked participants to provide their age, gender, rank, job title and police force.

*About Your Experience.* This section asked questions about the number of years for which the participant had been interviewing generally and interviewing children formally. It also involved questions regarding the participants' training, and how many child interviews they had ever conducted, conducted on average per month (child and other interviews), and conducted with children under seven years old, between seven to eleven years, and with children between 12 and 17 years old.

*First Interviews.* This section began with a clarification that 'first interview' referred to the first formal interview conducted with a child. Questions addressed any contact the police officer would have had with a child prior to the interview; in particular, how often they had met the child before the interview, how often the child voluntarily disclosed details of the crime during this prior contact, and what form prior contact normally took (i.e., rapport building, statement taking, first report of the crime, family liaison, assessment of child's cognitive ability, or other). Questions also addressed how frequently the officer conducted first interviews with children and their approach to these interviews (i.e., authoritative, friendly, business-like, formal, informal, compassionate, or other). Finally, this section also asked participants to rate each phase of the ABE interview (i.e., preparing the interview, rapport-building, initiating and supporting a free narrative account, questioning, and closure) for its efficacy in eliciting probative information from child interviewees, the helpfulness of the guidelines and training, and how comfortable they felt conducting these phases.

*Second Interviews.* The first half of this section was only completed by participants who answered yes to having ever completed a second interview of a child victim/witness. These questions addressed the frequency with which these were conducted, whether second interviews are conducted by the same or a different interviewer, and the ages of children with whom they had conducted second interviews. It also asked for their approach to the second interview and their opinions on the ABE phases in second interviews; first, how often they used each phase, and second, how effective they were for eliciting probative information. Participants were only asked how effective each phase was if they stated that they did use that phase in second interviews (i.e., did not answer 'never' to using that phase). The second half of this section (which all participants completed) asked the officers to rate the ABE phases for how comfortable they felt/would feel using them in second interviews. Additionally, they were asked to give a proportion

of cases over the last year for which they felt second interviews would have been helpful, they were asked if second interviews were carried out more frequently for particular crimes, what ages of children they would conduct second interviews with, and how helpful they found the ABE guidelines relating to second interviews.

The last question of the first questionnaire asked if there was anything else they felt could help children during the interview process.

**Follow-Up Questionnaire.** The follow-up questionnaire consisted of four sections: (i) About you, (ii) First interviews, (iii) Second interviews, and (iv) Interviewing Interventions. Again, the final section is not relevant to this thesis and will not be described, but is present in Appendix B.

*About You.* This section was identical to the first questionnaire, and was included in case the two completions could not be matched up otherwise (i.e., via the random number provided in the first questionnaire which completers were asked to enter in the second questionnaire's briefing page).

*First Interviews.* Officers were asked to describe in detail the 'average' pre-interview contact they had with children (i.e., rapport building, statement taking, first report of the crime, family liaison, assessment of child, or other).

*Second Interviews.* This section asked participants to describe under what circumstances they would conduct a second interview, and circumstances under which they would have liked to conduct a second interview but were unable to. They were also asked if they had received any specific training for conducting second interviews, how they would improve the ABE guidelines and training on this subject, and what their views of second interviewing were. An additional question that did not directly address second interviews asked whether they thought asking children to write down their memories of the alleged crime as soon as the crime came to the police's attention would be helpful.

The last question on the questionnaire asked if there was anything else they thought would improve the ABE guidelines and training.

### **2.2.3 Pilot**

The questionnaire was piloted with five police officers. They were asked to complete the questionnaire and give feedback on any questions they felt were unclear, or comments on the questionnaire in general. The wording of some questions was improved in response to feedback from these pilot participants. Comments were also made that the questionnaire was very long, taking between 40 and 50 minutes. Some questions were, therefore, removed, but it was decided that it would otherwise be put online unchanged. After two months with no responses, the questionnaire was adapted into its final form (i.e., a first questionnaire and a follow-up questionnaire). The same questions were used in both the pilot study and the final questionnaires (with some removed for the final questionnaires), and so the pilot responses were included in the final sample. There was one exception to this. In the pilot questionnaire, participants were asked to rate and comment on the ABE guidelines and the ABE training separately for a number of interviewing methods (i.e., ABE phases, and second interviews). However, in the final questionnaires, these questions were amalgamated in order to decrease the overall length, so participants were asked to comment on the ABE guidelines and training in one question. To include the pilot responses to these questions, an average of their Likert responses for the two questions was used, and their qualitative responses were entered into the same cell together.

## **2.3 Results**

### **2.3.1 Sample**

Fifty-three participants began the questionnaire. Those that provided no answers beyond the 'Your experience' section were deleted, which resulted in 40 participants remaining, of which 30 had completed the first questionnaire entirely. One participant was removed as they had never conducted a child interview. Of the 39 participants remaining, 53.8% were female ( $n = 21$ ), and the average age was 42.10 years ( $SD = 7.2$ ). The majority of participants were Police Constables or Detective Constables ( $n = 30$ , 76.9%). Sergeants ( $n = 5$ , 12.8%), one Inspector, one Chief Inspector, one independent interviewer, and one civilian staff member also completed the study. Participants came from twelve different police forces in the UK, with one from another police related organisation and one participant working with numerous forces. All participants had completed some form of interview training related to the ABE guidelines. For those respondents who included the date of their most recent training ( $n = 23$ ), this ranged between 2000 and 2015 ( $Mode =$

2012, *Median* = 2011). Four respondents stated that they were currently responsible for some form of interviewing training. On average, the respondents had 15.5 years (*SD* = 7.3) of interviewing experience, and 9.1 years (*SD* = 6.5) of formal interviewing experience (i.e., pre-planned, recorded interviews). In this time, 30.8% of participants had conducted fewer than 50 child interviews (*n* = 12), 12.8% had conducted 50 or more but less than 100 (*n* = 5), 33.4% had conducted between 100 and 200 (*n* = 13), and 15.3% had conducted more than 200 child interviews (*n* = 6). Two participants did not answer this question, and another said they had lost count. The number of child interviews conducted per month on average by the participants varied dramatically, from none up to 20 interviews. On average, approximately half of these interviews (53.43%) were with children between the ages of 12 and 17, slightly under a third with children between seven and 11 years old (28.50%), and about a sixth with children under seven (16.78%).

Sixteen participants continued on to complete (*n* = 12) or partially complete the follow-up questionnaire. This sub-sample had a mean age of 43.4 years (*SD* = 7.93), and 56.3% were female (*n* = 9). Eleven stated they were Police Constables or Detective Constables, three were Sergeants, one an independent advisor and one a civilian. They came from eight different UK police forces, with one participant working with numerous forces.

### **2.3.2 Pre-Initial Interview Contact**

Respondents had often had contact with the child interviewee prior to their first formal interview with them, and children quite regularly voluntarily provided information about the crime in these pre-interview meetings (see Table 2.1). Participants often described this contact as entailing rapport-building (*n* = 35, 89.7%), assessing the child's cognitive ability to undertake an ABE interview (*n* = 34, 87.2%), and the child's first report of the crime (*n* = 16, 41.0%). These meetings less frequently entailed family liaison meetings (*n* = 8, 20.5%), and statement-taking (*n* = 1, 2.6%). 'Other' pre-initial interview contact descriptions included first response (*n* = 1, 2.6%), discussions about an interview supporter (*n* = 1, 2.6%), and joint visits with social services (*n* = 1, 2.6%).

In the follow-up questionnaire, participants were asked to describe these pre-interview initial contacts with the child. Thirteen of the 16 participants described a pre-interview rapport-building meeting. Regarding the aims of this meeting, participants most frequently mentioned learning what the best ways to communicate with that child were

Table 2.1

*Pre-initial interview contact with child interviewees*

Question	Likert Scale Response Numbers (Percentage)							Average (SD)
	1 (Never)	2	3	4	5	6	7 (Always)	
How often in cases have you had contact with the child prior to the first interview?	0 (0%)	4 (10.3%)	2 (5.1%)	2 (5.1%)	6 (15.4%)	16 (41.0%)	9 (23.1%)	5.41 (1.55)
During this contact, how often does the child voluntarily recall details about the crime?*	1 (2.7%)	7 (18.9%)	2 (5.4%)	10 (27.0%)	11 (29.7%)	5 (13.5%)	1 (2.7%)	4.14 (1.48)

\* Two participants did not answer this question.

and gauging his/her abilities ( $n = 10, 76.92\%$ ), followed by opening communication and finding out about the child's interests ( $n = 6, 46.15\%$ ), and reducing the child's anxiety or building trust ( $n = 4, 30.76\%$ ). They mentioned doing this by discussing a number of neutral subjects including school, music, their likes and dislikes ( $n = 8, 61.54\%$ ), with some providing the child with information about the interview ( $n = 5, 38.46\%$ ), and some attempting to obtain information about the offence ( $n = 2, 15.38\%$ ). Many participants stated this would normally take less than half an hour ( $n = 6, 46.15\%$ ), with some stating it depended on the child ( $n = 6, 46.15\%$ ). The locations tended to be within the child's home or school ( $n = 7, 53.85\%$ ). Recording of this meeting varied from writing down "trigger words" for the interview, to a verbatim written record, to audio recording the meeting. When participants stated for which types of crime they would conduct such a meeting ( $n = 6, 46.15\%$ ), responses tended to vary, from conducting with all child victims and witnesses to only for serious crimes, to only those who may need an intermediary or who were involved in sexual abuse cases.

Five participants described pre-interview contact consisting of first reports. As expected, these focused much more on obtaining a disclosure ( $n = 5, 100\%$ ). However, they were otherwise similar to the rapport-building meetings, taking place at home or school ( $n = 2, 40\%$ ), and being a similar length (less than 30 minutes or dependant on the child,  $n = 4, 80\%$ ). Two participants mentioned that once first disclosure had been obtained, no further questions were asked (40%), and three respondents mentioned the disclosure should be obtained with open questions only (60%).

When participants described their pre-interview contact as an assessment of the child ( $n = 12$ ), their descriptions were very similar to those described as rapport-building meetings or first report meetings. Indeed, seven participants (58.33%) explicitly stated assessment would be conducted as part of the previously described meetings. Therefore, the descriptions were again similar to the rapport-building meetings' descriptions. Four participants mentioned the location, and all of them stated it would ideally take place in a child's school or home (33.33%). Three participants stated they would have a neutral conversation to assess the child (25.00%), and one stated they would use their experience of the child to decide his/her suitability for an ABE interview (8.33%). Four participants (33.33%) mentioned the importance of including information from other sources in assessing a child (in particular, teachers and parents).



Fewer than three participants described pre-interview contact relating to family liaison, statement taking, or 'other' and so will not be described in detail here.

### **2.3.3 Initial Interviews**

Participants' reported that their approaches towards initial child interviews were, in the majority, 'friendly' ( $n = 19, 54.3\%$ ), with some taking a 'compassionate' approach ( $n = 5, 14.3\%$ ). Others said they were 'informal' ( $n = 4, 11.4\%$ ), with one participant stating they were all three in the 'other' option. Only one participant stated they were 'business-like' (2.9%), and no participants stated their approach was 'formal' or 'authoritative'. Four further participants described their approach using the 'other' option; one stating they were 'supportive,' another that they were 'empowering', and the final two saying they tailored their approach to the child.

Participants found most phases of the ABE interviews (see Figure 2.1) at least 'somewhat effective' for eliciting probative information from children, with slightly higher average scores for 'initiating and supporting a free narrative account' and slightly lower scores for 'closure.' Figure 2.1 depicts officers' average ratings (in this figure, a rating of one would indicate the participant felt the phase was not at all effective, that the ABE guidelines and training were not at all helpful, or that they did not feel comfortable conducting that phase at all and a rating of seven would indicate that they felt the phase was very effective, the ABE guidelines and training were very helpful, or they felt very comfortable conducting that phase of the interview). Participants rated the ABE training and guidelines 'somewhat helpful' to 'helpful' for all the interview phases, and felt 'comfortable' to 'very comfortable' conducting all the phases in first interviews, other than 'rapport-building' for which they felt 'somewhat comfortable' to 'comfortable'.

### **2.3.4 Second Interviews**

Twenty of the thirty participants (66.7%) who completed the first questionnaire had been involved in a case where they had to conduct a second full ABE interview with a child victim/witness. However, they said this occurred relatively rarely, with an average of 2.40 ( $SD = 0.75$ ) on the Likert scale from 'never' occurring (indicated by one) to 'always' (indicated by seven). Only one participant stated they conducted second interviews once a month, and one once every three months, with the remaining participants conducting

second interviews once every six months ( $n = 5$ ), once every year ( $n = 5$ ), or less frequently than once a year ( $n = 8$ ).

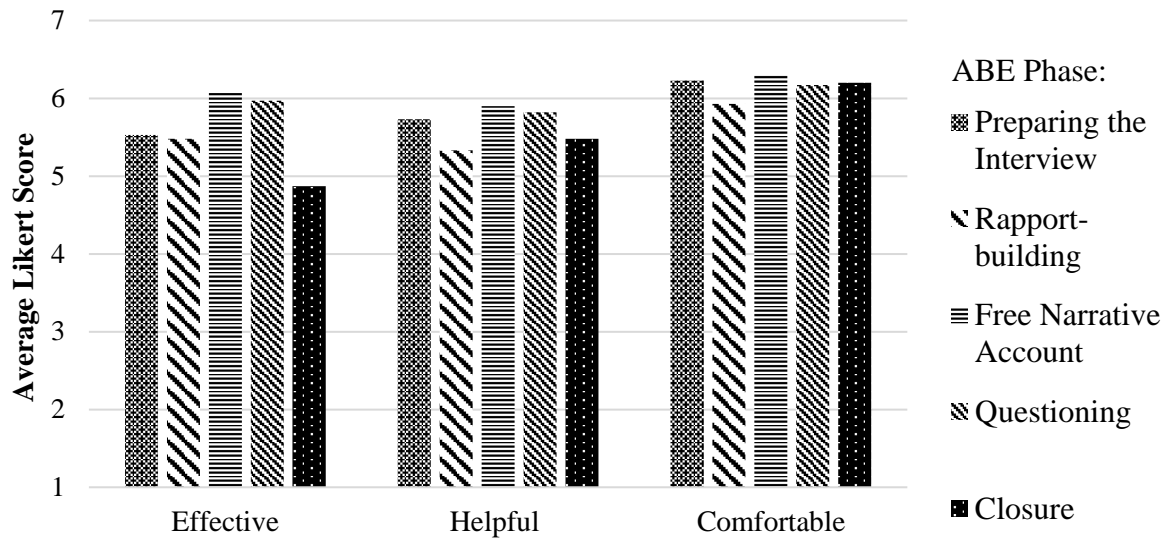


Figure 2.1. Average Likert scale scores for ABE interview phases' efficacy, helpfulness of the guidelines and training, and comfort.

Participants stated that if a second child interview was carried out, they were often conducted by the same interviewer ( $M = 5.75$ ,  $SD = 1.52$ , one indicating 'never' and seven 'always'). Nearly half of the 20 respondents had conducted second interviews with children between the ages of 12 and 17 ( $n = 19$ , 48.7%), about a third with children between seven and 11 years ( $n = 11$ , 28.2%), and only five participants had conducted second interviews with children under seven years old (12.8%).

The majority of respondents reported using the same approach in interview two as they did in interview one ( $n = 14$ , 70%). Two participants changed their approaches from supportive (friendly and compassionate) to non-supportive options (business-like and formal respectively).

According to the present study's participants, most phases of the ABE interview are used in second interviews (see Figure 2.2). Questioning is used nearly always, with closure used nearly as often. The rapport-building phase is somewhat less likely to be conducted in a second interview.

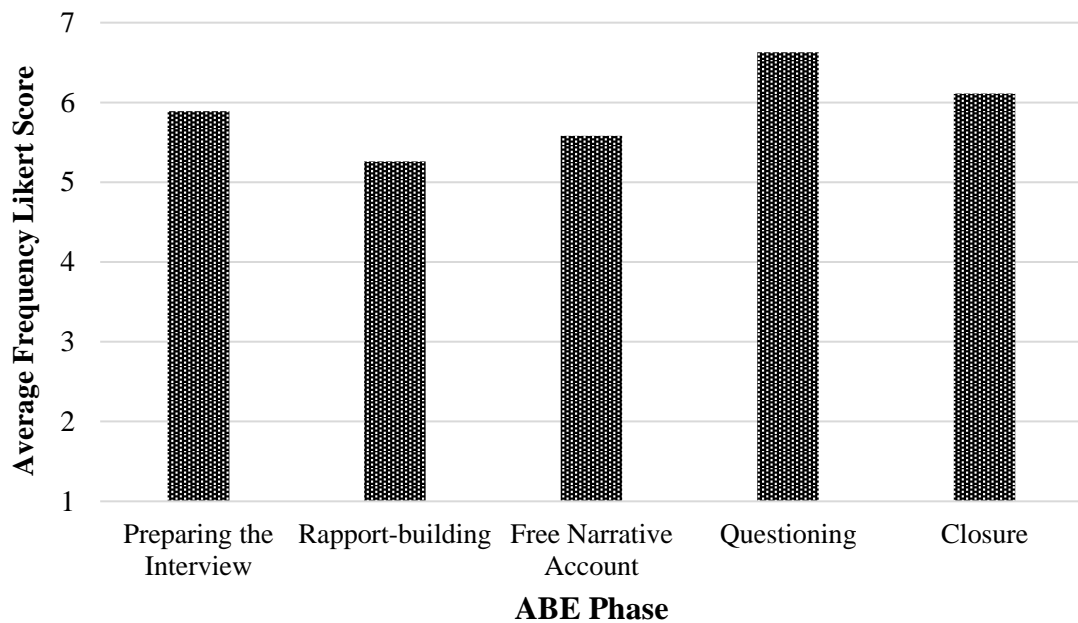


Figure 2.2. Frequency with which ABE phases are used in second child interviews.

Participants' ratings of how effective the ABE phases were for eliciting probative information from child interviewees in first and second interviews were entered into a factorial repeated-measures ANOVA (see Figure 2.3). The phases were entered as a within-subjects factor, along with interview number (first or second). Officers' scores of usefulness were non-normally distributed. Reversed logarithm transformations most effectively reduced skew and kurtosis for interview one scores and reversed square root transformations were better at reducing skew and kurtosis for interview two scores. Thus, ANOVAs were conducted with reversed logarithm transformed, reversed square root transformed and non-transformed data. All of the three types of data produced the same findings. Therefore, the non-transformed data ANOVA is reported for ease of interpretation. As indicated by Mauchly's test, the assumption of sphericity had been violated for the main effect of ABE phase,  $\chi^2(9) = 22.67, p = .007$ . Therefore, Greenhouse-Geisser estimates of sphericity were used to correct the degrees of freedom ( $\epsilon = .62$ ). There was a significant main effect of interview phase,  $F(2.51, 40.10) = 5.45, p = .005$ . Contrasts compared scores of efficacy for each phase with scores of efficacy for the closure phase as this was the phase with the lowest score for efficacy. These contrasts revealed that efficacy ratings of rapport-building,  $F(1, 16) = 4.56, p = .049, r = .47$ , the questioning phase,  $F(1, 16) = 10.46, p = .005, r = .63$ , and free narrative account,  $F(1, 16) = 9.04, p = .008, r = .60$ , were significantly higher than those for the closure phase (see

Figure 2.3). Ratings of efficacy for preparing the interview were not, however, significantly different from those for closure,  $F(1, 16) = 3.27, p = .090$ . Additionally, the main effect of interview number was not significant,  $F(1, 16) = 0.03, p = .867$ , and neither was the interaction between ABE phase and interview number,  $F(2.63, 42.12) = 2.07, p = .125$ . Thus, participants viewed some phases as more effective than others. However, they viewed each phase as equally effective for a second interview as they did for a first interview.

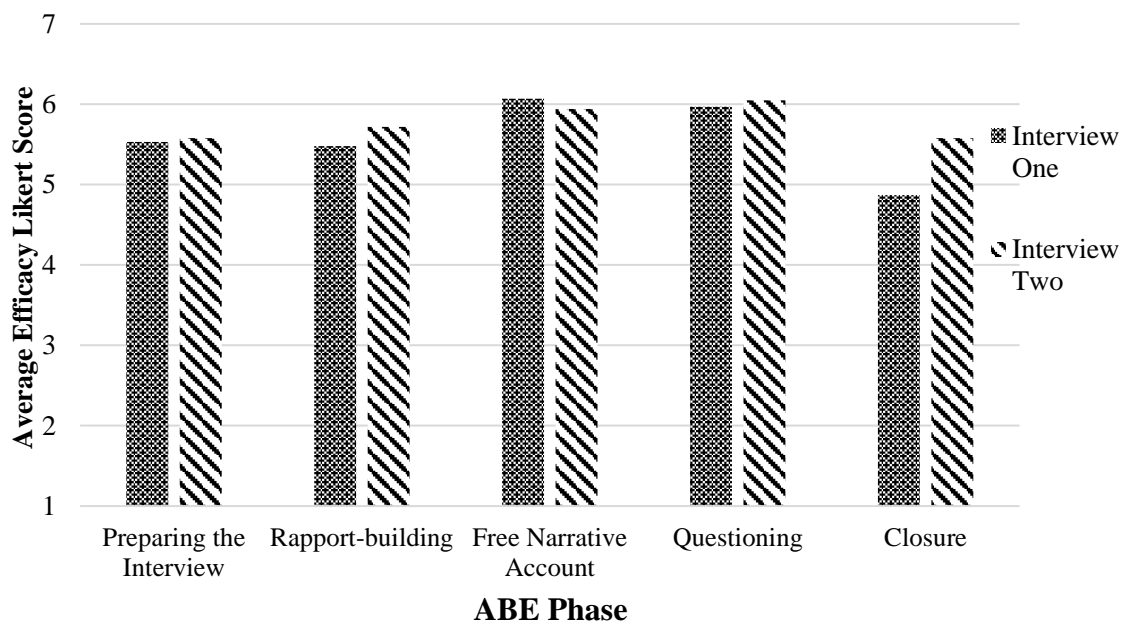


Figure 2.3. Average ratings of efficacy of ABE phases for eliciting probative information from child interviewees in first and second interviews.

Participants' ratings of how comfortable they felt conducting each phase of the ABE interview in first and second child interviews were also entered into a factorial repeated-measures ANOVA (see Figure 2.4). Again, ABE phases and interview number were included as independent variables. However, the dependent variable (comfort scores) was reversed and logarithm transformed in order to reduce high kurtosis and negative skew. Again, Mauchly's test of sphericity was significant for ABE phase,  $\chi^2(9) = 60.63, p < .001$ , and so Greenhouse-Geisser corrections were used ( $\epsilon = .43$ ). The main effect of ABE phase was not significant,  $F(1.71, 44.53) = 0.46, p = .608$ . However, the main effect of interview number was significant,  $F(1, 26) = 7.41, p = .011, r = .47$ , indicating that participants felt significantly more comfortable conducting the ABE phases in first

than second interviews with child interviewees (see Figure 2.4). The interaction between ABE phase and interview number was not significant,  $F(2.69, 69.86) = 1.26, p = .294$ . Thus, participants felt equally comfortable conducting all ABE phases, but less so in second interviews than first.

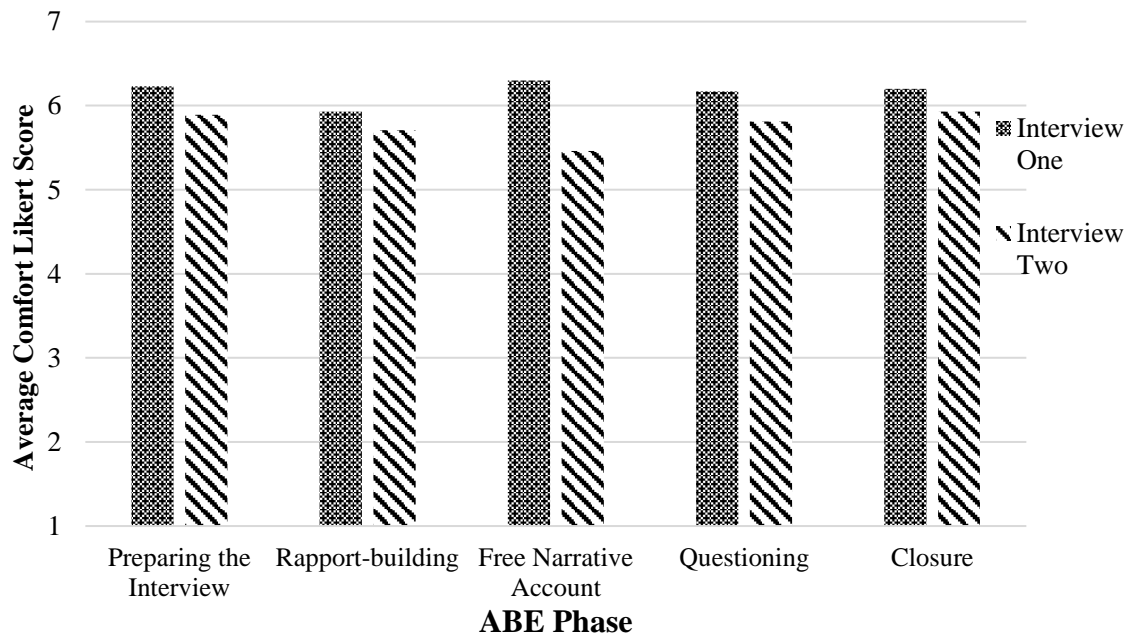


Figure 2.4. Average ratings of how comfortable participants felt conducting ABE phases in first and second interviews.

The average score for how helpful the ABE guidelines and training were regarding second interviews was 4.83 ( $SD = 1.51$ ) on a seven-point Likert scale, with one indicating ‘very unhelpful’ and seven indicating ‘very helpful.’ This suggests participants overall found the guidelines and training only somewhat helpful.

On average, in the last year participants would have liked to conduct a second interview with child interviewees but were unable to in 15.63% of cases ( $SD = 20.6$ ), with answers ranging from 0% to 80% of interviews. All participants who completed the full survey said they would conduct second interviews with 12 to 17 year olds ( $n = 30$ ), whereas 90.00% said they would conduct them with seven to 11 year olds ( $n = 27$ ), and 63.33% with under seven year olds ( $n = 19$ ). Seventeen participants answered the question about whether there were specific crimes for which children were more frequently interviewed a second time; nine participants specifically mentioned sexual offences (52.94%), two

referred to serious crimes (11.76%), and another two mentioned historic cases or those involving delayed reporting (11.76%). Five participants (29.41%) stated that doing so was not related to the crime but provided other reasons for conducting second interviews (e.g., being advised to by the Crown Prosecution Service or intermediaries).

In the follow-up questionnaire, the reasons officers gave for conducting second interviews were most often that further evidence required discussion with the child ( $n = 7$ , 58.33%), or that the child had disclosed further information since the first interview ( $n = 4$ , 33.33%). Other reasons given were that the Crown Prosecution Service requested a further interview ( $n = 3$ , 25.00%), that clarification of the child's recall was needed ( $n = 2$ , 16.67%), or that the first interview had to be stopped for the child (such as she/he became tired,  $n = 2$ , 16.67%). One participant mentioned each of the following reasons: that there was too much to cover in one interview, that disclosure from the suspect required further discussion with the child, equipment failure in the first interview, and that the child was discussing crimes that had more than one suspect and that each suspect's offences required separate interviews. The final participant simply put "As stated in ABE."

Four of the twelve follow-up questionnaire completers described circumstances under which they would have liked to conduct a second interview with a child victim/witness and were unable to. Two of these participants mentioned time pressures which resulted in being unable to interview the child more than once. The other two participants stated situations in which interviews of witnesses or suspects had raised questions they would have liked to put to the child. They did not, however, clarify why they were unable to do this.

Of the follow-up questionnaire participants who answered the question regarding training on second interviews, the majority said they had not received any specific training on this ( $n = 10$ , 83.33%). One stated they had learnt (but did not say where) when second interviews were appropriate and how to ensure they were suitable for court, and another participant stated it was covered in their ABE courses. A final participant stated he/she had been taught about second interviews, and went on to describe a situation in which the interviewer puts lawyers' questions to the child as an alternative to the child attending court. Six participants believed that the ABE guidelines and training for second

interviews could be improved. Suggestions for improvement ranged from “Have training on it!” to including memory research and ensuring trainers understand the reasons for conducting a second interview. One participant believed the ABE information on second interviews was adequate, and the final two participants who answered this question were unclear on how or if the ABE guidelines and training could be improved.

Participants’ general views of second interviewing were also captured in the follow-up questionnaire. Only two participants displayed strong negative views of second interviewing; one stating they were “unacceptable in serious and traumatic incidents” and the other that they should only be conducted if “absolutely necessary.” The majority of participants also mentioned risks associated with second interviews; 50.00% ( $n = 6$ ) mentioned the risk of them affecting children’s well-being negatively (i.e., through increased distress or confusion), and 41.67% ( $n = 5$ ) mentioned the risk of children providing inconsistent accounts. On the other hand, most of the respondents ( $n = 10$ ) stated some situations in which they felt second interviews were necessary or effective. One participant even stated that “In my experience conducting second or even third interviews has been significant in securing further charges and also convictions at court which without the further interviews wouldn't have been possible.” Some participants also felt they should be provided more freedom to conduct second interviews ( $n = 2$ , 16.67%), such as the participant who stated “CPS perceptions of juries [*sic*] reactions to second interviews should not prevent them taking [*sic*] place if necessary.”

### **2.3.5 Other Improvements**

Participants’ responses in the first questionnaire to the question regarding whether there was anything else they felt could help child interviewees were quite varied. Eight participants mentioned aspects of the process which hindered rapport-building in child interviews. In particular, three participants specifically stated that building rapport with a child prior to the interview (including via additional meetings) would be beneficial, and two further participants mentioned time pressures from others within the criminal justice system (supervisors, courts and other police officers) which were detrimental to rapport and quality interviewing. Another two participants felt that the emphasis on conducting child interviews as soon as possible meant that children were often interviewed too soon after disclosure and that there was not enough time for them to build rapport.

Four participants focused on aspects of the physical environments and resources available to them for conducting child interviews, stating that they believed a more child-friendly environment would be beneficial (three of these participants were from the same police force).

Four participants mentioned improvements in training. One requested more training with input from the judiciary, one asked for more focus on intermediaries and support options, and one felt there was too much focus on the guidelines, and not enough on training. This participant stated that officers refer to the guidelines less frequently than do academics. The final participant did not directly mention training but said that interviewers should know the difference between “evidential information and investigative detail”, and that this would improve the court presentation for the child.

Finally, one participant recommended the removal of the truth-lies component of child interviewing, and another stated that the use of video-recorded cross-examination would improve children’s experiences of the criminal justice system.

## **2.4 Discussion**

This study is the first to survey police officers in England and Wales regarding their pre-interview contact with child interviewees and their use and opinions of ABE phases for second interviews. The responses reveal that officers frequently have met the child interviewee prior to the formal ABE interview, that the child has often disclosed some information about the alleged crime to the officer prior to the formal interview, and that officers’ manner of recording of this prior meeting varies considerably.

The findings regarding pre-interview contact are somewhat troubling. Although the ABE guidelines (Ministry of Justice, 2011) suggest that initial contact may be necessary in order to make informed early investigation decisions, an additional meeting prior to the investigative interview at which the child often discloses details of the alleged crime could result in children inadvertently being provided with misinformation (e.g., about the crime). Although some of the officers in the present study mentioned good practice that would reduce the risk of contaminating children’s evidence (such as using only open questions, as recommended in ABE), research has repeatedly shown that even trained interviewers display poor interviewing techniques. For example, in Lamb, et al.’s study



(2009), in a sample of ABE interviews, interviewers used 8.29% leading questions, despite training that emphasises the negative impact leading questions can have on children's recall. The varied formats reported for recording these encounters (from 'trigger words' to audio recording) may also make it difficult to identify any practice that may negatively affect children's ABE interview recall, and is directly contradictory to the ABE advice that comprehensive notes are made including details of everything the witness says. On the other hand, an additional meeting to build rapport that does not include any references to the alleged crime may lead to the child feeling more comfortable within the subsequent interview setting. A separate rapport-building meeting is in fact encouraged by ABE (Ministry of Justice, 2011) for some children, in particular younger children, those with learning disabilities, and those who have been traumatised.

The present study has also shed light on second interviewing practices and attitudes. Most respondents had experience of conducting second interviews with child victims/witnesses, but they occurred quite infrequently (once every six months or longer). These second interviews were mostly conducted with older children (over 12 years) and some respondents indicated that they should only be conducted with older children. Police officers reported that they conduct second interviews in a similar manner to first (mainly supportive in some manner), that often the same interviewer conducts both interviews, and that they use all of the ABE phases in second interviews most of the time. Despite officers reporting all the ABE phases to be equally effective in second as first interviews for obtaining probative information from children, there does seem to be room for improvement for the multiple interview training; very few officers had been trained specifically on how to conduct second interviews, they rated the ABE guidelines and training as less helpful than that for first interviews, and officers reported feeling significantly less confident conducting second interviews than first. Most of the officers in the present study had conducted second interviews and believed there were circumstances for which multiple interviewing was appropriate. Furthermore, they wanted to conduct second interviews in 16% more cases on average, but were unable to. From these results it appears that police officers are likely to conduct a second interview at least once in their careers. Thus, investment in training may be beneficial for police officers' confidence and ability to conduct such interviews.

The reasons police officers gave for conducting second interviews were mostly in line with ABE guidelines (Ministry of Justice, 2011), such as if the child provided further disclosure after their first interview or further evidence came to light that needed to be discussed with the child. However, a quarter of participants that answered this question mentioned conducting second interviews for clarification purposes. This is not a reason provided in the ABE guidelines, presumably as it is assumed that with planning and feedback from a co-interviewer, all clarifications should have been made within the first interview. Information as to how often second interviews were conducted for this reason was not captured in this survey. Therefore, although second interviews conducted for clarification purposes may be caused by poor interviewing practice in first interviews, this may not occur very often.

The present survey also examined officers' opinions of rapport-building. Officers in the present study rated rapport-building as somewhat effective for obtaining probative information from a child interviewee. However, it was rated as one of the less effective ABE phases. They also rated rapport-building as the interview phase for which the ABE guidelines and training were least helpful, and as the phase which they felt least comfortable conducting. Officers in the present study, therefore, rated rapport as similarly effective to other officers from England and Wales (Wheatcroft, et al., 2014) but slightly less effective than Scottish police officers (La Rooy, et al., 2011). This may be due to the different training offered to police officers in Scotland. The officers in the present study did not seem to feel the training on rapport-building was as helpful as training on other ABE interview phases. Officers with a greater understanding of how to conduct rapport and why to conduct it may have a better perception of its efficacy and the benefits good rapport-building can have on children's recall (e.g., Roberts, Lamb, & Sternberg, 2004). They may also feel more comfortable building rapport with child interviewees.

#### **2.4.1 Limitations**

The main limitation of the present study is the sample size. Despite contacting 17 forces, only 30 participants completed the first questionnaire. This is likely to be due to budget cuts and officers' increased workloads, and a number of contacted forces warned that response rates may be low for this reason. The data collection period was extended substantially, from six months to three years to obtain even this sample size.

Additionally, the present study mainly included older officers with a lot of experience of interviewing. Although this may mean that these views are representative of those who are training and supervising less experienced officers and are therefore at a more influential stage of their career, their views may not be representative of the majority of interviewers. Additionally, their opinions may not be based on the most recent training. Future research with a larger sample size and a variety of officers of differing experience levels with recent training experience is vital to support (or otherwise) the findings presented here, as they may not be representative of all forces and all investigative teams' methods and opinions. However, the results provide an interesting starting point for understanding how second interviews are conducted and the format of pre-interview contact with child interviewees.

#### **2.4.2 Conclusions**

This study obtained the first detailed descriptions of pre-interview contact between investigative interviewers and child interviewees, as well as the first examination of police officers' opinions of second interviews and how they are and should be conducted. The findings indicate that police officers have frequently had contact with child interviewees prior to the formal investigative interview and have often then obtained some form of disclosure. According to officers, this pre-interview contact often takes the form of rapport-building. Rapport-building was found to be positively viewed by officers as an effective phase of the interview, but they felt less confident conducting this phase than others, and felt the ABE guidelines and training were less helpful for this phase. Second interviews are conducted in a similar manner to first, but child interviewers feel less confident conducting them and feel training could be improved. Additionally, this study provided specific details about second interviews, including that they are mostly conducted by the same interviewer, using the same approach, and for reasons described in ABE (Ministry of Justice, 2011). Understanding the interviewing process beyond initial ABE interviews is crucial for identifying strengths and weaknesses, directions for research, and improvements for training and practice.

The following chapter will follow up these findings by determining how multiple interviews are conducted (rather than how they are perceived to be conducted) in terms of both social support and interviewer questions. Chapter four will also follow up the

findings of this chapter by examining the effects of a separate pre-interview rapport-building session on children's recall and well-being.

# **Chapter Three**

## **Dynamics of Multiple Interviews with Children**

### **3.1 Introduction**

Following on from the previous chapter, in which it was determined how police officers perceive themselves to conduct multiple interviews of child witnesses, this chapter examines how they actually conduct multiple interviews. A sample of transcripts of Scottish multiple interviews with child victims was coded for interviewer behaviours, including question types and social support, and interviewee behaviours, including informativeness, topic and investigation-relevance of details, and consistency across first and subsequent interviews. These behaviours were compared in first, second and third interviews of child witnesses.

#### **3.1.1 Interviewing Best Practice in Scotland**

Due to difficulties obtaining transcripts from English and Welsh police forces in the required time period, the present study involves analysis of a number of Scottish interviews of child victims. The interviewing guidance in Scotland (Scottish Executive, 2011) lays out empirically-based best practice interviewing techniques and is very similar to ABE (Ministry of Justice, 2011), addressing planning and evaluation as well as other aspects of the interview.

One key difference between the two guidelines is that Scottish interviews with child witnesses are conducted jointly by a police officer and social worker, whereas English interviews tend to be conducted by police officers. In joint interviews, one interviewer takes the role as the lead interviewer and the second interviewer observes the interview. This involves monitoring both the child and the lead interviewer for what they say and how they act, particularly looking for gaps or inconsistencies in the child's testimony (Scottish Executive, 2011). Additionally, the second interviewer may also ask questions in order to clarify the child's recall or obtain further details.

Although the number and type of interviewers may differ, the interview itself is conducted in a similar way in England, Wales, and Scotland. In Scotland, it begins with the interviewers introducing themselves and explaining the process, which is followed up

with rapport-building. The child then completes a practice interview when appropriate (see below for discussion of this key difference between Scottish Executive and ABE interview formats). The substantive section follows with an initial free recall, followed by questioning, and finally closure (Scottish Executive, 2011).

The rapport-building phases in the Scottish Executive (2011) and ABE guidelines (Ministry of Justice, 2011) are very similar. Like the ABE rapport-building, the Scottish Executive (2011) guidelines recommend that the interviewee is given an opportunity to respond to open questions during this phase (Nicol, La Rooy, & Houston, 2016). Direct questions are also similarly discouraged (e.g., questions that encourage a short response, such as “How old are you?”) because of their association with lower accuracy rates and fewer details in the substantive phase of the child’s interview (Roberts, Lamb, & Sternberg, 2004; Sternberg et al., 1997). Abrupt answers from the child in the substantive phase may in turn lead the interviewer to ask more option-posing questions because they have to fall back on these techniques to gather the necessary information. Unlike ABE, however, the Scottish Executive (2011) recommends a practice interview is conducted after the rapport-building phase to accustom the interviewer and interviewee to asking and responding to open questions about a specific event. A practice interview, according to the guidelines, entails using open-ended and wh- questions (i.e., those that begin with who, what, where, when, how) and prompts to encourage the child to provide a full narrative on a neutral topic or event of the child’s choosing. Although the ABE guidance does suggest this may be a useful technique for interviewing younger witnesses or those with learning disabilities, practice interviews are not included as a required phase of the interview as they are in the Scottish guidelines.

For the substantive phase of the interview, however, the Scottish Executive (2011) recommendations align with ABE (Ministry of Justice, 2011). Recommended question types in the substantive phase of the interview are similar to the rapport-building phase, and interviewers are advised to use question types in a phased or stepped approach (for further details and supporting research, see section 1.3). Interviewers are recommended to use as many invitations or open questions as possible, and to only use specific or option-posing and closed or yes/no questions when children’s answers to open questions have been exhausted (Scottish Executive, 2011). Suggestive questions should be used only in specific situations and misleading questions (i.e., questions that imply an incorrect

answer or an answer for which its accuracy is unknown) should be avoided (Scottish Executive, 2011). The present study will determine how well interviewers stick to this guidance by measuring the percentages of each question type used and mapping a sub-sample of the interviews visually in order to ascertain where in the interview these types of questions are most frequently used.

### **3.1.2 Interviewing Practice in Scotland**

There have been very few evaluations of Scottish child interviews to determine whether interviewers use the recommended question types. In a questionnaire study of 91 Scottish police officers addressing their interview training and interviewing along with other topics, officers reported using open questions less often than recommended, with 20% of respondents stating they rarely used open questions (La Rooy, Lamb, & Memon, 2011). This suggests that Scottish interviewing of children may not be carried out according to best practice. The only previous studies that have analysed transcripts of real Scottish interviews have supported this. They found that Scottish interviews prior to 2011 were found to have been conducted particularly poorly (La Rooy, Earhart, & Nicol, 2013; La Rooy, Nicol, Halley, & Lamb, 2012). Interviewers infrequently used open questions and had a high reliance on suggestive questioning. However, transcripts of interviews conducted after 2011, when new guidance was introduced, showed improvements, with an increased use of open questions and fewer suggestive questions (La Rooy, et al., 2013).

Both of these studies (La Rooy et al., 2012; 2013) used a selection of Scottish transcripts that overlap with the current sample. However, they focused on the use of ground rules and interviewer question types irrespective of interview number (i.e., whether it is the first, second, or third interview of a child). The focus of this study, on the other hand, will be on comparing first, second and third interviews and analysing the use of social support throughout.

### **3.1.3 Multiple Interviews and Scotland**

Similarly to ABE (Ministry of Justice, 2011), the guidance on the joint investigative interviewing of child witnesses in Scotland (Scottish Executive, 2011) encourages interviewers to avoid second interviews and to try to obtain the necessary information in a

single interview. The guidance does suggest that second interviews may be necessary, however, in the following situations:

- When the child becomes extremely distressed when first interviewed,
- Multiple meetings are necessary to build sufficient rapport with the child, or for the interviewer to be trusted by the child,
- The child did not provide information in the first interview and subsequently becomes willing to talk or disclose,
- New information is uncovered during the investigation that needs to be discussed with the child,
- Further time is needed to discuss allegations disclosed in the first interview,
- During the first interview it becomes clear the child needs additional support from a specialist source in order to give their account.

Despite the discouragement of multiple interviews (Scottish Executive, 2011), they do occur in Scotland and many other countries. In Plotnikoff and Woolfson's (2001) study including a pilot group of 11 Scottish cases, 25 child victims and witnesses had spoken to a professional (including social workers, doctors and police officers) about the crime an average of 4.76 times. Fourteen of the 25 children were interviewed more than once by the police, although it was not always clear why. Thus, multiple interviews of children appear to occur quite frequently in Scotland. However, interviewers are given very little guidance on how to conduct second interviews; merely informed to conduct them using the guidance given for first interviews (Scottish Executive, 2011). The present study, therefore, aims to examine why and how these subsequent interviews are conducted, and whether this is consistent with the guidance (Scottish Executive, 2011).

The concern raised in the Scottish Executive guidelines (2011) that interviewers' confirmation bias increases with interview number will also be examined in this study. It is suggested that with time and increased knowledge of the offence, interviewers may be more likely to guide the interview according to their beliefs regarding the crime in question; gathering only information that fits their version of events and ignoring any information that does not fit. Thus, the proportion of suggestive questioning used in first, second, and third interviews will be compared to determine whether interviewers are expressing greater confirmation bias in their questioning styles in later interviews.



### 3.1.4 Social Support

Another reason given in the Scottish guidance (Scottish Executive, 2011) for conducting only single interviews is to avoid distressing the child (further) through repeated recalls of the event. Two mothers of children included in Plotnikoff and Woolfson's (2001) study directly addressed this by complaining about the number of interviews their child experienced and the effect this had on their well-being. One technique that could be used to reduce the negative effects of multiple interviewing on children's well-being is using socially supportive verbal and non-verbal behaviours. These have previously been found to reduce children's anxiety (Almerigogna, Ost, Bull, & Akehurst, 2007; Davis & Bottoms, 2002), and sometimes improve the accuracy of children's recall (Almerigogna, et al., 2007; Carter, Bottoms, & Levine, 1996; Davis & Bottoms, 2002; Goodman, Bottoms, Schwartz-Kenney, & Rudy, 1991; for more details see section 1.5.4).

Some socially supportive techniques are relatively simple to apply (e.g., smiling and eye contact), and so they may already be naturally included by interviewers in children's interviews. The research, however, suggests that the amount of interviewer-provided verbal support varies between interviews. In Teoh and Lamb's (2013) analysis of 75 Malaysian Police interviews with five to 15 year old child interviewees, they found that police officers were more verbally supportive to older children than younger ones. Hershkowitz, Orbach, Lamb, Sternberg, and Horowitz (2006) also found interviewers varied in the level of support they provided. However, in their study interviewers were more supportive to children who disclosed abuse than children who did not disclose. This was the case despite both the above studies revealing that children who were interviewed in a more supportive manner were more informative (e.g. gave more information of probative value) irrespective of age. Furthermore, support provided at the beginning of police interviews has been found to decrease children's reluctance to give information (Ahern, Hershkowitz, Lamb, Blasbalg, & Winstanley, 2014), and children interviewed using protocols that emphasise rapport and social support have been found to disclose abuse more often than those interviewed with less of an emphasis on this (Hershkowitz, Lamb, & Katz, 2014). Thus, interviewers do appear to already use some verbally supportive techniques when interviewing children and this does seem to lead to children providing more information and being more cooperative in forensic interviews. The

present study will look to see if Scottish officers provide supportive verbal comments to children, and whether this support is consistent across multiple interviews.

### **3.1.5 Child Responses in Multiple Interviews**

Alongside examining interviewers' behaviours, the present study will examine child responses to multiple interviewing. The investigative value of multiple interviewing is the possibility of obtaining further information about the event that could act as investigative leads. This entails children recalling new information that they have not previously recalled, or reminiscing. Previous experimental studies have often found children to reminisce (e.g., La Rooy, Pipe, & Murray, 2005; 2007; for more details see section 1.4.1). Hypermnesia is when children's recall appears to improve over time as they provide more details overall than they did in previous interviews (i.e., their recall of new information outweighs their forgetting). This has been found to occur less frequently in experimental studies (for a review, see La Rooy, Lamb, & Pipe, 2009). The present study will, therefore, examine reminiscence and hypermnesia across multiple interviews.

It is important that this new information provided in later interviews is still accurate. In the present sample, it is unknown whether the children's accounts are accurate or not. Instead, interviewers' question types will be analysed as accuracy has been found to be reliably associated with particular types of questions, such as open questions (Lamb, Orbach, Hershkowitz, Horowitz, & Abbott, 2007; Sternberg et al., 1996). Another sign of unreliable testimony is contradictions; when an interviewee contradicts themselves directly by making two mutually exclusive statements, such as stating in one interview that an event did not occur and that it did occur in another interview (Fisher, Brewer, & Mitchell, 2009; La Rooy, Katz, Malloy, & Lamb, 2010). This does not necessarily mean the entire account is inaccurate, but it does mean that there is at least one piece of information that is (Fisher et al., 2009). Therefore, the prevalence and nature of contradictions in children's testimony will be analysed in the present sample to ascertain how detrimental multiple interviews may be to the interviewees' perceived reliability.

Furthermore, for multiple interviewing to be particularly useful for investigations, the new information provided in later interviews should be of high investigation-relevance.

Previous studies have examined recall and how relevant it is to an investigation (e.g., Phillips, Oxburgh, Gavin, & Myklebust, 2012; Wright & Holliday, 2007). However, very

few studies have examined this aspect of children's recall, and none have looked at it across multiple interviews. Multiple interviews may not be viewed as particularly useful if the new information provided is only of low investigation-relevance. Thus, the present study will also examine this aspect of children's recall across multiple interviews.

### **3.1.6 The Present Study**

The aims of the present study are, therefore, to determine:

- The reasons second and third interviews are conducted with child victims/witnesses.
- Whether subsequent interviews differ from first interviews in regard to:
  - Interviewer question types and consequently interview quality,
  - Interviewer-provided verbal support; both its continuance through the substantive phases and the quality of the rapport-building phases,
  - Interviewee informativeness; both number of details and type of details,
  - Interviewees' recall consistency.

It is particularly challenging to make predictions regarding interviewer and interviewee behaviours across multiple interviews as there are very few studies that have previously examined this. However, it could be that with the progression of the investigation and the police officers' increased knowledge, and possibly biases, about the event(s), that when re-interviewing children, officers are likely to use fewer open questions and introduce more new information into the interview by asking more closed, forced choice or leading questions (as found in Santtila, Korkman, & Sandnabba, 2004). Additionally, based on the experimental literature, it is predicted that children would provide new information in subsequent interviews (e.g., reminisce) but also not repeat every detail they included in their first interview. Finally, in regard to support, it was expected that interviewers would provide differing levels of support to children, but no predictions regarding support levels across multiple interviews were made.

## **3.2 Method**

### **3.2.1 Sample**

A convenience sample was used. Transcripts provided by lawyers to an academic and expert witness from a Scottish University (for quality assessment through his work as an expert witness) were preliminarily examined to identify cases in which a child victim or

witness had been interviewed more than once by the Scottish police or trained social workers. This revealed 14 appropriate cases, involving multiple interviewing of 21 children, who were interviewed an average of 2.52 times (range 2 to 5). In many of the interviews, a police officer asked all of the questions (11 or 52.4% of first interviews, 14 or 66.7% of second and 4 or 57.1% of third), with the rest being jointly conducted with a social worker or an additional police officer, or by a social worker alone. These interviews were conducted between 2003 and 2013, with the majority conducted in 2012.

Video recording of interviews only became mandatory in Scotland in 2011 (Nicol et al., 2016), thus, the quality of the transcripts varied from verbatim transcriptions of video-recordings to scribed transcripts (notes written during the interview by a second interviewer that attempt to include word-for-word interviewer and interviewee utterances). In order for scribed transcripts to be as accurate as possible, interviewers prior to 2011 were trained to conduct their interviews at a slow pace. Of the present sample, 57.1% were conducted prior to 2011. To explore whether the scribed interviews conducted prior to 2011 documented fewer details provided by the child than interviews transcribed from videos (2011 and later), independent samples t-tests were conducted. These indicated there was no significant difference between the number of child-provided details included in first interviews conducted before ( $M = 148.33$ ,  $SE = 27.41$ ) and after 2011 ( $M = 159.67$ ,  $SE = 45.75$ ,  $t(19) = -.224$ ,  $p = .825$ ). This was also true for second interviews conducted before ( $M = 108.25$ ,  $SE = 66.91$ ) and after 2011 ( $M = 145.22$ ,  $SE = 89.53$ ,  $t(19) = -1.085$ ,  $p = .291$ ), and third interviews conducted before ( $M = 65.33$ ,  $SE = 21.00$ ) and after 2011 ( $M = 278.5$ ,  $SE = 199.6$ ,  $t(5) = -1.799$ ,  $p = .132$ ).

The children interviewed ranged in age from three to 14 years old ( $M = 7.5$ ,  $SD = 3.0$ ), 52.4% of whom were male. The children in the sample were all (alleged) victims. The majority were interviewed regarding allegations of child sexual abuse (61.9%), with some interviewed regarding physical abuse (19%), and some both (4.8%). The sample also included children interviewed about sexual abuse plus domestic violence (14.3%). The 'victim-perpetrator' relationship was in the majority parental (61.9%) or another familial relationship (28.6%). Transcripts regarding cases of extra-familial abuse constituted 9.5% of the sample.

This chapter will focus on the first, second, and, where conducted, third interviews of these children<sup>1</sup>.

### 3.2.2 Coding

Prior to coding, the interview transcripts were anonymised by the author, removing references to names, places, dates, and any particularly distinguishing aspects of the crime. All utterances in the interview transcript were coded. An utterance was determined by the transcript; each change in speaker (interviewee to interviewer and vice versa) signified a new utterance. Interviewer utterances were coded for question type and social support.

#### Interviewer Question Types

Every utterance that asked the child for information was coded for its question type. The coding for question types was based on the method used in Griffiths and Milne's (2006) study, which was the first to use the Griffiths Question Map (see below). However, some additions to these types were made as these became clear in the transcripts. The question types were as follows:

1. *Open*: The question encouraged the child to freely recall any aspect of the event(s). For example, 'Tell me everything that happened' or 'What happened next?'
2. *Prompter*: The utterance was a minimal encourager, including very little information but prompting the child to continue. For example, 'Uuh' or echoing the child's words.
3. *Probing*: The interviewer encouraged free recall on a cued topic. For example, wh-questions such as 'Where did that happen?' fall into this category.
4. *Appropriate closed yes/no*: The question required a 'Yes' or 'No' answer but was asked at an appropriate point in the interview, for example, after the children's responses to open and probing questions on a topic were exhausted.
5. *Inappropriate closed yes/no*: The question required a 'Yes' or 'No' answer, but was asked at an inappropriate point in the interview such as when the child's recall in

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<sup>1</sup> Despite the low sample size of third interviews ( $n = 7$ ), these were still included in the present analysis because no prior studies have examined third interviews in detail. However, the findings must be considered with caution. Fourth and fifth interviews were not analysed due to even smaller sample sizes. Fourth interviews were only carried out with three children and only one child was interviewed a fifth time.

response to open or probing questions had not been exhausted. Alternatively, the question started with ‘Can you tell me...’ This was included as these sorts of questions appear to include two questions in one and as such are ambiguous and thought to be difficult for younger children to understand (Hardy & Van Leeuwen, 2004).

6. *Multiple*: The interviewer asked more than one question in one utterance.
7. *Summary*: The interviewer summarised what the child had said previously, either with or without questioning what they said.
8. *Leading*: The question introduces information the child has not mentioned previously in any interview or the question implies a desired response. The question may also include other suggestive techniques, such as mentioning what the interviewer has heard from other sources. For example, ‘Your mum told me your brother hurt you, what do you remember about that?’
9. *Forced choice*: The question includes answers for the child to choose between. For example, ‘Did you hit your head or your knee?’
10. *Unclear*: The question was not clearly transcribed, and parts of the question were missing.
11. *Unfinished*: The question was not finished, either because the child interrupted or the adult changed their question.

If an utterance fell under more than one coding category, the higher numbered category was used. For example, some utterances could be coded as both multiple and leading when the interviewer asked more than one question and one or more of these questions were leading. This example would be coded as leading as eight is greater than six. This is because the higher numbered question types could cause more inaccuracies in a child’s recall and so cause more damage to the quality of the information given during the child’s interview.

### **Interviewer Support**

Support was coded for every interviewer utterance, including all interviewers’ questions. If the interviewer said something but it was not a question, then the utterance was coded as a supportive, unsupportive or neutral utterance using the definitions below. If the utterance included supportive and unsupportive techniques, the utterance was coded as unsupportive, unless there were more supportive than unsupportive techniques used in the

utterance. The coding for supportiveness was based on Hershkowitz (2011; pp.123-125), with some additions (that are indicated by an asterisk).

### *1. Supportive*

The interviewer's utterance was coded as supportive if the interviewer:

- used the child's name, but not in order to get the child's attention,\*
- welcomed the child,
- expressed personal interest in the child,
- expressed caring for the child,
- checked the child's feelings, including 'Is there anything more you would like to tell us?',
- included non-specific reinforcement (e.g., "You are doing very well"<sup>2</sup>),
- made a small gesture of 'good will' (e.g., offered water, asked if they had any questions for interviewers),
- thanked or showed appreciation to the child.

They were also coded as supportive if, when the child showed difficulties disclosing or elaborating, the interviewer:

- showed empathy,
- legitimised expressions (e.g., 'You can talk about bad things here'),
- generalised or normalised the child's difficulties,
- expressed confidence in the child or optimism,
- reassured the child,
- offered help (e.g., allowed the child to write about the event(s) instead of talking about it).

Or if, when the child showed reluctance to disclose or elaborate, the interviewer:

- expressed worry about children (e.g., 'My job is to check that children are ok'),
- 'contained' (e.g., 'Children can trust me when something has happened to them'),
- encouraged the child (e.g., 'It is important that children tell if..'),

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<sup>2</sup> Although children could perceive this as praise for what they have just said, this is meant to reflect the child's interview performance generally rather than about the specific comment. This form of support occurred very infrequently in the current sample of transcripts.

- removed responsibility from the child (e.g., ‘When something happens to children, it’s not their fault’).

Finally, when the child expressed distressing emotions, the interviewer was coded as being supportive if they:

- explored the emotions (e.g., ‘Tell me more about..’),
- accepted the emotions (e.g., ‘I understand what you are saying’),
- echoed the child’s words (e.g., ‘You say you were frightened’).

## 2. *Unsupportive*

The interviewer was coded as unsupportive if, when the child expressed distressing emotions, the interviewer:

- ignored the child’s emotion, difficulties, worries, or wishes,
- made a negative response (e.g., ‘We are wasting time’).

Or if the interviewer:

- coerced the child in any way,
- made negative comments about the child’s behaviour,
- doubted the child’s accuracy (e.g., ‘Are you sure?’),\*
- repeatedly asked the child the same closed question – possibly implying they were incorrect in their first answer (such as ‘Are you worried about getting X in trouble?’).\*

Finally, if the interviewer suggestively supported the child in any of the following ways, despite there being no strong evidence of a crime having occurred, their utterance would be coded as unsupportive. The coders assumed there was no strong evidence unless the interviewer mentioned specific evidence, such as photographs. Suggestive support implies that a specific aspect of the child’s response was good and thus may encourage the interviewee to respond with more information on that subject, or uses supportive techniques to introduce new information into the interview. Thus, the comments can be very similar to non-suggestive support (described above) but are directed at eliciting a particular response from the child. Suggestive support that was coded as unsupportive included:



- using any supportive techniques to reinforce the actual content of the child's statement,
- expressing worry about the child specifically,
- using specific 'containment' techniques (e.g., 'You can trust me if...'),
- encouraging the child with specifics (e.g., 'It is really important that you tell if...'),
- removing responsibility from the child (e.g., 'If ... has happened, it is not your fault').

### 3. *Neutral*

The interviewer's utterance was coded as neutral if the interviewer used none of the techniques described in the above two categories, or used the child's name but in order to get the child's attention. \*

Reinforcement of content during rapport, such as saying 'That's right' during the truth/lies task, was coded as neutral rather than unsupportive as the interviewer knew whether the child was right or not on that specific point.

Additionally, during rapport, if the interviewer asked 'Are you happy to talk to us?' this would be coded as a supportive, appropriate yes/no question, as this was appropriate at any point during rapport.

### **Interviewee Utterances**

Child utterances were coded for the number of details provided, the type of information, and its likely investigation-relevance. Repetitions of information within the same interview or utterances in which the information that the child provided was not related to the event(s) being discussed were coded as 'non-substantive', and no further coding of the utterance occurred. In second and third interviews, each child utterance was also coded for the novelty and consistency with prior interviews of the information provided.

### **Number of Details**

The number of details that the child provided was determined by the number of clauses in each utterance. A clause (as in Gross and Hayne, 1999) was a simple statement, with every additional detail scored separately. For example, if the child said 'My bedroom is

upstairs’, this would be coded as one detail. If the interviewer had asked the child ‘Where is your bedroom?’ and the child had responded ‘Upstairs’, this would also count as one detail. Additionally, if the child added information, such as ‘My bedroom is upstairs with Mummy’s’, this would count as two details. Further details within the clause were also coded (for example, ‘he was wearing a blue shirt’ would count as two details, with one for the clause, and one for blue). When children listed people, or objects, each additional item in the list counted as an extra detail.

### **Type of Details**

The types of details provided by the child were coded for each utterance. If the child spoke about multiple types within one utterance, they were coded separately. The types, as in Phillips et al. (2012), were (a) *people*: details relating to persons involved in the event(s), (b) *actions*: details explaining what happened during the event(s) and any other relevant time points, (c) *locations*: details of places involved in the event(s), as well as descriptions of the places, (d) *items*: any details of objects or items involved in the event(s), such as descriptions of clothing, and (e) *temporal*: details given regarding the timing of the event(s).

### **Investigation-Relevance**

Each child utterance was also coded for investigation-relevance. Defining high- and low-investigation-relevance can be particularly subjective and because both coders were not trained investigators, the definition of high investigation-relevance was made relatively narrow and precise. If children referred to some details of high investigation-relevance and some of low investigation-relevance within one utterance, the details were coded separately. Details were coded as of *high investigation-relevance* if the child was directly discussing something illegal. For example, all discussion of an adult sexually touching them would have been coded as of high investigation-relevance. Denials of illegal events were also included as of high investigation-relevance. Alternatively, details were coded as of *low investigation-relevance* if the child was discussing the alleged crime or surrounding events, but not specifically an illegal act. For example, discussion of what happened after the illegal act would be coded as of low investigation-relevance.

### **Consistency and Novelty in Second and Third Interviews**

All child utterances in second and third interviews were coded for whether the child had mentioned the details in previous interviews or not. They were also coded for whether any new details fit with their previous testimony, or whether they directly contradicted something said in a prior interview. The codes were as follows:

- *repeated*: the child had previously mentioned the detail in one of their preceding interviews,
- *new consistent*: the detail had not been mentioned in a prior interview, and it did not directly contradict the information previously given by the child.

Traditionally, any new information would be categorised as inconsistent as it involves different information to that given in the first interview (i.e. none).

However, in the present study, consistency relates to whether the information fits with the child's previous story or contradicts it,

- *new contradictory*: the detail had not been mentioned in a prior interview, and it directly contradicted testimony the child gave in a preceding interview. For example, if in interview one the child had denied ever going to the suspect's house, but described going to the suspect's house in interview two, this and any further details regarding their visit to the suspect's house would be coded as new and contradictory.

### **Inter-rater Reliability**

A second rater coded 19% of the children's interviews (e.g. the interviews of four children). This sub-sample was randomly determined. Agreement for coding of all six aspects of the interviewer and interviewee utterances ranged from 95.4% to 100%, with an average of 98.5% agreement. The lowest agreement was for coding 'support' in the child interviews.

#### **3.2.3 Additional Information**

Additional information was gathered about each child and their interview. The child's age and gender were determined. Regarding the interview, information was obtained about the number of people present and their professions, whether the interviewers were the same or different people in subsequent interviews, the delay in days between interview one and two and interview two and three, and the reason for the second and

third interviews being conducted. The majority of this information was found on a non-anonymised cover page of the interview transcripts. Permission to access these non-anonymised versions was given by the Scottish academic but limited to a handful of days when the author visited Scotland.

Details regarding the reasons for the second and third interviews were gleaned from the interview transcript itself. The reasons were coded as follows:

- *additional evidence*: the interviewer mentioned in a subsequent interview further evidence from another source that they wanted to discuss with the child,
- *child asked to stop first interview*: in some interviews the child was clearly distressed and asked to come back another day to continue the conversation,
- *conflicting evidence*: the interviewer mentioned evidence from another source in a subsequent interview that differed from what the child previously had said,
- *further child disclosure*: the interviewee disclosed further information after their first police interview to someone who then informed the police and this was mentioned by the interviewer or interviewee in the subsequent interview,
- *no disclosure in first interview*: the child had not disclosed any crime in any prior interviews and no other reason was given for the subsequent interviews,
- *not obvious*: it was not clear from either the interviewer or the interviewee's comments why another interview was being carried out, and the interviewee had disclosed information in the prior interview(s) (i.e., it could not be categorised as 'no disclosure in first interview').

### 3.3 Results

#### 3.3.1 Simplification of Coding

Preliminary t-tests comparing the percentages of each question type in interviews one, two, and three showed very few differences ( $ps > .058$ ). The only statistically significant finding was that the interviewers asked more multiple questions in interview three ( $M = 10.08\%$ ,  $SE = 3.01$ ) than in interviews one ( $M = 4.63\%$ ,  $SE = 1.92$ ,  $t(6) = -2.79$ ,  $p = .032$ ,  $r = .75$ ) or two ( $M = 4.56\%$ ,  $SE = 1.86$ ,  $t(6) = -2.69$ ,  $p = .036$ ,  $r = .74$ ). Due to the general lack of differences between interviews, the coding was simplified to determine if there was any change in style of questioning rather than in specific question types. The simplified coding was as follows:

1. *invitations*: this consisted of open questions and prompters; both of which encourage free recall,
2. *directives*: this consisted solely of the probing question category, as it was the only question type that asked for cued-recall, or free recall about a targeted aspect of the event (such as the people involved),
3. *option-posing*: this included both appropriate and inappropriate yes/no questions, and forced choice questions, all of which encourage children to give short or pre-specified answers,
4. *suggestive*: this category was a re-coding of the leading questions only, as this was the only category used specifically regarding suggestive questions,
5. *multiple*: this included both multiple and summary questions,
6. *unknown*: this included both unfinished and unclear questions as it was not known what type of question was intended.

Question type percentages were calculated for each interview's substantive section. This was calculated by dividing the number of substantive questions in each category by the number of questions asked in the substantive section of that interview overall.

### **3.3.2 Interview Details**

The full sample were interviewed twice ( $N = 21$ ), but only seven of the sample were interviewed three times. The mean length of the interviews, measured by the total number of child and interviewer utterances combined, were compared. According to paired samples t-tests, there was no significant difference in the length of the substantive phases of interview one ( $M = 209.95$ ,  $SE = 34.09$ ), interview two ( $M = 245.67$ ,  $SE = 35.58$ ), and interview three ( $M = 301.86$ ,  $SE = 98.24$ ,  $ps > .26$ ). However, the interviews did have a tendency to increase in length with the number of interviews.

On average, the second interviews occurred 45 days later (with a range of 0 to 368 days later), and the third interviews occurred 41 days after the second interview (range: 2 to 133 days).

First disclosure or partial disclosure (e.g., the child discussed the event but did not clarify what happened) occurred in 66.7% of first interviews, 19% of second interviews, and no third interviews. Three children never disclosed any offence being committed against

them. The majority of second interviews were conducted by the same lead interviewer (60%). However, third interviews were most often led by a different interviewer from either the first or second interviews (57.2%).

### **3.3.3 Reasons for Second and Third Interviews**

The majority of second interviews were conducted because the child disclosed no information or a very limited amount of information about a crime in the first interview (8 interviews; 38.1%). In four further second interviews the child appeared to have made additional disclosures about the event(s) to someone who informed the police (19.0%). In three interviews the child had asked to stop the first interview but had agreed to come back for a second interview (14.3%). In a further three interviews there was no obvious reason for the second interview (14.3%). The other three interviews were conducted due to additional evidence, for one of which the evidence opposed the child's prior interview account (4.8%).

The reasons for third interviews were not clear in three interviews (42.9%). For three others the child had disclosed further information (42.9%). In one interview the interviewee had not given any information regarding the perpetrator in either prior interview and the interviewee was asked questions addressing this issue and so it appeared this interview was conducted because these questions had not been answered in the previous interviews.

### **3.3.4 Interviewers' Behaviours in Multiple Interviews**

#### **Question Types**

The majority of questions asked in all interviews were option-posing, followed by directive (see Figure 3.1). Percentages of each question type were compared for interviews one and two ( $ps > .085$ ), interviews two and three ( $ps > .059$ ), and interviews one and three ( $ps > .065$ ) using paired-samples t-tests. No significant differences were found.

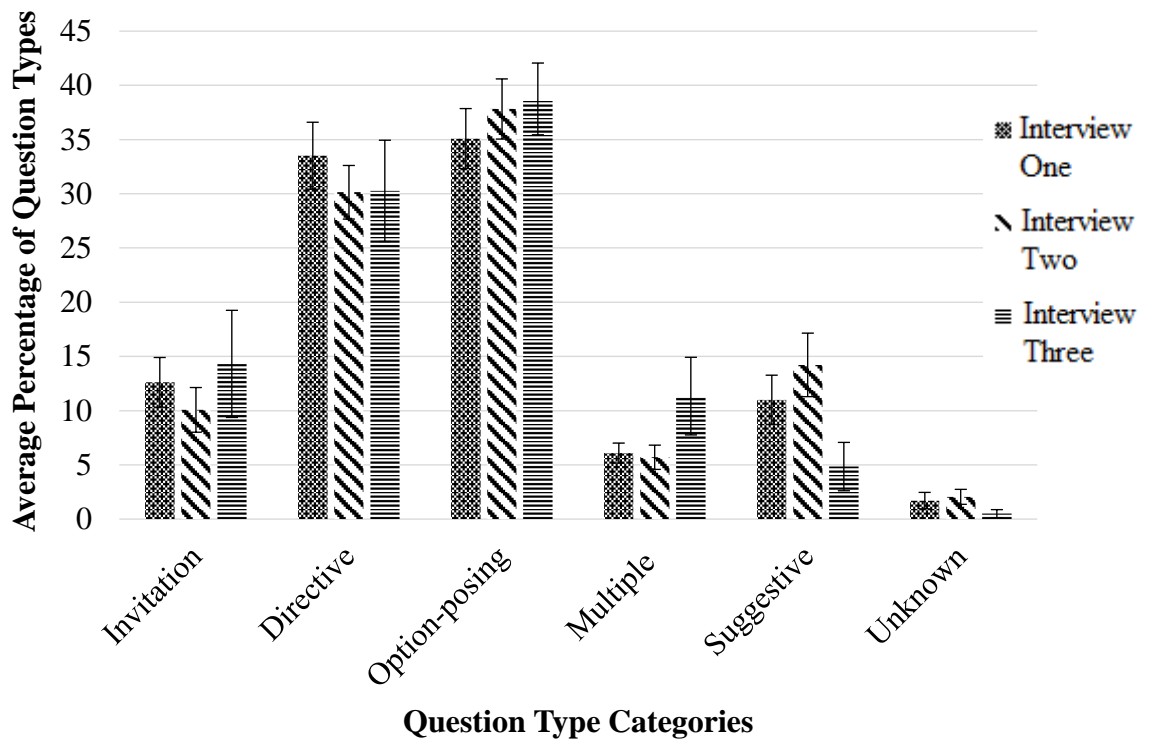


Figure 3.1. The average percentages of question types and standard errors of means in interviews one, two, and three.

### Supportive Questioning

Using paired samples t-tests to compare the percentage of supportive, neutral, and unsupportive questions and utterances in interviews one and two, two and three, and one and three, revealed no significant differences ( $ps > .090$ ,  $ps > .119$ , and  $ps > .096$  respectively). The majority of questions and non-question utterances were coded as neutral ( $M = 83.84\%$ ), followed by supportive ( $M = 10.36\%$ ), and non-supportive ( $M = 5.81\%$ ; see Figure 3.2).

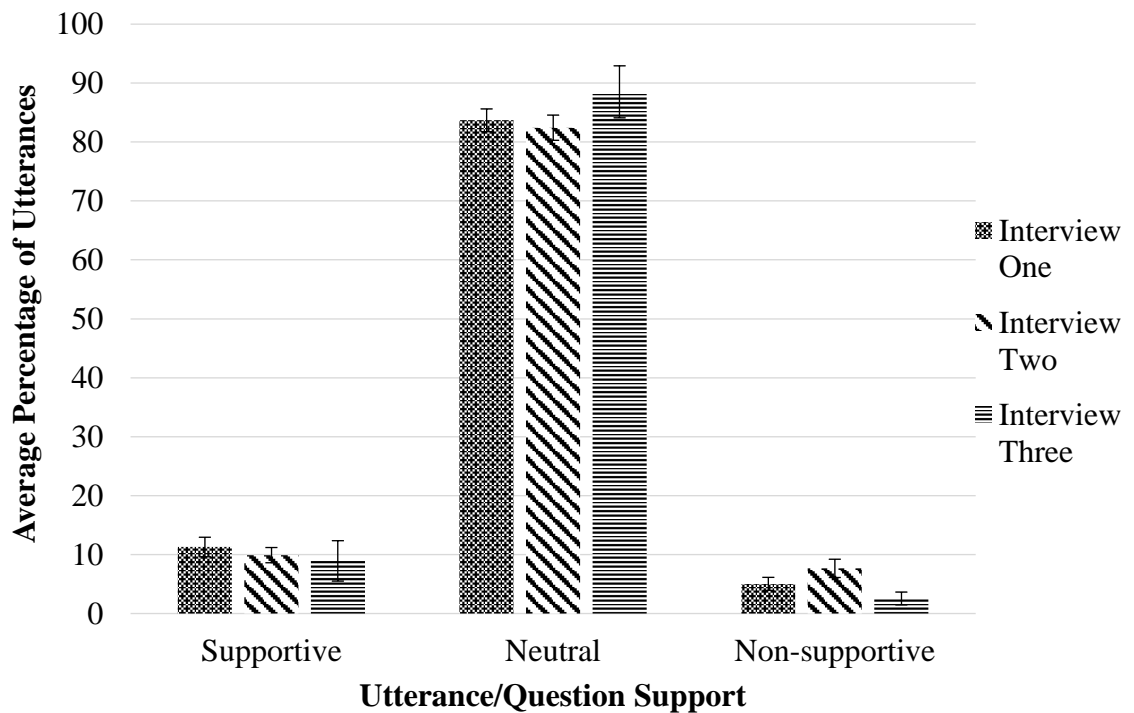


Figure 3.2. The average percentages of each level of utterance or question support and standard errors of means in interviews one, two, and three.

### Rapport in Interviews One and Two

The rapport-building phase of the interview had been fully transcribed for 15 of the first interviews and 15 of the second interviews, but only four of the third interviews.

Therefore, the analysis of the rapport-building phase was restricted to first and second interviews. The majority of questions in the rapport-building sections were option-posing (see Figure 3.3). Paired-samples t-tests showed no significant differences in the percentage of each question type between interviews one and two ( $p > .159$ ).



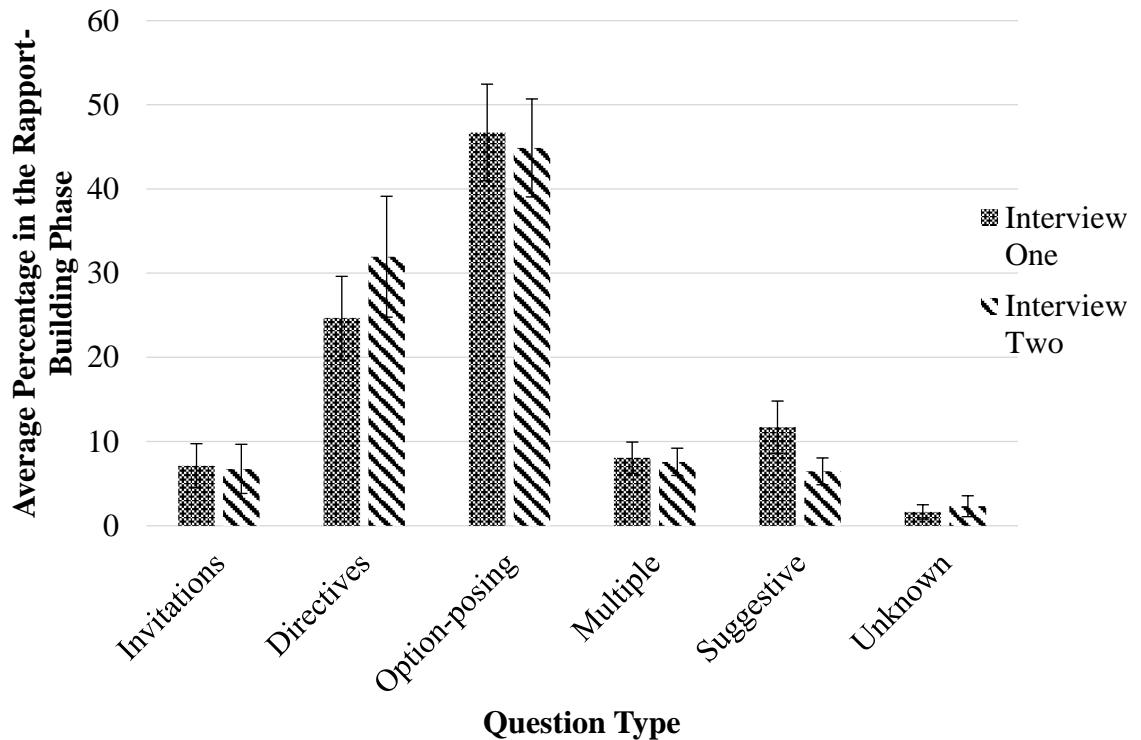


Figure 3.3. Average percentages of question types in rapport-building section of interviews one and two and standard errors of means.

### 3.3.5 Children’s Responses in Multiple Interviews

#### Number of Details

The number of investigation-relevant details provided by children in interviews one, two, and three did not statistically significantly differ ( $ps > .202$ ). On average across all interviews, children provided 120.51 investigation-relevant details per interview.

#### Type of Details

The majority of details recalled in all interviews were about actions related to the event(s) ( $M = 73.24\%$ ; see Figure 3.4). The percentages of details recalled regarding people, locations, temporal information and items were, on average, relatively low (14.13%, 6.27%, 4.19%, and 2.18% respectively). Paired samples t-tests showed only one statistically significant change in the percentages of details provided of each type in interviews one, two, and three. This was that children provided a significantly larger percentage of details on ‘items’ in interview two ( $M = 2.94\%$ ,  $SE = 0.75$ ) than in interview one ( $M = 1.12\%$ ,  $SE = 0.43$ ,  $t(20) = -2.19$ ,  $p = .040$ ,  $r = .44$ ), though the percentages were very small.

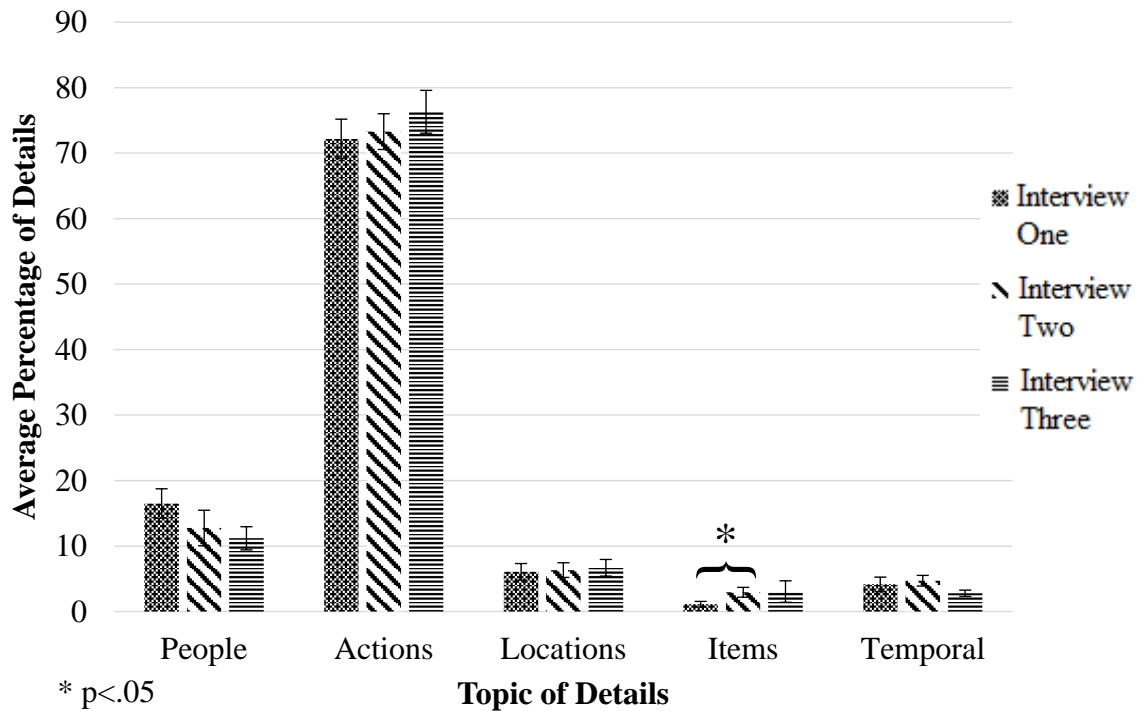


Figure 3.4. Average percentage of details recalled by type in interviews one, two, and three and standard errors of means.

### Investigation-Relevance

The percentage of details given that were of high investigation-relevance (of all the investigation-relevant information provided) did not differ in paired samples t-tests across first, second, and third interviews statistically ( $ps > .413$ ). Children provided a similar percentage in interview one ( $M = 16.80\%$  or 24.86 details), as in interview two ( $M = 20.77\%$  or 24.14 details), and as in interview three ( $M = 28.46\%$  or 32.29 details). However, there was a trend for the percentage of high investigation-relevance details to increase with interview number.

### Novelty and Consistency in Interviews Two and Three

#### Consistent

Children recalled in their second interview, on average, a majority of details that were ‘new and consistent’ ( $M = 82.72\%$ , or 80.86 details) with their prior recall in interview one. This amount did not differ significantly from the percentage of ‘new and consistent’ details they recalled in interview three ( $M = 88.89\%$ , or 137.71 details,  $t(6) = -.497$ ,  $p = .637$ ). Of the ‘new and consistent’ information provided in interview two, 19.29% of it was of high investigation-relevance (or, on average, 18.19 details). In the third

interviews, 25.19% (or 28.71 details) of ‘new and consistent’ details were of high investigation-relevance.

### **Contradictory**

There was also no significant difference between the percentage of ‘new and contradictory’ details recalled in interview two ( $M = 11.34\%$  or 14.57 details) and interview three ( $M = 6.11\%$  or 6.14 details,  $t(6) = .678$ ,  $p = .523$ ). When ‘new and contradictory’ details were provided in second interviews ( $n = 14$ ), 25.60% was of high investigation-relevance (or, on average, 8 details). In third interviews, 77.69% (or 4.25 details) of ‘new and contradictory’ details were of high investigation-relevance (in the four interviews in which any ‘new and contradictory’ details were recalled).

### **Repeated**

Additionally, there was no statistically significant difference in the number of repeated details provided in interview two ( $M = 5.93\%$  or 5.05 details) and interview three ( $M = 5.00\%$  or 3.71 details,  $t(6) = .142$ ,  $p = .892$ ).

As can be seen from Figure 3.5, the majority of high investigation-relevant details given in interviews two and three were ‘new and consistent’, and of a similar percentage to the percentage of high investigation-relevant details given in interview one. Few details were ‘contradictory’.

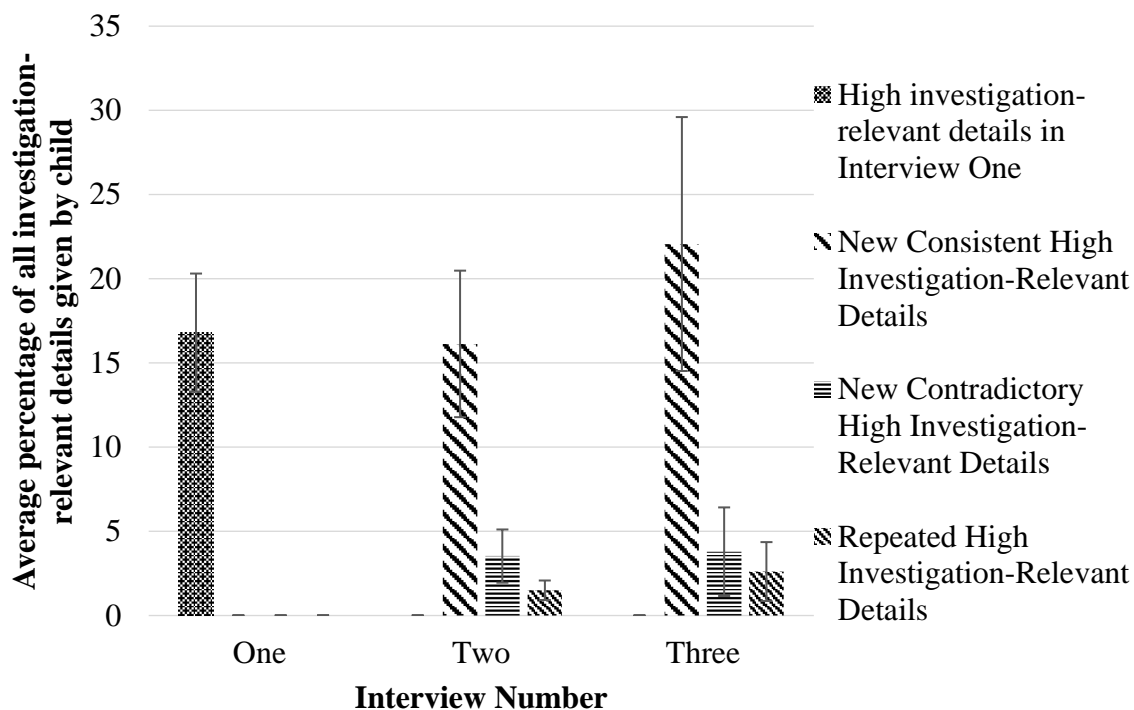


Figure 3.5. Average percentages of consistent, contradictory and repeated high investigation-relevant details recalled in interviews two and three.

### Nature of Contradictory Details

‘New and contradictory’ information was provided in 18 of the 28 second and third interviews. For seven of these interviews, the information was of low investigation-relevance. For the majority of these, the information consisted of a slight change in story, such as contradictory temporal information, or information about who lives where. In the remaining 11 interviews, some new contradictory information that was provided was of high investigation-relevance. In seven of these interviews, the child had denied something happened in one interview but in a subsequent interview had gone on to explain in detail the action that was originally denied. In two further cases the contradictions seemed to relate to the child’s understanding of the word ‘touch’ (a word that has been found to be difficult for children to understand; Quas & Schaaf, 2002). In the remaining two interviews, the children had given details in prior interviews that they subsequently changed.

Contradictory details were given in two interviews in response to leading questions from the interviewer that included inaccurate information about what the child had said in the prior interview.

### 3.3.6 Griffiths Question Maps and Waterhouse Answer Grids

A sub-sample of four children's first and second interviews were analysed using the Griffiths Question Map (henceforth GQM) and Waterhouse Answer Grid (henceforth WAG). This form of analysis creates a visual representation of each interview which allows examination of the temporal order of the interviewer's question types and the child's responses.

This is created by plotting all the interviewer and interviewee's coded utterances with time running along the x-axis (from left to right) and type of utterance along the y-axis. In the following eight figures the type of utterance/question asked by the interviewer is on the top half of the y-axis (above the red line; the Griffiths Question Map). The utterances above the blue line are question types and between the blue and red line are non-question utterances. On the bottom half of the y-axis (the Waterhouse Answer Grid), below and on the red line are the type of details the child responds with. The colour and shape of the data points which represent each utterance also signify the supportiveness of the question for the interviewers' utterances, and the novelty, investigation-relevance and consistency for the interviewees' responses. The key for each GQM/WAG explains this in more detail.

The sub-sample was chosen according to the quality of the first interview. Two particularly 'good' and two particularly 'poor' first interviews were analysed using the GQM and WAG, along with their corresponding second interviews. Quality was based on the percentages of question types. To identify the best interviews, for each first interview the percentage of suggestive questions was subtracted from the percentage of invitations. The two interviews with the highest scores were analysed as examples of 'good' interviews (child 'A' and 'B', see Figures 3.6.1 and 3.7.1, and their corresponding second interviews; Figures 3.6.2 and 3.7.2 respectively). This is because the literature and guidelines (for example, the Guidance on Joint Investigative Interviewing of Child Witnesses in Scotland; Scottish Executive, 2011) advise using mainly open questions (invitations) and avoiding suggestive questions. 'Poor' interviews (child 'C' and 'D', see Figures 3.8.1 and 3.9.1, and their corresponding second interviews; Figures 3.8.2 and 3.9.2 respectively) were identified by subtracting the percentage of invitations from the

number of option-posing and suggestive questions, highlighting interviewers who relied on closed questioning and avoided open questions.

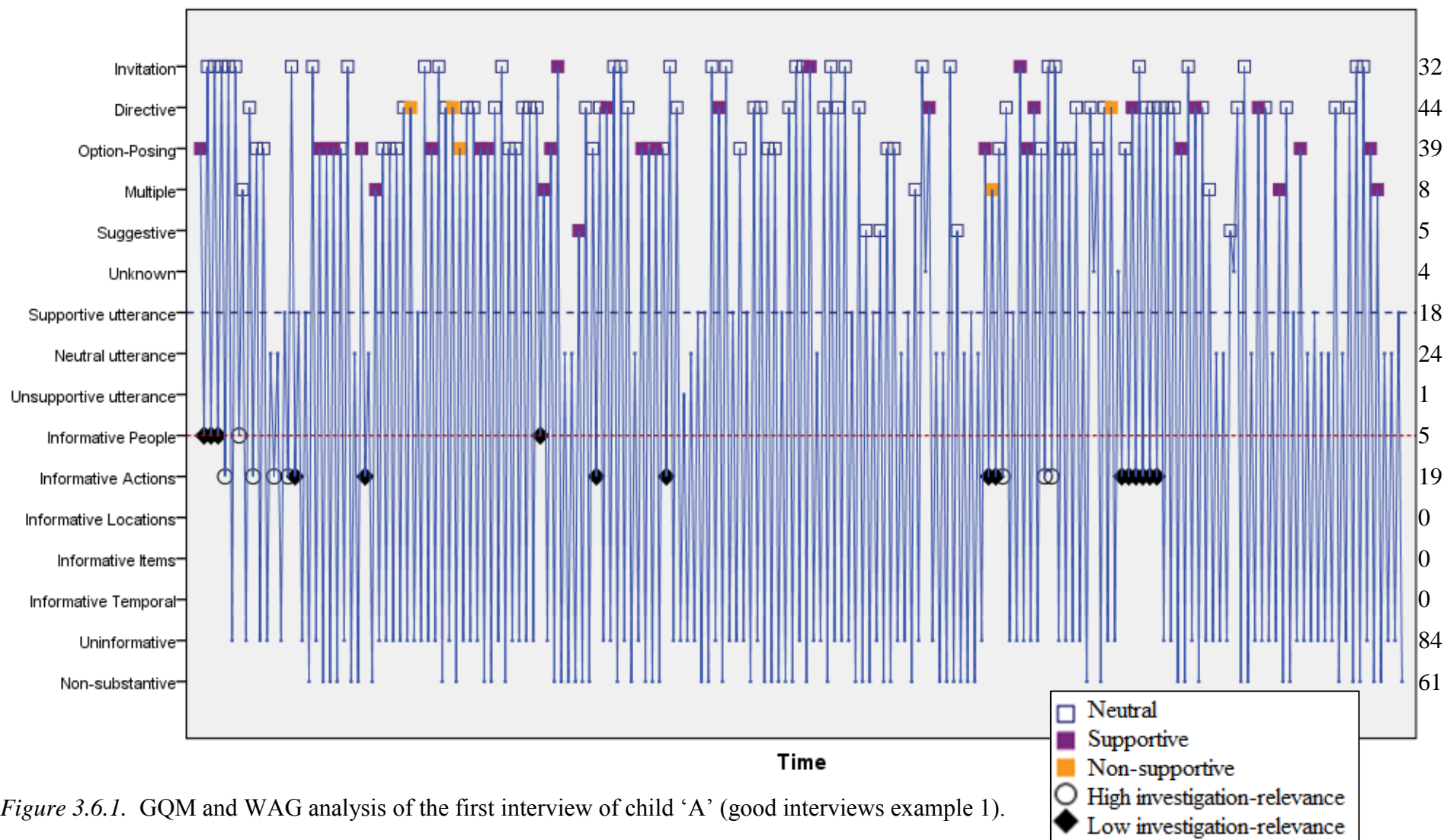


Figure 3.6.1. GQM and WAG analysis of the first interview of child 'A' (good interviews example 1).

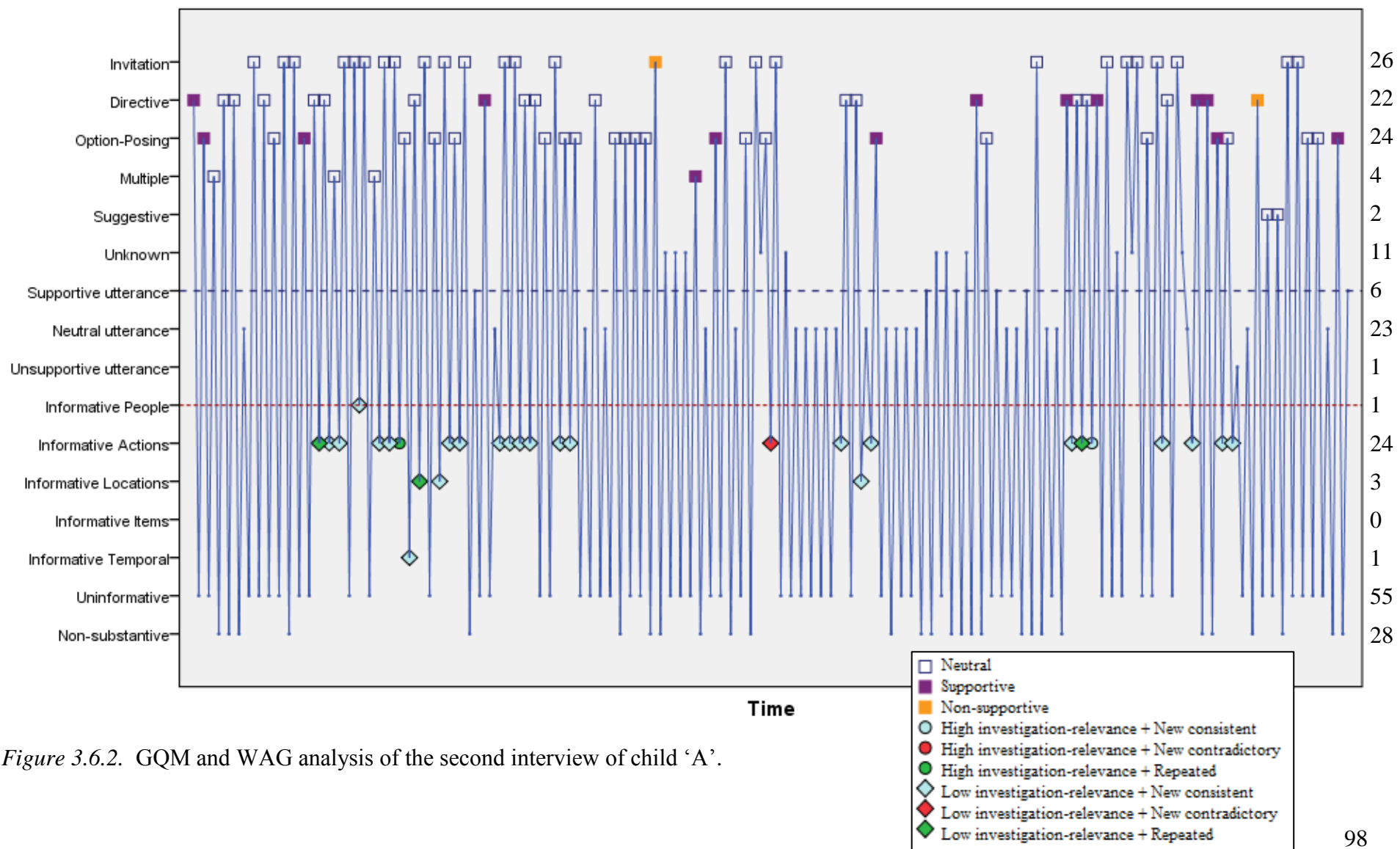
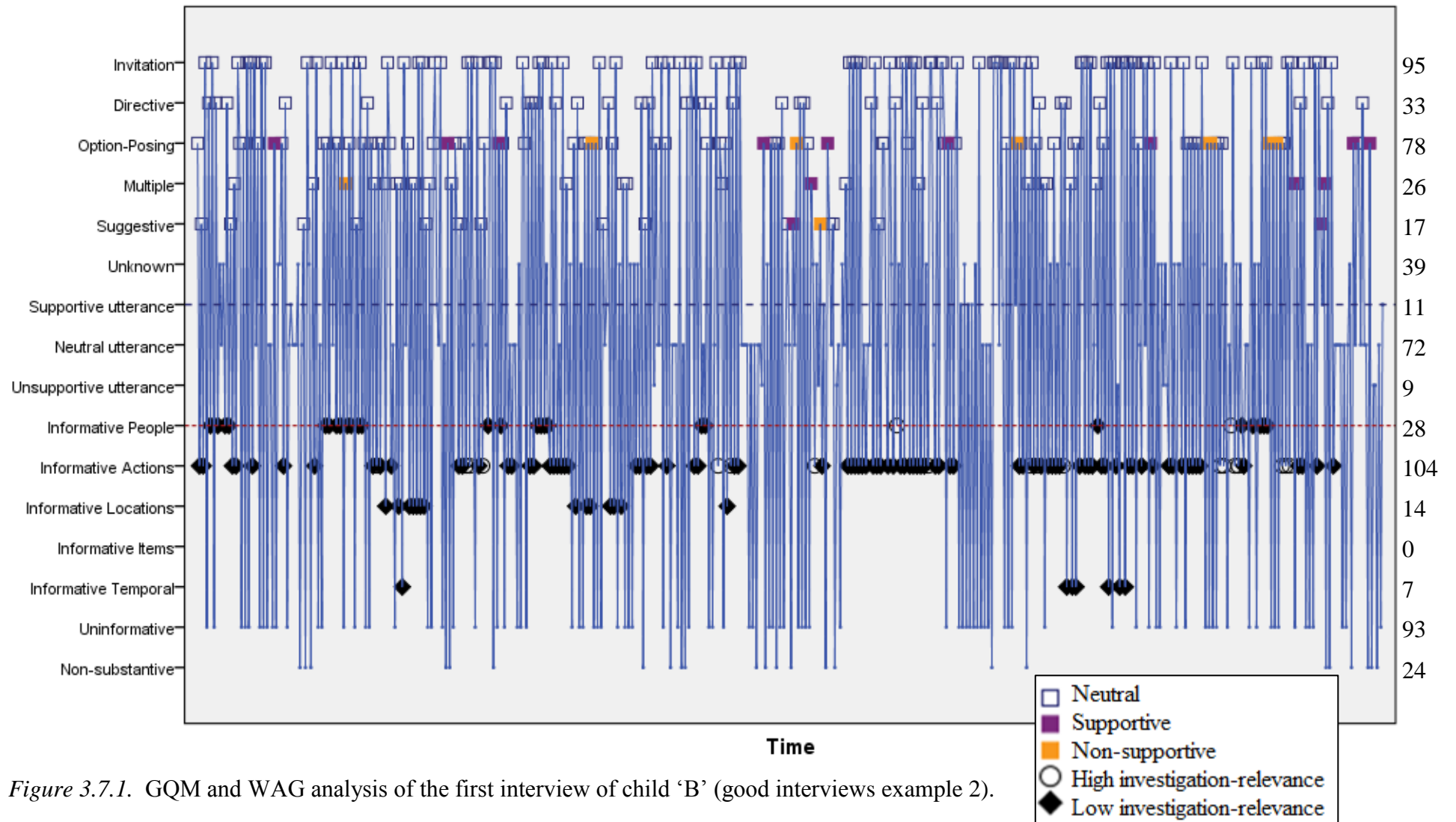


Figure 3.6.2. GQM and WAG analysis of the second interview of child 'A'.





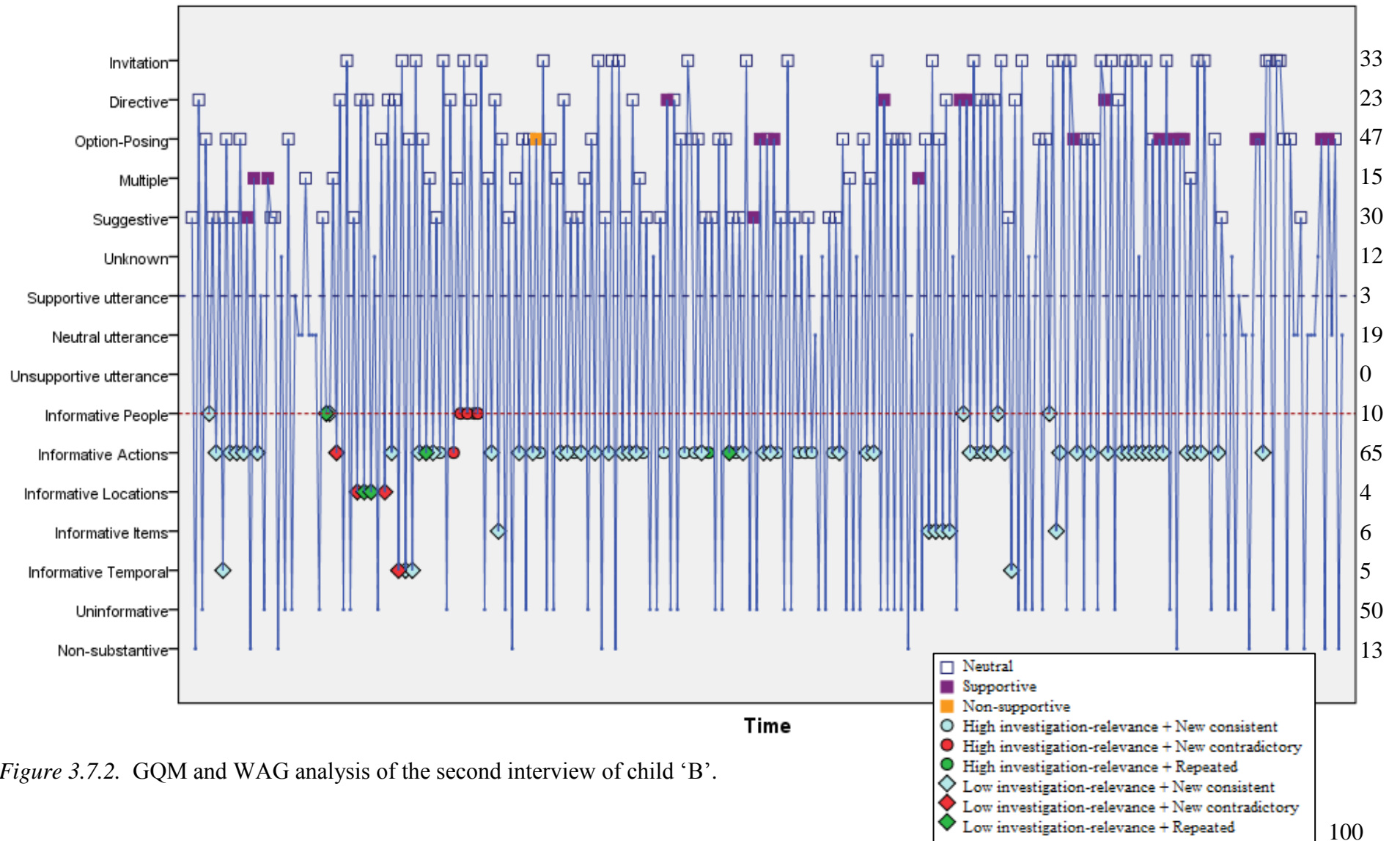


Figure 3.7.2. GQM and WAG analysis of the second interview of child 'B'.

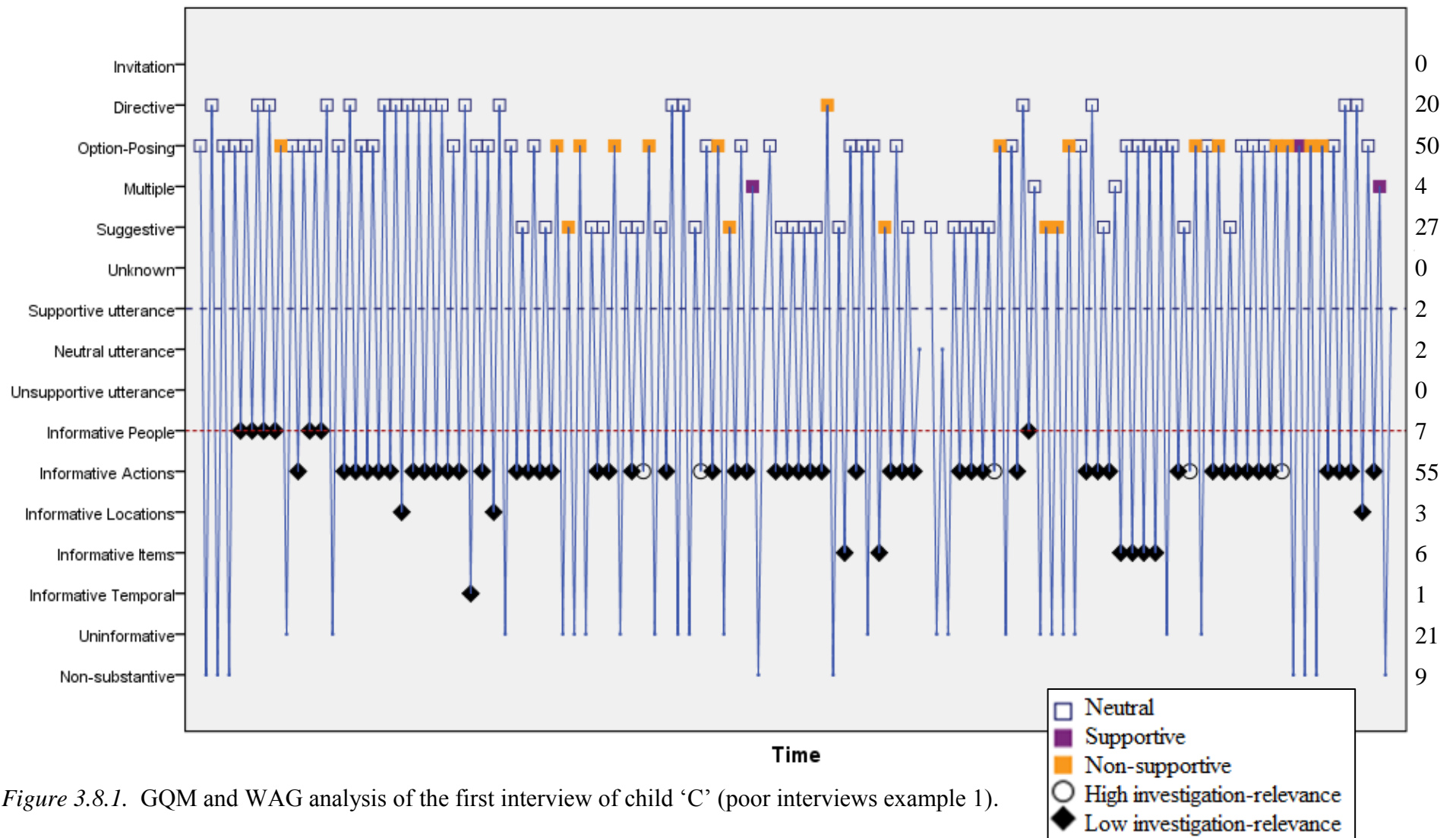


Figure 3.8.1. GQM and WAG analysis of the first interview of child 'C' (poor interviews example 1).

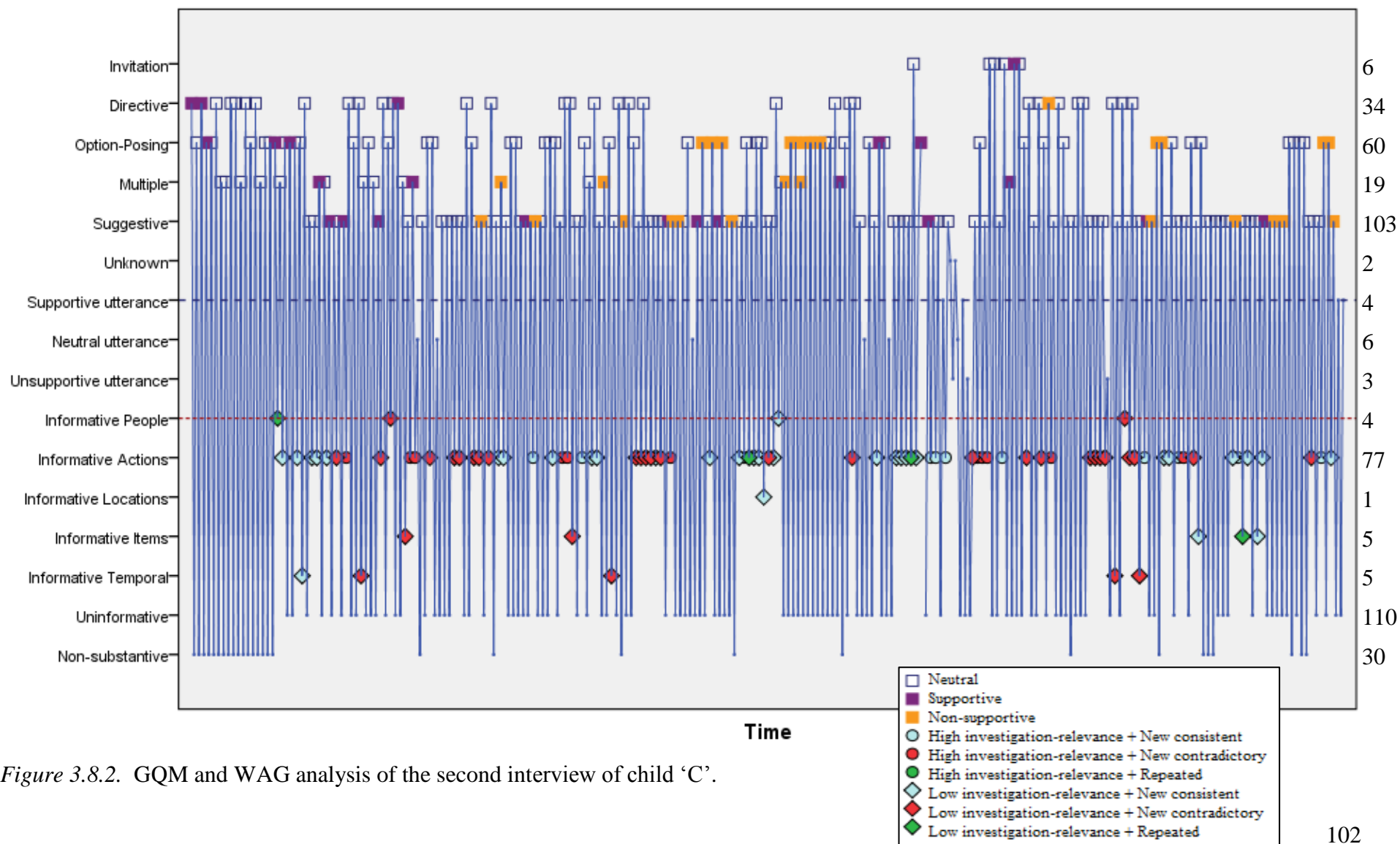


Figure 3.8.2. GQM and WAG analysis of the second interview of child 'C'.

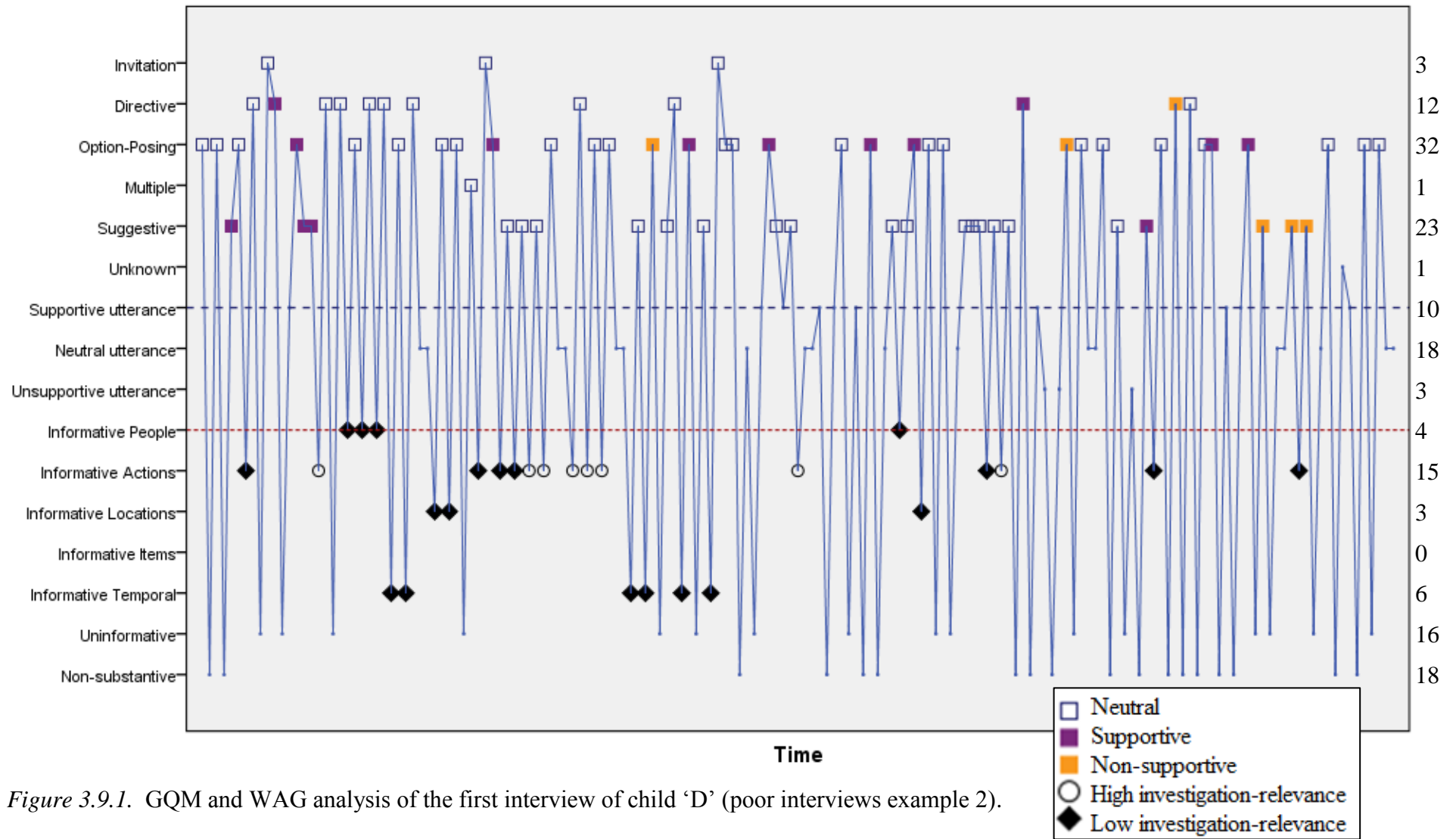
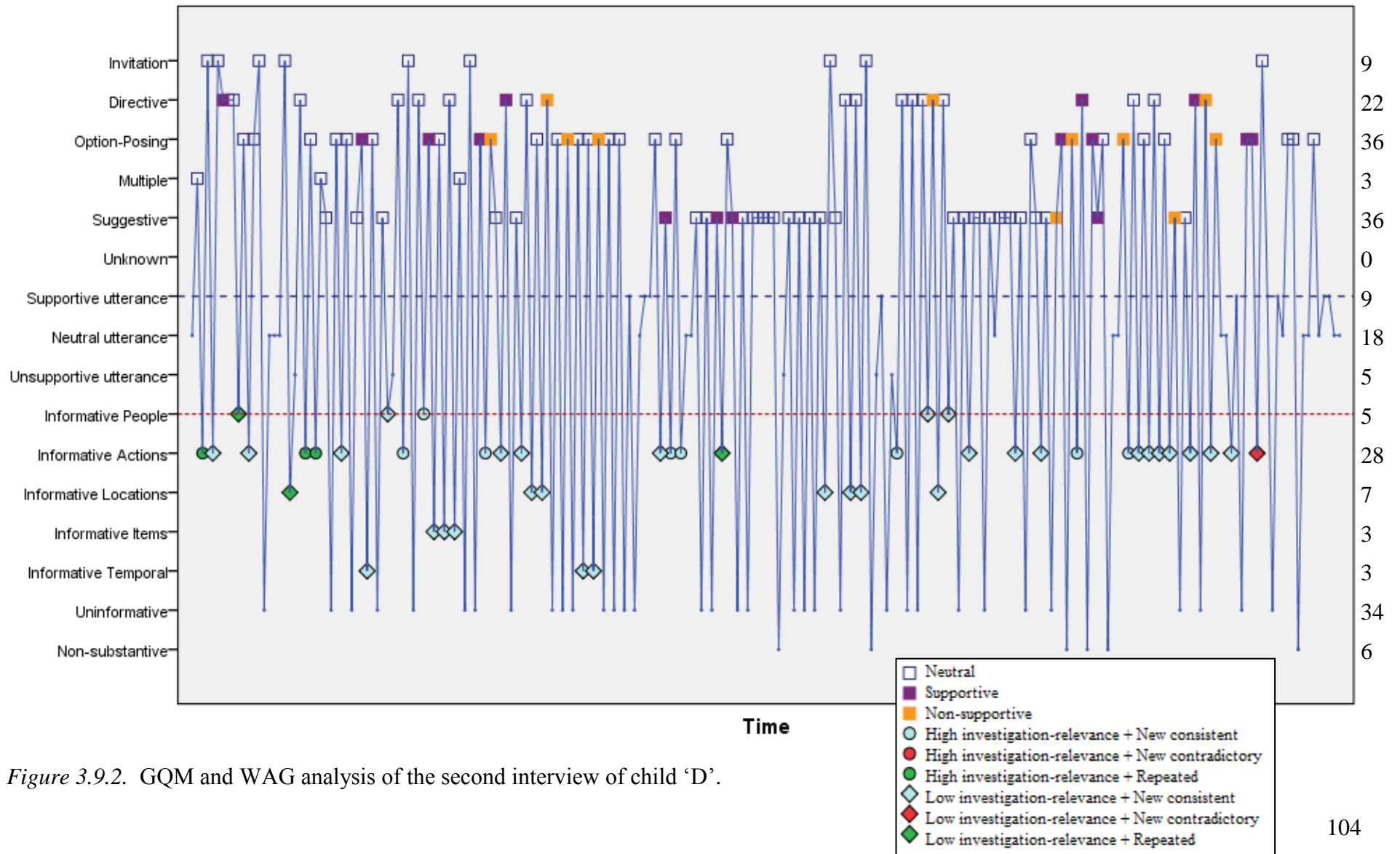


Figure 3.9.1. GQM and WAG analysis of the first interview of child 'D' (poor interviews example 2).



From the GQMs and WAGs, it is possible to see that interviewers in the ‘good’ interviews used invitations frequently and throughout the interviews, returning to them often after having asked directive, option-posing, and multiple questions. Invitations in the ‘poor’ interviews were used erratically, with some solely used at the beginning (Figures 3.9.1 and 3.9.2), some in the middle (Figure 3.8.2) and some never using invitations (Figure 3.8.1). Suggestive questions were used frequently and throughout the ‘poor’ interviews. However, they are also seen in the ‘good’ interviews quite often, for one child during the first halves of their interviews (Figures 3.7.1 and 3.7.2) and for the other during the second halves (Figures 3.6.1 and 3.6.2).

Socially supportive comments are made throughout most of the ‘good’ and ‘poor’ interviews with varying frequency. However, there seem to be more non-supportive comments in the ‘poor’ interviews, which are mainly in the second half of the interview. Interviewers in the ‘good’ interviews use social support in their questions towards the end of the interviews more than interviewers in the ‘poor’ interviews.

Children disclose information regarding ‘actions’ throughout both ‘poor’ and ‘good’ interviews. In most cases, the children disclose information of high investigation-relevance earlier in the second interviews than they do the first. In second interviews, children generally provide new consistent information throughout, whereas repeated information is mainly mentioned at the beginning of the interview. Children’s reporting of contradictory information varied, with two children providing very little contradictory information (Figures 3.6.2 and 3.9.2), one providing quite a lot of contradictory information throughout (Figure 3.8.2) and one including a section of contradictory information near the beginning of their second interview (Figure 3.7.2). Finally, all four children provided quite a large number of uninformative details throughout both their first and second interviews.

### **3.4 Discussion**

In summary, the results from this study showed that the reasons for which second and third interviews were conducted appeared to be in line with the Scottish guidance (Scottish Executive, 2011). This was, in the majority, due to children not having disclosed any or enough relevant information in their prior interviews. Additionally, contrary to our predictions, interviewers were found to be highly consistent in their

behaviours in first and subsequent interviews. Instead of becoming more reliant on closed question types (e.g., suggestive and yes/no questions) with increasing interview number, interviewers asked statistically similar proportions of question types across interviews. They were also equally supportive. However, although interviewers were consistent, they provided little social support and the quality of their interviews was low; relying heavily on option-posing and suggestive questions in first and subsequent interviews, against the best practice guidelines (Scottish Executive, 2011). Children were also highly consistent in their responses; providing similar proportions of details (both in terms of topics and investigation-relevance) and numbers of details across these interviews. The majority of the information the children provided in each of these interviews was new and consistent with their prior testimony. The findings will now be discussed in more depth and in relation to the literature.

### **Reasons for Multiple Interviews**

The two most frequent reasons for conducting second or third interviews were 1) because the child had not disclosed key information in their prior interviews, and 2) because the child had made further disclosures that the investigators were then alerted to. The Scottish Executive guidelines (2011) state this first reason is appropriate for conducting another interview if the child subsequently becomes willing to disclose. However, three children never disclosed, suggesting they had not become willing to. The second reason could be interpreted as new information uncovered during the investigation that needs discussion with the child; another appropriate reason for conducting a subsequent interview according to the Scottish guidelines (Scottish Executive, 2011). The current study also suggests that reminiscence (discussed below) occurred with some frequency and that interviewers may be aware of the possible benefits of conducting second interviews to obtain additional information. Scottish police interviewers, therefore, do generally seem to follow the guidelines regarding reasons for conducting second interviews with child witnesses/victims.

### **Interviewers' Utterances**

Interviewer styles were also found to be consistent across first, second, and third interviews. This was the case when interviewers' utterances were coded using both very detailed codes and more general codes of question types. The only significant difference found was that there were more multiple questions in interview three than in prior



interviews. However, the difference in percentages of multiple questions used was no longer significant when summary questions were included in this category, suggesting that interviewers were using summaries (e.g., paraphrasing what the child had previously said) in the first and second interviews instead of multiple questions. Furthermore, the very small sample of third interviews means that these findings should be interpreted with caution. There may be key variations in the cases involving third interviews that may mean they are not representative of the other cases (e.g., age, abuse type and frequency, victim-perpetrator relationship, timing of interviews, and disclosure history).

The finding of interviewer consistency in the percentages of question types they use across interviews is encouraging in terms of interviewing practice. As the investigation develops, the risk of the interviewer introducing their own biases (confirmation bias) and information they have obtained from sources other than the interviewee into the subsequent interviews can become higher (Scottish Executive, 2011; Smith & Milne, 2011). This has been found in previous studies where interviewers' use of suggestive or leading questions has increased with the number of interviews the child has experienced (Cederborg, La Rooy, & Lamb, 2008; Patterson & Pipe, 2009; Santtila et al., 2004). Interviewers in the current sample did not show increasing reliance on suggestive techniques (including introducing information the interviewee had not previously mentioned) in later interviews and so there is no evidence they were affected by their (possibly) growing knowledge of the case. Such an effect may have been masked, however, because some of the subsequent interviews were conducted by new interviewers who may have had less information about the case.

The present findings show that although interviewing styles were consistent, the interviews were not ideal. In comparison to previous research that has examined investigative interviewers' use of each question type in England and Wales and Scotland, the interviews were rather poor (Lamb et al., 2009; La Rooy et al., 2013; see Table 3.1). As found elsewhere (for example in Australia; Powell, Cavezza, Hughes-Scholes, & Stoope, 2010), interviewers used only a small percentage of invitations (or open questions) and had a very high reliance on option-posing and suggestive questions. Thus, in the current sample, despite there being no decrease in quality from first to second interviews, there was significant room for improvement in interviewing practices, as

predicted from La Rooy et al.'s (2011) self-reported questionnaire results in which 20% of interviewers rarely reported using open prompts.

Table 3.1

*Table comparing mean percentages of question types used in the present study's investigative interviews and those of Lamb et al. (2009) and La Rooy et al. (2013)*

Question Type	Present Study	Lamb et al. (2009)		La Rooy et al. (2013)	
		Standard	Protocol	Pre-2011*	Post-2011*
Invitations	11.8%	6.8%	34.1%	7%	15%
Directives	31.6%	43.1%	27.5%	39%	49%
Option-Posing	36.8%	27.2%	17.9%	37%	34%
Suggestive	11.5%	8.29%	5.6%	17%	2%

*Note.* Table includes only directly comparable categories of question type. Lamb et al.'s (2009) additional, omitted category was 'summary', in comparison to the present study's 'multiple' and 'unknown' question types. La Rooy et al. (2013) used only four categories.

\*Some of the transcripts from these samples were included in the current sample.

The quality of the interviews is important for determining the likely accuracy of the child's responses in these interviews. The style of interviewing found in the current sample (i.e., relying on suggestive and option-posing questions and using few open questions) encourages the use of 'recognition memory', rather than 'free-recall'. Recalling information via 'recognition memory' elicits less accurate information (Orbach, & Pipe, 2011), and less information in total (Lamb et al., 2007; Sternberg et al., 1996) than that recalled via 'free-recall'. Thus, the information obtained in the current sample of first, second, and third interviews could be less reliable/complete than information obtained via best practice interviews.

The GQM analysis of the present study's interviews also revealed them to be conducted poorly. Even those interviews that used a high percentage of invitations and a low percentage of suggestive questions (e.g., the 'good' interview examples) introduced

option-posing questions early on in the interview and used them regularly throughout. The ‘poor’ interviews used option-posing questions from the beginning of the interview and used very few alternative question types, other than suggestive ones. The ‘good’ interviews, however, did show interviewers using invitations throughout, returning to them even after having used other forms of questioning (e.g., specific or closed), as recommended by the Scottish Executive (2011).

In regards to poor practice in the current sample, it is important to note here a particularly concerning finding regarding suggestive questions. More than once in the transcripts, suggestive questions were found that included inaccurate information regarding what the child had said in prior interviews. For example, the interviewer in the second interview would ask “You said you went to the park with him last time we spoke, tell me all about that” when the child, according to the prior transcript, had not said they had gone to the park, but that they had gone to the library. This form of suggestive questioning has also been noted by prosecutors as a source of inconsistencies in child testimony (Burrows & Powell, 2014) and it can lead to children not correcting the interviewer (Hunt & Borgida, 2001). Thus, interviewers can continue to believe an inaccurate detail and include this in their investigative decision-making. In the present study, for example, children in two interviews provided ‘new and contradictory’ information in response to this type of question as their testimony changed in response to the inaccurate detail provided by the interviewer. This supports previous research which found, in a sample of seven children’s multiple interviews, self-contradictions to occur in response to suggestive questions most frequently, and never in response to open-ended questions (Lamb & Fauchier, 2001). As previously mentioned, inconsistency (including contradictions, a particularly serious form of inconsistency) in children’s testimony is often perceived as an indication of unreliability by mock-jurors (Leippe, Manion, & Romanczyk, 1992; Quas, Thompson, & Clarke-Stewart, 2005). Thus, interviewers should be at their most diligent in not introducing contradictions into the interviewing process themselves. With more thorough planning, the contradictions created by the interviewer misremembering could be avoided.

The interviewers in this sample were also not particularly supportive. One aspect of this lack of support was the interviewers’ poor rapport-building. Interviewers used a high percentage of option-posing questions during the rapport-building phase, as in the

substantive phases, despite their training encouraging the use of a practice interview which gives interviewees the opportunity to practice responding to open questions prior to the substantive interview (Nicol et al., 2016). Using direct questions in the rapport-building phase can have negative impacts on children's recall in the substantive phase, both in terms of their accuracy and depth (Roberts et al., 2004; Sternberg et al., 1997). Additionally, asking questions for which children need only reply with minimal detail may make them feel that the interviewer is not genuinely interested, thus reducing the positive effects that rapport-building may have on children's well-being and their recall (Almerigogna, et al., 2007; Davis & Bottoms, 2002; Quas & Lench, 2007).

Furthermore, interviewers did not use supportive utterances and questions in the substantive phase very frequently. The 'good' interviews showed some evidence of interviewers using social support towards the end of their interviews, but in the majority, interviewers' questions and utterances were neutral (i.e., neither supportive nor unsupportive). Interviewers were, therefore, successfully avoiding using inappropriate supportive techniques, such as selectively encouraging children by praising their recall of a particular subject or event, and so avoided risking obtaining inaccurate evidence through providing praise only for things the interviewer wanted to hear (Garven, Wood, & Malpass, 2000). However, this neutral interviewing prevents the possible positive effects of supportive interviewing.

Coding 'social support' is, however, rather subjective. Although the coding in the present study was designed to try and avoid subjectivity as much as possible, the inter-rater reliability was lowest for this aspect of the coding (but still at 95.4%). This coding was further hampered by being based purely on written transcripts. Both tone of voice and non-verbal behaviours can clarify the intention behind an utterance, and have been found to have significant effects on children's emotive perceptions of an interviewer (Almerigogna, Ost, Akehurst, and Fluck, 2008). While studying verbal supportive behaviours, as in the current study, is important as a first step in this form of research, future studies should try to use the original video-recorded interviews to examine social support both verbally and non-verbally.

## **Interviewee Responses**

Interviewees provided on average the same number of pieces of information in their first, second and third interviews. They also provided the same percentage of each type of information in these interviews, except that they provided slightly more ‘item’ details in interview two than either interviews one or three. This could reflect children recalling more detailed specific events in the second interview, having relied on a more general description in the first. This is consistent with Santtila et al.’s (2004) study in which they found children to give more descriptions in second and subsequent interviews than in their first interviews. However, in the present study, this was statistically quite a small effect.

An important finding is that the information provided by children in the second and third interviews was, in the majority, new. This shows that children were reminiscing as predicted. The reason for this reminiscence may have been genuine reminiscence (i.e., the information was not remembered in the first interview, but recalled at a later attempt), or the children’s willingness to disclose may have increased, possibly due to a greater understanding of the interview process or rapport with the interviewer. Irrespective of the cause, children appear by no means to exhaust their recall in a single interview; a finding supported by the experimental and field literature (for a review, see La Rooy, et al., 2009). Also consistent with the literature, children were not recalling significantly more information *in total* in subsequent interviews so they were not experiencing hypermnesia (see La Rooy, et al., 2009). This could be due to children forgetting as much information as they were newly recalling, or consciously deciding that they did not need to repeat some of the information they had given in previous interviews.

Children’s reminiscence of both high investigation-relevant and consistent information in second and third interviews presents a persuasive argument for the usefulness of multiple interviews with child victims. Children provided very similar numbers of new, high investigation-relevant details in subsequent interviews as they did in their first interviews. In fact, for four children (or 19% of the sample), the second interview provided the disclosure that the child did not give in the first interview. This finding is similar to the 11% of children in DeVoe and Faller’s (1999) sample who only disclosed during a second interview, and reflects a benefit of multiple interviewing mentioned by an officer in the previous study’s survey. Thus, there is a high likelihood that these investigations may not

have progressed to court without these second interviews. Although some of this new important recall may be explained by reminiscence, the amount of support the children received in their first or second interviews may also have played a part. Children and adults have been found to be less reluctant to disclose information in police interviews when provided with consistent support (Ahern, et al., 2014; Hershkowitz et al., 2006; Walsh and Bull, 2012). Paradoxically, it has also been found that interviewers provide less support to reluctant disclosers (Hershkowitz et al., 2006). Therefore, it may be that if the interviewers had been more supportive during the rapport-building and substantive phases of the *first* interviews, these children would have felt comfortable enough to disclose to them the first time and thus not needed a second interview. This highlights how important it is that interviewers are supportive to children throughout all of their interviews, regardless of any initial reluctance on the child's part, as this may encourage children to be as informative as they can within that interview or in subsequent ones.

Corroboration for the importance of maintaining support throughout the interview comes from the WAGs. Using this entirely novel tool that in conjunction with the GQM allows us to map out an entire interview, we can see that children disclosed high investigation-relevant information throughout their interviews. Therefore, children do not provide all the high investigation-relevant information solely at the beginning and are likely to need support for each of these disclosures, wherever they come within the interview. Thus, although the maintenance of rapport throughout interviews has been found to be a challenging task for interviewers (Walsh & Bull, 2012), this study indicates it is key for continuing the interview and possibly obtaining (further) information of high investigation-relevance from child victims/witnesses.

The contradictory information provided in second and third interviews could also be related to increasing rapport. Although relatively little contradictory information was provided overall, the majority of contradictory information that was provided was caused by children retracting earlier denials about aspects of the event(s) being discussed. There are many possible reasons for this to have occurred; the children may have felt more comfortable with disclosing, have genuinely reminisced (i.e., forgotten the detail in the previous recall and then remembered it), or alternatively have changed their recall regarding these denials because they believed their first answer must have been 'wrong' in the adult's eyes. It is difficult with this type of data to establish the accuracy of any of

the details given by the children (particularly in this study where we had no knowledge of corroborating evidence) and thus whether these contradictions reflect a positive or negative impact of multiple interviewing. On the other hand, it is highly plausible that these contradictions could merely reflect delayed disclosure rather than inaccurate testimony, thus supporting the use of second interviews to encourage further recall.

### **3.4.1 Limitations**

The main limitation of the present study is related to the collection of the transcripts. The method of sampling means that all of the cases included in the sample had progressed to court and so are unrepresentative of the majority of child sexual abuse cases which do not ever progress to court (NSPCC, 2014). Additionally, these were all cases where an expert opinion on the interview quality was thought appropriate for court. These two aspects could reflect the quality of the interviews generally: the interviews may be conducted well enough for the authorities to determine the evidence as strong enough to go to court, but not conducted so well that their quality is unarguable. This may explain the relatively stable quality of the interviews and the homogeneity of first and subsequent interviews. The sample is also quite small and, as with any research using field interviews, it is not known how accurate the information provided by the children is. Thus, although the second interviews are helpful in terms of giving the interviewers further information about the event(s), it is not possible to be certain whether this additional information is accurate, or even as accurate as the information given in the child's first interview. Furthermore, the sample size of third interviews ( $n = 7$ ) reduces the reliability of the findings and so the lack of differences between third and previous interviews is at most a tentative finding. As previously mentioned, the use of transcripts also meant that only verbal communication was analysed, with no awareness of non-verbal communication. A final limitation relates to the varying interviewers involved in the transcripts. In some cases, all the interviews with a child were conducted by the same interviewer, but in other cases they were conducted by different interviewers and from different professional groups.

### **3.4.2 Further Research**

Research that addresses the limitations of the present study by including a larger, more representative sample (possibly obtained via police forces and including cases with a number of legal outcomes) would be beneficial to test the present study's conclusions.

Including the analysis of interviewer and interviewee non-verbal behaviours would also strengthen our knowledge of the effects of interviewer-provided support. Research that compares multiple interviews conducted by the same or different interviewers would also be useful for determining the ideal interviewers in second and subsequent interviews. The limited existing research suggests that children are more accurate in second interviews if they are interviewed by the same person as in the first interview (Bjorklund et al., 2000). However, this could increase interviewer's confirmation bias and further research would help to examine whether this affects interviewer style and interviewee responses.

### **3.4.3 Conclusions**

This study provides the first analysis of interviewer and interviewee behaviours during unforeseen multiple interviews conducted with typically-developing child victims/witnesses in the UK. The analysis provides compelling arguments for encouraging the use of second interviews in cases in which child testimony is key. Third interviews also appear to be effective, but analysis of larger sample sizes is necessary. No negative effects of multiple interviewing were found. Despite a lack of relevant training on conducting second interviews, interviewers conducted them in similar ways to first interviews. Child responses were also similar across first and subsequent interviews in terms of amount and types of details provided. The multiple interviews were effective in gaining extra, high investigation-relevant information from children. Additionally, we can see from the WAGs that children provided this information steadily across second interviews. Finally, not only did second and third interviews reveal new information, but this information was consistent with the children's prior accounts, with the majority of inconsistencies emerging from children disclosing details regarding events they had denied in prior interviews. Unfortunately, the interviews generally involved over-reliance on less desirable types of questioning (option-posing and suggestive) and little social support was provided. However, the present study suggests that if general standards of interviewing improve, there is no reason to believe subsequent interviews should not also do so and continue to be of investigatory value.

The following chapter describes an experimental study designed to ascertain the accuracy of this new information provided in second and third interviews, as well as examining



how to best provide social support in the form of rapport-building across multiple interviews.

## **Chapter Four**

### **Rapport-Building in Multiple Interviews of Children**

#### **4.1 Introduction**

The two studies previously described have determined that interviewers are likely to be required to conduct multiple interviews with child victims/witnesses at some point during their career. Additionally, officers reported that they frequently conduct rapport-building in multiple interviews despite both feeling less comfortable doing so, and a lack of specific guidelines or training on how to do this in multiple interviews. Furthermore, the findings in chapter two revealed that rapport-building is often conducted during a separate, pre-interview meeting, despite there being no research on how this may affect the child's well-being or recall. The present study, therefore, aimed to examine experimentally different rapport-building options (including a separate meeting) across multiple interviews. In particular, for first interviews, the use of ABE-described rapport-building was examined in comparison to a control group (who experienced no specific rapport-building phase) and a group for whom rapport-building was conducted the day before the interview. For second and third interviews, children either experienced ABE-described rapport-building as it would be conducted in first interviews, no rapport-building, or a shortened rapport-building phase to determine whether a full rapport-building session is necessary beyond a first meeting. Children's recall and well-being (in the forms of perceived rapport and state anxiety) were measured and analysed across interviews and between groups.

As described in section 1.5.3, the ABE guidelines (Ministry of Justice, 2011) encourage interviewers to build rapport with child victims/witnesses by discussing a positive or neutral subject with the child prior to conducting the interview. The purpose of building rapport is to create a more comfortable relationship between the interviewer and the interviewee, and thus to improve the atmosphere during the interview (R. Collins, Lincoln, & Frank, 2002). However, there is an important gap in the literature: in the majority, experimental studies have neglected to include a no rapport-building control condition (with the notable exception of K. Collins' doctoral thesis, 2012). Thus, there is little literature to determine whether rapport-building actually improves children's recall in comparison to interviews with no such rapport-building. The limited research that does

exist with child participants involving a control condition suggests that, unlike with adults (e.g., Vallano & Schreiber Compo, 2011), rapport is not effective at improving children's recall or reducing their suggestibility (K. Collins, 2012).

The majority of rapport-building studies have compared two different types of rapport-building (excluding a control condition) and their effects on children's recall (Roberts, Lamb, & Sternberg, 2004; Sternberg, et al., 1997, for more details see section 1.5.3). The research, therefore, has little to say on rapport-building's effects on children's well-being. This creates a gap in our knowledge because it is unknown whether rapport-building is actually successful in creating rapport between an interviewer and child interviewee. Rotenberg et al. (2003) liken rapport between an adult and child to the secure attachment style originally described by Bowlby in the 1950s. Based on this, they suggest there are a number of non-verbal and verbal measures that may indicate the level of rapport the child feels within a child-adult interaction. These are (a) the child's disclosure of personal information to the adult, (b) the frequency with which the child smiles and looks at the adult, (c) how calm the child is during the interaction, and (d) how trustworthy and likable the child thinks the adult is. They suggest that children will exhibit more of these behaviours and beliefs the greater the rapport with the adult, but also acknowledge that some may be challenging to measure and of questionable reliability (for example, social desirability may affect the assessment of (d), Rotenberg et al., 2003). Only one study examining rapport-building has employed Rotenberg et al.'s (2003) rapport indices: Collins measured children's self-reported state anxiety and heart rate, which could be argued to indicate how calm the children were (K. Collins, 2012). She also measured how much the children looked at the interviewer and how frequently they smiled, but found none of these measures were affected by rapport-building when compared to a control group. Although previous rapport-building studies have looked at the amount of information disclosed by the child, this was not necessarily personal information, and was viewed as an outcome of rapport rather than an indicator of it (Roberts, et al., 2004; Sternberg, et al., 1997). Furthermore, other explanations for this increased disclosure have been posited. For example, it is possible that children disclose more not as an indication or outcome of greater rapport, but because rapport-building provides them an additional opportunity to practice answering open questions. Thus, the fundamental question of whether ABE's (Ministry of Justice, 2011) rapport-building phase actually leads to rapport between the interviewer and child interviewee has, by most studies, been

entirely ignored. The present study addressed this by measuring children's state anxiety and their perceived rapport via a novel questionnaire.

One practical criticism of the rapport-building phase of child investigative interviews put forward by prosecutors is its typical length. Burrows and Powell (2014), for example, found some prosecutors were concerned that long rapport-building might tire children. This possibility has also been mentioned in the experimental literature. In Roberts et al.'s (2004) study, they compared rapport-building using open-ended questions with rapport-building using a direct questioning style of wh- and yes/no questions. Although children who experienced open-ended questioning in the rapport-building were more accurate, they provided no more information overall in the mock-interview than children who experienced direct questioning. Roberts et al. (2004) suggested that this may have been because open-ended rapport-building was too long (on average 16 minutes in comparison to six minutes for direct) and that children were too tired to recall more. In Sternberg et al.'s (1997) study, in which all rapport-building sessions were limited to seven minutes, children were significantly more informative in response to the first free recall question when they experienced open-ended rapport-building than direct rapport-building. Additionally, Davies, Westcott, and Horan (2000) found that shorter rapport-building sessions (less than eight minutes) were associated with children providing longer answers in the interview. Davies et al. (2000) suggested this could be due to children who had longer rapport-building becoming more tired. Alternatively, it may be that the interviewers noted children's reluctance and so attempted to build rapport with these children for a longer period of time. The ABE (2011) guidelines do not make any recommendations regarding the optimal length of rapport-building, other than stating it should be brief. However, it states that open-ended questions should be used, and some researchers have called for interviewers to use open questions and to encourage children to talk at length during the rapport-building phase in order to increase their recall in the substantive phase (e.g., Wood, McClure, & Birch, 1996). One way of overcoming concerns regarding over-lengthy rapport-building is to conduct it during a separate meeting with the child prior to the substantive session of the ABE interview (Ministry of Justice, 2011). However, to date there has been no research that has determined how a separate, pre-interview, rapport-building session would affect a child's subsequent recall. Despite this, some countries do conduct interviews in this manner (for example, the

officers in chapter two described doing so and the Extended Forensic Interview Protocol involves this, see section 1.4.2; National Children's Advocacy Center, 2014).

The possibility that poor (or long) rapport-building negatively affects children's recall in comparison to no rapport-building is particularly worrying when rapport-building in investigative interviews is frequently poorly handled (Westcott & Kynan, 2006; Wood, et al., 1996). Thus, if well conducted rapport does not benefit children's recall, but poorly conducted rapport has significant negative effects, it may be that the inclusion of rapport-building in interviews with children is not wise in terms of gathering reliable and detailed evidence.

#### **4.1.1 Multiple Interviewing and Rapport-Building**

No prior studies have examined rapport-building across multiple interviews, and the ABE (Ministry of Justice, 2011) guidelines provide no specific advice for interviewers on how to attempt to build rapport with a child when interviewing him/her for a second time, but they state that rapport-building should be conducted in all interviews (i.e., including second and subsequent ones), with the exception of when children are anxious to tell their account of the alleged crime immediately. This may confuse children who could believe they are there to talk about the event only and not an unrelated neutral event. On the other hand, additional rapport-building may have additive benefits for decreasing children's anxiety. A second interview rapport-building session may be particularly vital in cases in which the interviews occur with large delays between them, when the child may not remember the interviewer or their previous rapport, or with anxious children. The present study, therefore, acts as a vital first study of the interaction between rapport-building and multiple interviews.

#### **4.1.2 Individual Differences**

A number of individual differences, such as anxiety, could be expected to affect children's recall in mock-investigative interviews. Trait anxiety refers to a person's predisposition towards anxiety, and is relatively stable. State anxiety, on the other hand, refers to how anxious a person is in the present situation (Ridley & Gudjonsson, 2013). These measures of anxiety are likely to be associated. Prior research has focused on how state anxiety at interview affects children's responses to direct questions, and found anxiety to affect children's suggestibility, but not their responses to non-misleading direct

questions (Almerigogna, Ost, Bull, & Akehurst, 2007; Ridley & Clifford, 2004; Ridley, Clifford, & Keogh, 2002). Suggestibility is not the focus of the present study, instead we are interested in children's recall in response to best practice interviews. The only study to have examined state anxiety's effect on children's free recall found younger children aged between six and 6.5 years old provided less correct and more incorrect information when they were anxious, but anxiety had no effect on older children's recall (6.5 to 7.6 years) (Davis & Bottoms, 2002). The present study, therefore, measured children's trait and state anxiety levels. This was in order to (i) determine the relationship between rapport-building and children's state anxiety, (ii) ensure any recall or well-being group differences were not caused by differences in trait anxiety across groups, and (iii) examine the relationship between trait anxiety, state anxiety and perceived rapport.

A further individual difference that may affect children's recall is their spontaneous narrative ability. Children who provide more unprompted details about a visual scene may provide more information in interviews about a to-be-remembered event, as they may have better linguistic skills and be more capable of structuring their ideas (Ripich & Griffith, 1988). However, the only published study to have looked at how children's spontaneous narrative ability relates to their informativeness has found there to be no relationship between the two (Brown & Pipe, 2003). On the other hand, Kulkofsky and Klemfuss (2008) found that children's autobiographical recall quality was significantly positively correlated with their interview recall quality, and Chae and Ceci (2005) found children's verbal intelligence (an alternative measure of children's language abilities) to explain 5% of children's open-ended recall variance.

Children's visual memory may also affect their recall. This individual difference has not been examined in child witnesses (other than its association with suggestibility; Bruck & Melnyk, 2004). The measure used in the present study (the Benton Visual Retention Test) has, however, previously been used in research with adult witnesses (Dando, Wilcock, & Milne, 2009). Children who have a better visual memory may be expected to remember more of an event and hence be able to recall more details. Thus, the present study included measurements of these two variables (i.e., narrative ability and visual memory) (i) to determine the relationships between these skills and children's recall and (ii) to ensure that group differences were not caused by unequal narrative ability and visual memory skills.

### 4.1.3 The Present Study

The present study, therefore, will add to the rapport-building literature in a number of ways. First, it involves a no-rapport control condition in order to compare this to best practice rapport-building as currently recommended in the UK. Additionally, it looks at the timing of rapport in first interviews by use of a *separate* rapport-building meeting to compare this with both no-rapport (*control* condition) and *normal* rapport-building at the beginning of the interview. Finally, it examines different rapport durations (*brief* and *standard*) in second and third interviews and their possible effects on children's recall and well-being in comparison to a *control* condition.

Based on the existing literature, it was hypothesised that:

- *Normal* rapport-building (as currently encouraged by ABE, 2011) would have no effect in comparison to the *control* group on children's recall in their first interviews.
- *Normal* rapport-building would not reduce children's state anxiety in their first interview in comparison to children in the *control* group.
- State anxiety would have no effect on children's informativeness as measured by the total details the child provided in their interviews.

Further examinations were conducted, but due to the lack of prior research or mixed prior findings, hypotheses were not made. These examinations were:

- How *separate* rapport-building affected children's recall, anxiety, and perceived rapport.
- How rapport-building affected children's well-being and recall in second and third interviews.
- The effects of rapport-building conditions (timing of rapport prior to interview one: *normal* or *separate*, and rapport duration for interviews two and three: *brief* or *standard*) on children's perceived rapport in comparison to a *control* condition.
- The relationship between children's visual memory and narrative ability scores and their recall in multiple interviews.

## 4.2 Method

### 4.2.1 Design

The study had a 2 (between groups - timing of first interview rapport: same day deemed *normal* or day before deemed *separate*) x 3 (within groups - interview number: first, second, or third) x 2 (between groups - second and third interview rapport duration: *standard* or *brief*) mixed design with an additional *control* group that experienced no rapport-building in any of their interviews (but the other rapport-building conditions were fully crossed across the first two interviews; see Table 4.1). The children were allocated randomly (within their genders) to groups.

### 4.2.2 Sample

Head teachers at eight different primary schools in London and the surrounding counties agreed for their schools to take part in the research. Consent forms and an introductory letter (see Appendix C) were then distributed to parents of all the children in years four and five (in the majority, eight to ten year olds). One school only obtained three consent forms and so the research was taken no further with this school. From the other schools, 122 consent forms were completed and returned in all. Due to absences, only 113 children completed at least one interview. Six of these were removed from the final analysis due to the child having special educational needs or an anxiety disorder ( $n = 4$ ), due to technical difficulties ( $n = 1$ ), or due to the child remembering absolutely nothing about the to-be-remembered event ( $n = 1$ ). The final sample consisted of 107 children, ranging in age from 87 to 128 months old ( $M = 107.83$ ,  $SD = 8.29$ ). This sample size is larger than previous published multiple interviewing studies (e.g., Bruck, Ceci, & Hembrooke, 2002; La Rooy, Pipe, & Murray, 2007; Salmon & Pipe, 1997), and there are a similar number of children per condition in the present study as in previous rapport-building research (e.g.,  $n = 24$ , Roberts, et al., 2004;  $n = 25$ , Sternberg, et al., 1997). There were slightly more girls (54.2%) than boys. Due to absences, one boy only experienced one interview, and three boys and three girls were only interviewed twice.



Table 4.1

*Description of Group Conditions*

Group ( <i>n</i> )		Initial Rapport Condition	Interview 1	Interview 2	Interview 3
1 (24)	Event	<b>Control:</b> No Rapport	Recall	<b>Control:</b> No rapport + Recall	<b>Control:</b> No rapport + Recall
2 (21)	Event	<b>Normal:</b> Rapport during interview one	Recall	<b>Standard:</b> Standard length rapport + Recall	<b>Standard:</b> Standard length rapport + Recall
3 (22)	Event	<b>Normal:</b> Rapport during interview one	Recall	<b>Brief:</b> Brief rapport + Recall	<b>Brief:</b> Brief rapport + Recall
4 (20)	Event	<b>Separate:</b> Rapport day before interview one	Recall	<b>Standard:</b> Standard length rapport + Recall	<b>Standard:</b> Standard length rapport + Recall
5 (20)	Event	<b>Separate:</b> Rapport day before interview one	Recall	<b>Brief:</b> Brief rapport + Recall	<b>Brief:</b> Brief rapport + Recall
Timing	Day 1	Days 8-9	Day 9	Day 16	Day 23

### 4.2.3 Materials

#### *Narrative Ability Task*

The narrative ability task was based on Brown and Pipe's (2003) task. Children were given a picture book with no written words ('Frog, Where are you?' by Mercer Mayer, see Appendix D for sample pictures) and then provided with the following instructions by the research assistant.

"These pictures tell a story. I want you to look at them carefully and when you've had a good look, I want you to tell me as much as you can about the story that is in the pictures. Look through the book, and then please tell me as much about the story as you can as we go through the book."

Children's stories were audio-recorded. They were later transcribed and coded. The details they provided about the book were coded as (a) 'correct': the detail was stated as depicted in the book, (b) 'incorrect': the detail was stated to some extent as depicted in the book but with some aspect incorrect, such as 'the dog crept out of the window' when the frog was shown creeping out of the window, or (c) 'confabulations': the detail was not depicted in the book. These included those (i) that could have been presumed from the pictures (i.e., 'the boy climbed the tree' when the boy is on the ground in one picture and in the tree in the next), and (ii) complete confabulations, such as giving the characters names.

*Inter-Rater Reliability.* A second rater coded 19% of the children's narratives (i.e., 20 children's narratives). This sub-sample was randomly selected. Inter-rater reliability was calculated for coded numbers of correct, incorrect, and confabulated details. Due to non-normal distributions, Spearman's correlations were conducted regarding the number of incorrect and confabulated details, but Pearson's correlations were used for correct details. The two raters' scores were significantly correlated for correct, incorrect, and confabulated details:  $r = .961, p < .001$ ;  $r_s = .459, p = .042$ ; and  $r_s = .542, p = .014$  respectively. After subsequent discussion, the two raters were in 100% agreement, and the new rules determined in this discussion were applied to the coding of all the other children's narratives.

#### *Benton Visual Retention Test*

The Benton Visual Retention Test (BVRT) was designed for children eight years and older. The research assistant informed the child that:

“I am going to show you a page with one or more figures on it. You should look at it for ten seconds. Then I will cover the design, and you will draw what you saw. Make the drawing as much like the one on the page as you can.”

The children were then shown ten figures one after another and asked to draw what they saw after being shown each. They were also given prompts as necessary, as described by the BVRT’s Administration A (the figures were identical for each child and consisted of Form C in the BVRT booklet). As an example, the first figure the child saw and was asked to reproduce was a parallelogram. Children’s reproductions were scored as correct or incorrect according to the BVRT scoring instructions. Children’s visual memory scores were therefore scores out of a possible ten.

#### *Spielberger’s State-Trait Anxiety Inventory for Children (STAI-C)*

The STAI-C comprises two questionnaires; one addressing the child’s state anxiety (level of anxiety at the time of questionnaire completion) and one addressing the child’s trait anxiety (general disposition towards stress and anxiety). These questionnaires are called ‘How I feel’ questionnaires and have often been used in studies with child samples (e.g., Almerigogna, et al., 2007; K. Collins, 2012; Ridley, et al., 2002). They have also been found to have good validity and reliability (Spielberger, Auerbach, Wadsworth, Dunn, & Taulbee, 1973). Children in the present study completed these questionnaires with the help of a research assistant, who was not the interviewer. The research assistant would read the instructions to the children and answer any questions they had. The questions were also read to the children if they stated that they would prefer this to reading it themselves.

*Trait Anxiety Inventory.* The trait anxiety questionnaire entails statements and the child must decide how much they agree with these. For example, “I am shy”, “I worry about school”, and “My hands get sweaty”, to which the child must respond “hardly-ever”, “sometimes”, or “often”. In all there are 20 statements.

*State Anxiety Inventory.* The state anxiety questionnaire involves the child deciding which of three options about their feelings is most appropriate at that moment. For example, one question involves choosing between “I feel very cheerful”, “cheerful” or “not cheerful.” There are 20 questions in the questionnaire.

*Scoring.* Children's responses were scored as per the STAI-C scoring instructions. For each statement, the child's response was given a score between one and three. These resulted in scores out of 60, with high scores indicating high anxiety and low scores indicating no/low anxiety.

#### *To-Be-Remembered Event*

The to-be-remembered event was a four minute film depicting the theft of a lady's handbag on a street. During the film, a man grabs a woman's bag and runs off with it, the woman chases but he gets away with money and other valuables. The film had previously been used in published research as the to-be-remembered event for a subsequent interview (Dando, Wilcock, Behnkle, & Milne, 2011). Each child watched the film with the research assistant. The film involved no violence, but the research assistants were instructed to stop the film if it caused the child any distress (this was not necessary for any of the children), and the research assistant had a positive conversation with the child when the film ended. The children were encouraged by the research assistant to concentrate on the film if they got distracted.

#### *Rapport-Building Sessions*

All of the rapport-building sessions were modelled on the ABE's (2011) instructions; the interviewer asked the child open-ended questions about a neutral event (e.g., 'Tell me everything about your school trip'). The child was then prompted with further open-ended questions, minimal prompts (e.g., repetitions of what they have said, nodding, 'uhuh') and wh- questions until they had nothing more to say about the event or the session had taken ten minutes (whichever came first). The ABE guidelines (Ministry of Justice, 2011) give no information about the length of the rapport-building phase. However, time restrictions were in place because schools preferred children not to be absent from the classroom for much over 20 minutes. The neutral event was either a recent, unusual, school-based activity (such as a school trip) that the interviewer was aware of through conversations with teachers, or a recent activity that the child remembered enjoying, such as a visit to the cinema, or a birthday party. For children's first interviews, the rapport-building was conducted identically regardless of whether it was conducted just before the mock-interview (*normal*), or the day before (*separate*).

*Standard and Brief Rapport-Building.* For children in the rapport-building conditions, they either experienced *standard* or *brief* rapport-building sessions in their second and third interviews. Each rapport-building session the child experienced focused on a different neutral event. *Standard* rapport-building sessions took up to ten minutes and were conducted in the same manner as the first rapport-building session they experienced. *Brief* rapport-building sessions began with an open-ended question about a neutral event, but this was followed up with only two prompts for further information. If the child provided a lot of information in response to the first question, fewer prompts were used so that rapport-building ideally took less than five minutes.

#### *Mock-Investigative Interviews*

The mock-investigative interviews began with a ‘ground rules’ section. The child was given information as to what to expect during the interview (e.g., free recall followed by questions), and they were advised of a number of ‘rules’ for the interview. These were that (a) the child should correct the interviewer if she said something incorrect or misunderstood the child, (b) the child should tell the interviewer if she asked a question the child did not understand, and (c) that responding ‘I don’t know’ was acceptable (Ministry of Justice, 2011). Additionally, the interviewer pointed out that she was not at the event, and therefore did not know what happened. The children were also told that they should provide as much detail as possible. ABE (2011) advocates going through the ground rules at the same time as rapport-building, but ‘ground rules’ are arguably not a form of rapport-building themselves. They provide instructions for the interview, and so the ‘ground rules’ were included at the beginning of the mock-interview rather than at the end of the rapport-building for those in the *separate* rapport-building conditions.

‘Ground rules’ were followed by clarification of the child’s understanding of truth and lies. This was conducted as recommended by ABE for younger children (Ministry of Justice, 2011). The interviewer explained that it was important that the child told the truth throughout the interview and asked if it would be ok to check if the child knew the difference between a truth and a lie. The child was then told the following story.

“John was a little boy. John was playing with his ball in the kitchen and he hit the ball against the window. The window broke and John ran upstairs into his bedroom. John’s mummy saw the broken window, and asked John if he had broken the window. John said, ‘No mummy.’”

The child was then asked if John told a lie or the truth, and if she/he said a lie, she/he was then asked what John should have said. This section of the interview ended with the interviewer reiterating the importance of telling the truth during the interview.

After the truth/lies conversation, the substantive section of the interview began. Children were initially encouraged to provide free recall of the film by the interviewer saying ‘Tell me everything that happened in the film’. Further disclosure was supported with minimal prompts (e.g., repetitions of what they have said, nodding, ‘uhuh’). When the children had exhausted their free recall, directive prompts were used to obtain more detail (e.g., ‘You said there was a man, tell me everything you remember about him’), until it was felt that they had given their full recall. Suggestive questions were avoided, but option-posing and closed questions were used in some cases to clarify children’s responses. At the end of the interview, their recall was summarised and the children were given the opportunity to add anything else they remembered.

The second and third interviews were conducted in an identical manner to the first, except that for the second interview only, children were asked one additional question at the end of the interview. This question was “I heard that the man who stole the bag bumped into someone. Do you know anything about that?” The thief did bump into someone in the to-be-remembered event, and this question was asked to simulate the situation where a second interview is conducted in order to obtain information about a particular (not yet recalled) aspect of the event. If the child had already recalled the thief bumping into someone ( $n = 8$ ), this question was not asked.

### *Rapport Questionnaire*

After each interview, children completed the rapport questionnaire. This questionnaire was designed for the present study. It was originally based on Duke’s (2013) unpublished dissertation in which she designed and evaluated a rapport scale for the investigative interviews of adults. No research has developed a similar scale for child perceptions of rapport as of yet. In Duke’s research, she found nine factors that influenced adults’ perceptions of rapport. These were general trustworthiness, attentiveness, deep respect, trustworthiness towards source, cultural similarity, connected flow, commitment to communication, professional expertise, and professional dedication. The last two were thought to be inappropriate for child perceptions. Based on the remaining seven factors,

seven statements were created for the questionnaire. These statements also addressed Rotenburg et al.'s (2003) indicators of good rapport (children's perceptions of adult trustworthiness and likeability). The statements were reviewed by a developmental psychologist (Dr Kim Collins). Based on her advice, the wording of the questionnaire was simplified, and three additional statements were created. Two of these addressed Tickle-Degnan and Rosenthal's (1990) components of rapport (mutual attentiveness, positivity, and co-ordination) more directly, and one acted as a dummy question to ensure the child understood the format of the questions. The resulting questionnaire (see Appendix E) included statements such as "Gennie listened to me during the interview", to which the child could respond "None of the time", "Some of the time", or "All of the time".

As with the STAI-C questionnaires, the children completed the questionnaire with the help of a research assistant, who read out the instructions and checked that the child understood what each of the response options meant. All of the statements in the questionnaire were positive, and so children's responses were scored from one point for 'None of the time' to three points for 'All of the time'. The dummy question (I wear my school uniform at school) was not included in the final score, and so the maximum possible score (indicating very good rapport) was 27.

#### **4.2.4 Procedure**

Children were exposed to four or five sessions over a four week period, depending on their rapport-building conditions. All of the sessions took place in their primary school, during lessons, at a time convenient for their teacher. Each child completed the sessions individually. Sessions were conducted in as quiet and private an environment as possible, but these locations often changed across sessions due to school timetables.

In session one, the child undertook the three individual difference tasks guided by a research assistant and then watched the to-be-remembered event. The three tasks tested their narrative ability, their visual memory (Benton Visual Retention Test), and their trait anxiety (Spielberger's State-Trait Anxiety Inventory for Children). The order of these three tasks was counterbalanced across children, but the film was always shown last. Before each task (and all the following interviews), the child gave verbal consent to take part. For details of all three tasks and the to-be-remembered event, see section 4.2.3.

The second session (one week later) only took place for children who experienced *separate* rapport-building. One week after they had viewed the to-be-remembered event, children met with the interviewer to have a neutral conversation about something that had happened to them recently. For a detailed description of the rapport-building sessions, see section 4.2.3.

The third session (eight days after session one), which all children took part in, consisted of the first mock-investigative interview. Depending on their group, children experienced this interview without any rapport-building (*separate* rapport-building groups, and the *control* group) or with rapport-building just prior to the interview (*normal* rapport-building groups). Immediately after the mock-interview, all children were directed to a research assistant and completed (aided by the research assistant) a rapport questionnaire and the state anxiety questionnaire from Spielberger's State-Trait Anxiety Inventory for Children. The interviewing process, the rapport-building process and both questionnaires are described in detail in section 4.2.3.

The fourth and fifth sessions were further mock-investigative interviews. The fourth occurred one week after the third session and the fifth a week after that. Children experienced *standard*, *brief* or no rapport-building (*control*) prior to these interviews (for details, see section 4.2.3). They completed a rapport questionnaire and the state anxiety questionnaire with a research assistant after each interview. The two interviews were identical, so if the child experienced a *standard* rapport-building session prior to their mock-interview in session four, they received the same in session five. The same interviewer (i.e., the author of this thesis) conducted all of the interviews and the rapport-building with all of the children.

When all of the participating children in the class had completed all of the sessions necessary, de-briefing was conducted with the entire class. One of the research assistants and the interviewer explained briefly, in developmentally-appropriate wording, what the research involved, what the aims of the research were, and why it is important. All children were given an opportunity to ask questions, and the class was given a group gift for their participation and help. Teachers were given a second opportunity for de-briefing during an optional workshop offered to the schools. The workshop addressed the



interviewing literature and its applications within schools. Three schools requested the workshop as part of their staff's continuing professional development.

#### **4.2.5 Pilot Study**

Even though the majority of the tasks completed within the current study had already been repeatedly used with child participants in prior published research, the first recruited school was (initially) used as a pilot (one nine-year-old [a family member] completed all of the tasks prior to this and was asked to inform the researcher if they didn't understand any of the questions or tasks. She completed all the tasks correctly and understood all of the questions asked). The research assistants who completed the tasks with children from the first school were asked to keep track of anything that the children found particularly challenging, especially within the rapport questionnaire. No issues with this questionnaire were reported, but children did seem to find some of the STAI-C questions difficult to understand. The research assistants were, however, able to explain the terms that the children found most difficult (such as 'jittery'). Thus, no changes were made to the methodology and therefore the data from children in the first school were included in the main analysis.

#### **4.2.6 Investigation-Relevant Coding**

A list of the main details of the to-be-remembered event was made. In order to determine investigation-relevance, police officers were asked to rate the items on this list as of high or low investigation-relevance (as in Wright & Holliday, 2007). They could also add further details that they thought were important. Five police officers (three male, two female) viewed the to-be-remembered event and made decisions as to the investigation-relevance of these details. On average, these police officers had 17.2 years of service ( $SD = 6.22$ ), 16.1 years of investigative interviewing experience ( $SD = 5.12$ ), and all officers worked for or had recently worked for the Metropolitan Police Service. Details were coded as of high investigation-relevance if at least three of the officers rated it so. All the other details were coded as of low investigation-relevance. The percentage of the details thus coded as of high investigation-relevance was 77.8%.

#### **4.2.7 Coding of Interviews**

Prior to coding, all of the interviews were transcribed and anonymised. The information the children provided was coded for accuracy, consistency and novelty, and investigation-

relevance (see section 4.2.6). A template for coding the number of details was created (as in Wright & Holliday, 2007). Details from the film (classified as of high or low investigation-relevance as described above) were listed. Each piece of information provided was classified as one detail. For example, “the two (1) women (1) were walking (1)” would result in three details being scored. Every additional detail was scored separately, so for example “the two (1) women (1) were walking (1) down the high street (1)” would count as four details.

*Accuracy.* Each detail the child provided was compared to the film. Details that accurately described what happened in the film were coded as ‘correct’. Details that were somewhat correct, such as saying the man was wearing a black hat, when he in fact was wearing a black hood were coded as ‘incorrect’ (although in this example they would also get a correct point for ‘black’). Details that were completely incorrect, such as the child recalling seeing a police officer in the film (when there was none), were coded as ‘confabulations’.

*Consistency and Novelty.* For children’s second and third interviews, the details they provided were categorised as ‘new’ (i.e., the child had not mentioned the detail in his/her previous interview/s), or ‘repeated’ (i.e., the child had mentioned the detail in his/her previous interview/s). Contradictions were also coded. If the child said something in their second interview that directly contradicted something they had said in their first interview (e.g., saying a man was bald in the first interview and had long hair in the second), this was coded as one contradiction. If the child said something in the third interview that directly contradicted something they had said in the second interview, or something they had said in the first interview and said nothing about in the second interview, then this also counted as a contradiction. Contradictions were coded additionally to the detail’s accuracy and consistency (i.e., using the previous example, ‘the man had long hair’ would count as one new and correct detail, as well as a contradiction).

### **Inter-Rater Reliability.**

A second rater coded 19% of the children’s interviews (i.e., all three interviews for 20 children). This sub-sample was randomly determined. Correlations of the two raters’ coding results were conducted after they had met twice to discuss the coding. During

these discussions some new coding rules were created (e.g., correct coding for the victim's hair colour was relaxed to include black and brown due to ambiguity in the film). All correlations were significant at  $p < .001$ . For interview one, the total number of correct, incorrect, and confabulated details the two coders recorded were significantly correlated,  $r_s = .960$ ,  $r_s = .979$ ,  $r_s = .930$ , respectively. For interview two, the raters' coding for new details (correct, incorrect, and confabulated) were all significantly correlated,  $r = .940$ ,  $r_s = .865$ ,  $r_s = .904$ , respectively. Coding for repeated details in interview two were also significantly correlated for correct,  $r_s = .985$ , incorrect,  $r_s = .933$ , and confabulated details,  $r_s = .936$ . The number of contradictions the two coders counted for interview two was also significantly correlated,  $r_s = .838$ . This was the same for interview three; number of new correct,  $r = .913$ , new incorrect,  $r_s = .884$ , and new confabulated details coded,  $r_s = .974$ , were significantly correlated. As were number of repeated correct,  $r_s = .984$ , repeated incorrect,  $r_s = .902$ , and repeated confabulated details coded,  $r_s = .953$ . Finally, the two coders' ratings of how many contradictions were present in each interview three transcript were also significantly correlated,  $r_s = .944$ ,  $p < .001$ . A further meeting between the two coders resulted in 100% agreement on all 60 transcripts. The final coding rules were used for coding all the remaining transcripts.

### **4.3 Results**

The analysis was initially divided into three sections. The first (section 4.3.1) looked at children's recall scores, the second (section 4.3.2) looked at their perceived rapport and state anxiety scores, and the final section (section 4.3.3) examined the effects of perceived rapport and state anxiety on children's total recall. Sections 4.3.1 and 4.3.2 were subdivided into two further analyses. Initial analyses focused on the effects of individual differences (age, gender, visual memory, narrative ability and trait anxiety) on children's scores (recall scores for section 4.3.1 and rapport and anxiety scores for section 4.3.2). The second analyses addressed whether different rapport-building conditions affected children's scores (recall scores for section 4.3.1 and perceived rapport and anxiety scores for section 4.3.2).

The individual differences considered in the present study are age, gender, narrative ability, visual memory, and trait anxiety. Trait anxiety is treated as an individual difference as this may affect recall but, due to trait anxiety being a fairly stable personality trait, is not expected to be affected by the different forms of rapport-building

(and was not measured across interviews). State anxiety, on the other hand, may be affected by the different rapport-building conditions and/or interview number, and so is treated mainly as a dependent variable in the analysis (other than for section 4.3.3, in which the effects of state anxiety and perceived rapport on children's overall informativeness are examined).

### 4.3.1 Children's Recall

#### Individual Differences

For individual differences (age, gender, narrative ability, visual memory, and trait anxiety), analyses were conducted to determine if there were group differences on these variables and whether these variables were related to children's recall. This latter analysis comprised conducting correlations with the following dependent variables: for all three interviews, the total number of details recalled, number of correct details, number of incorrect details, confabulations, overall accuracy of details, and the number and percentage of high investigation-relevant details. For the second and third interviews, the total number of new details, new correct details, new incorrect details, new confabulations, new high investigation-relevant details, and contradictions in each interview were also included in the correlations.

**Age.** Within the different groups, children's ages were normally distributed. A one-way independent ANOVA was conducted with group allocation as the independent variable ((i) *control*, (ii) *normal* first interview rapport x *standard* length second and third interview rapport, (iii) *normal* first interview rapport x *brief* second and third interview rapport, (iv) *separate* first interview rapport x *standard* length second and third interview rapport, (v) *separate* first interview rapport x *brief* second and third interview rapport) and age as the dependent variable. This showed there to be no significant difference in age between the groups,  $F(4, 102) = 0.78, p = .541$ .

To examine whether age had an effect on children's recall scores in the mock-investigative interviews, correlations were conducted between age and the children's interview recall scores (see Table 4.2). The majority of correlations were Pearson's correlations, but those for the number of confabulations provided in interviews one, two, and three, and those for the number of new confabulations and contradictions in interviews two and three, and those for the percentage of high investigation-relevant

Table 4.2

*Correlation Matrix of Interview Recall Scores with Age*

Interview Recall Scores	Interview Number		
	Interview One	Interview Two	Interview Three
Total details	.187	.254**	.285**
Correct details	.303**	.299**	.324**
Incorrect details	.114	.241*	.280**
Confabulations	<b>-.176</b>	<b>-.131</b>	<b>-.122</b>
Accuracy	.166	.050	.035
Number high investigation-relevant	.164	.241*	.222*
Percentage high investigation-relevant	-.098	-.104	<b>-.383**</b>
Total new details		.107	-.004
Total new correct details		.133	-.037
Total new incorrect details		.163	.220*
Total new confabulations		<b>-.099</b>	<b>-.179</b>
Total new high investigation-relevant		.104	-.039
Contradictions		<b>-.041</b>	<b>-.086</b>

*Note.* Correlations in **bold** are Spearman's correlations, the remaining correlations are Pearson's correlations.

\*  $p < .05$ , \*\*  $p < .01$

details provided in interview three were Spearman's correlations due to lack of normality in the children's scores. To reduce the risk of Type I errors, the critical significance value was decreased to  $p < .01$ . The only significant correlation for interview one was a positive correlation between age and number of correct details,  $r = .303, p = .001$ . For the second interview, age was positively correlated with number of correct details,  $r = .299, p = .002$ , and total details provided,  $r = .254, p = .008$ . For the third interview, number of correct details,  $r = .324, p = .001$ , and total details,  $r = .285, p = .004$ , were still positively correlated with age. However, so was number of incorrect details,  $r = .280, p = .005$ , and the percentage of high investigation-relevant details was negatively correlated with age,  $r_s = -.383, p < .001$ . Therefore, there were no group differences in age, but older children provided more correct details in all three interviews, more details in total in interviews two and three (possibly caused by the increase in correct details) and more incorrect details in interview three than younger children. Additionally, as children's age increased, the percentage of high investigation-relevant details they gave in interview three decreased.

**Gender.** There was no significant association between the child's gender and which experimental group they were allocated to,  $\chi^2(4) = 0.26, p = .993$ .

Gender differences were examined using separate t-tests for each dependent variable and the critical significance was reduced to  $p < .01$ . This analysis was chosen rather than MANOVA because the scores were not all independent, and they varied in terms of whether their distributions were normal or not. After removing 13 outliers, the following dependent variables continued to be non-normally distributed for one or both genders: total confabulations at interviews one, two, and three, new confabulations at interviews two and three, number of new high investigation-relevant details at interview two, percentage of high investigation-relevant details at interviews two and three, and contradictions at interviews two and three. For these variables, transformations were conducted. Logarithm and square root transformations were most successful at reducing skew and kurtosis and so these transformed scores were entered into the ANOVAs.

The differences in scores between genders were not significant for any of the variables measured during interview one,  $ts(104-105) < \pm 1.33, ps > .188$ , interview two,  $ts(102-104) < \pm 1.57, ps > .121$ , or interview three,  $ts(75-98) < \pm 1.90, ps > .060$ . Thus, there

were no group differences in gender and there were no significant differences in interview performance scores between the genders.

**Narrative Ability.** Children's incorrect and confabulated scores for the narrative ability task were not normally distributed for most groups, suggesting that the assumption of multivariate normality was violated. Logarithm transformations were, therefore, entered into a MANOVA to determine if there were significant differences in children's correct, incorrect, and confabulation narrative ability scores between groups. These transformations adjusted the distribution of the majority of groups' narrative ability scores to normality, and no extreme outliers were identified. Children's group allocation was entered into the MANOVA as the independent variable. Using Pillai's trace, there were no significant differences between groups' narrative ability scores,  $V = 0.13$ ,  $F(12, 294) = 1.10$ ,  $p = .357$ .

To determine whether narrative ability had a relationship with children's interview recall scores, Spearman's correlations were conducted between the three narrative ability scores (correct, incorrect, and confabulation) and the interview recall scores described above (see Table 4.3). To reduce the risk of Type I errors, the critical significance value was decreased to  $p < .01$ . For all three interviews, the number of correct details provided in the narrative ability task was positively correlated with the total number of correct details provided in the interviews,  $r_{s,s} > .311$ ,  $ps \leq .001$ , and the total number of details provided overall in the interviews,  $r_{s,s} > .347$ ,  $ps < .001$ . Children's narrative ability correct details score was also significantly positively correlated with the total number of incorrect details provided in interviews two and three,  $r_{s,s} > .332$ ,  $ps \leq .001$ , but not at interview one,  $r_s = .215$ ,  $p = .029$ . Narrative ability correct performance was positively correlated with the total number of high investigation-relevant details provided in all three interviews,  $r_{s,s} > .338$ ,  $ps \leq .001$ , but not the percentage,  $r_{s,s} < \pm .210$ ,  $ps > .034$ . Correct narrative ability scores were not significantly correlated with the remaining interview performance scores. Additionally, the number of incorrect and confabulated details given in the narrative ability task were not significantly correlated with children's recall in the interviews,  $r_{s,s} < .254$ ,  $ps > .015$ . Thus, the number of correct details provided in a child's narrative ability task appears to be highly correlated with the amount of information they provide in mock-investigative interviews.

Table 4.3

*Spearman's Correlations Matrix between Narrative Ability Scores and Interview Performance Scores*

Interview Recall Scores	Narrative Ability Scores		
	Total Correct	Total Incorrect	Total Confabulations
Interview One			
Total details	.347**	.129	.136
Correct details	.348**	.090	.116
Incorrect details	.215*	.133	.152
Confabulations	.131	.173	.051
Accuracy	-.054	-.132	-.125
Number high investigation-relevant	.353**	.187	.129
Percentage high investigation-relevant	-.126	.060	-.032
Interview Two			
Total details	.366**	.143	.084
Correct details	.311**	.117	.041
Incorrect details	.359**	.207*	.099
Confabulations	.095	.038	-.002
Accuracy	-.137	-.176	-.093
Number high investigation-relevant	.338**	.158	.064
Percentage high investigation-relevant	-.210*	-.051	.183
Total new details	.203*	.107	-.014
Total new correct details	.172	.079	-.053
Total new incorrect details	.205*	.211*	.039
Total new confabulations	.079	.004	.018
Total new high investigation-relevant	.169	.098	-.021
Contradictions	.150	.131	.126



	Interview Three		
Total details	.364**	.047	-.025
Correct details	.335**	.017	-.046
Incorrect details	.332**	.039	.040
Confabulations	.091	.038	-.014
Accuracy	-.121	-.057	-.069
Number high investigation-relevant	.362**	.086	-.030
Percentage high investigation-relevant	-.187	.064	.254*
Total new details	.116	.018	-.110
Total new correct details	.132	-.073	-.174
Total new incorrect details	.209*	.025	.059
Total new confabulations	.026	.055	.007
Total new high investigation-relevant	.103	-.028	-.086
Contradictions	.106	.125	.045

\*  $p < .05$ , \*\*  $p < .01$

**Visual Memory.** Visual memory scores were compared across groups. Benton Visual Retention Task scores were non-normally distributed for three of the five groups of children. Logarithm, square-root, and reciprocal transformations did not normalise distributions. Therefore, a Kruskal-Wallis test was used. The BVRT scores were not different between groups,  $H(4) = 3.79$ ,  $p = .435$ .

Whether visual memory scores correlated with recall scores was examined using Spearman's correlations (see Table 4.4). Again, the critical significance value was decreased to  $p < .01$ . Children's visual memory scores positively correlated with the amount of correct information they provided in interviews one and two,  $r_s > .260$ ,  $ps < .008$ , but not in interview three,  $r_s = .235$ ,  $p = .020$ . Visual memory score was not significantly correlated with other interview performance scores. Thus, higher visual memory scores are only associated with more correct information being provided in interviews one and two.

Table 4.4

*Spearman's Correlation Matrix of Interview Recall Scores with Benton Visual Retention Task Scores*

Interview Recall Scores	Interview Number		
	Interview One	Interview Two	Interview Three
Total details	.109	.120	.121
Correct details	.268**	.260**	.235*
Incorrect details	-.032	-.017	.057
Confabulations	-.055	-.011	-.063
Accuracy	.189	.203*	.135
Number high investigation-relevant	.113	.100	.121
Percentage high investigation-relevant	.094	-.031	-.028
Total new details		.082	-.041
Total new correct details		.215*	.090
Total new incorrect details		-.047	-.012
Total new confabulations		-.043	-.158
Total new high investigation-relevant		.032	.015
Contradictions		.045	-.017

\*  $p < .05$ , \*\*  $p < .01$

**Trait Anxiety.** Within the experimental groups, children's trait anxiety scores were normally distributed and no extreme outliers were identified. A one-way independent ANOVA with group membership as the independent variable and trait anxiety score as the dependent variable found no significant differences in trait anxiety scores between groups,  $F(4, 102) = 0.79, p = .538$ .

The relationship between trait anxiety and recall outcomes was investigated using Pearson's and Spearman's correlations. None of the correlations between trait anxiety scores and children's recall were significant,  $r_s < \pm .212, p_s > .029, r_{s,s} < \pm .146, p_s > .139$ .

**Summary.** The individual differences measured in the study, other than gender and trait anxiety, did appear to have some relationship with children's recall scores. As children got older, they provided more correct details in all three interviews, more details in general in later interviews, and more incorrect details and a lower percentage of high investigation-relevant details in their last interview. Children who provided more correct information in the narrative ability task provided more details overall in their mock-investigative interviews and more correct, incorrect, and high investigation-relevant details than children who provided less correct information in the task. However, narrative ability scores were not associated with accuracy, contradictions, number of confabulated details, or number of new details of any type provided in the interviews. Additionally, children with better visual memory scores provided more correct information in their interviews but no more incorrect, confabulated, or high investigation-relevant details. Visual memory was also not associated with accuracy or new details.

None of the groups were significantly different in age, gender, or their scores on the other individual differences' measures, and so these were not considered in the analysis of group differences.

### **Group Differences**

Due to the large volume of dependent variables in the present study, they were divided into variables that had already been examined in rapport-building experimental studies (see Table 4.5) and new dependent variables (see Table 4.6). The previously studied dependent variables were analysed first, followed by the new dependent variables.

### **Previously Studied Dependent Variables.**

*Interview One Group Differences.* As can be seen in Table 4.5, there appeared to be differences in the five groups' recall at interview one, despite children only having experienced three different conditions. Children in the two *separate* rapport groups had experienced the same sessions, as had children in the two *normal* rapport groups, and all children had been randomly allocated to groups. Therefore, it was expected that children's responses within the *separate* and *normal* rapport groups would be statistically similar. However, from the means, it looked as if there may be significant group differences based on random group allocation and so the initial analyses investigated this.

First interview group differences were examined using separate factorial ANOVAs for each dependent variable. This analysis was chosen rather than MANOVA for two reasons; first, the scores were not all independent, and second, they varied in terms of normal distributions. Children's scores for number of correct, incorrect, and total details, as well as their accuracy scores, were normally distributed, but their scores for number of confabulations were not. Square root transformation reduced skew for confabulations, but increased to an unacceptable level skew and kurtosis for some of the other dependent variables. Subsequently, the ANOVAs were conducted with non-transformed data for the other dependent variables, and with square root transformations of the confabulation scores. In order to address possible Type I error inflations, the critical significance value was reduced to  $p < .01$ .

The ANOVAs to check for differences based on random group allocation included interview one rapport-building as one independent variable (i.e., *control*, *normal*, *separate*), and interview two/three rapport-building group allocation as the second (i.e., *control*, *brief*, *standard*) to determine group differences. Children's recall scores for interview one were included as the dependent variables. There were no significant main effects or interactions for number of correct details provided in interview one,  $F_s(1, 102) < 3.09$ ,  $ps > .082$ , for number of incorrect details provided,  $F_s(1, 102) < 2.12$ ,  $ps > .148$ , or for overall accuracy,  $F_s(1, 102) < 1.16$ ,  $ps > .285$ . Interview two/three rapport condition group differences almost reached significance for the number of confabulations provided in interview one,  $F(1, 102) = 4.62$ ,  $p = .034$ , and total details provided,  $F(1, 102) = 6.24$ ,  $p = .014$ . They did not reach significance for the main effect of interview one

Table 4.5

*Mean (and Standard Deviation) group recall scores across interviews – Previously studied dependent variables*

Group	Interview One Rapport	Interviews Two and Three Rapport	Correct	Incorrect	Confabulations	Total	Accuracy (%)
Interview One							
1	<i>Control</i>		40.08 (12.2)	12.83 (5.5)	4.25 (4.5)	57.17 (14.3)	70.5% (11.9)
2	<i>Normal</i>		41.90 (8.7)	12.67 (5.0)	5.43 (5.6)	60.00 (13.4)	71.0% (11.3)
3	<i>Normal</i>		36.18 (10.9)	10.09 (4.6)	3.36 (5.1)	49.64 (14.0)	73.7% (10.5)
4	<i>Separate</i>		39.95 (10.7)	12.30 (7.2)	5.40 (5.7)	57.65 (20.1)	71.6% (10.9)
5	<i>Separate</i>		36.90 (13.7)	11.30 (5.3)	2.15 (2.3)	50.35 (18.2)	74.1% (9.1)
Interview Two							
1	<i>Control</i>	<i>Control</i>	36.88 (11.8)	12.88 (6.5)	3.50 (3.8)	53.25 (17.0)	71.0% (11.2)
2	<i>Normal</i>	<i>Standard</i>	44.33 (12.6)	12.86 (5.2)	5.76 (6.1)	62.95 (16.0)	71.2% (12.4)
3	<i>Normal</i>	<i>Brief</i>	36.27 (12.7)	10.59 (3.7)	2.18 (2.1)	49.05 (16.2)	73.8% (6.4)
4	<i>Separate</i>	<i>Standard</i>	40.11 (11.1)	15.16 (7.9)	6.00 (6.4)	61.26 (20.6)	67.5% (10.9)
5	<i>Separate</i>	<i>Brief</i>	34.85 (12.3)	12.55 (6.4)	3.05 (2.9)	50.45 (18.3)	70.2% (9.6)
Interview Three							
1	<i>Control</i>	<i>Control</i>	37.71 (13.8)	12.90 (4.9)	3.67 (5.1)	54.29 (17.9)	70.0% (10.3)
2	<i>Normal</i>	<i>Standard</i>	43.76 (10.9)	14.76 (6.4)	7.10 (7.6)	65.62 (13.3)	67.3% (13.4)
3	<i>Normal</i>	<i>Brief</i>	36.76 (14.1)	11.05 (6.4)	1.90 (2.2)	49.71 (19.9)	76.4% (9.9)
4	<i>Separate</i>	<i>Standard</i>	39.78 (10.3)	16.11 (7.0)	5.33 (4.6)	61.22 (16.7)	65.9% (11.6)
5	<i>Separate</i>	<i>Brief</i>	33.53 (13.3)	11.37 (7.4)	2.89 (3.6)	47.79 (19.6)	71.7% (10.7)

rapport or the interactions,  $F_s(1, 102) < 0.68$ ,  $ps > .412$ . Thus, random allocation to groups did not result in significantly different scores. Scores also did not differ according to interview one rapport-building conditions.

*Responses in Interviews Two and Three.* Hierarchical models were used in order to study the effects of rapport at different stages without violating assumptions of independence (Tabachnick & Fidell, 2013a)<sup>3</sup>. To ensure these models were kept as simple as possible for ease of interpretation, children's first interview responses were not included in the model. Children's experience of rapport at the first interview (*control, normal or separate*) may mean their later responses are not independent (of one another) within groups. Multilevel models allow groups to vary not only in their average responses (i.e., the intercepts of the linear relationships), but also by the relationship between factors (i.e., the slopes of the linear relationships). This is possible because multilevel modelling allows factors to be defined as fixed effect or random effect. Thus, by using this method it is possible to ascertain not only if and how different rapport-building conditions affect children's average recall, but also how these different conditions affect the relationship between children's average recall and interview number.

A three-level hierarchical model assessed the effects of rapport at interview one, rapport at interviews two and three, and interview number (i.e., second or third interview) on children's scores on the five dependent variables. First-level units were children's scores (with the predictor of interview number, e.g., whether it was a score from the child's second or third interview). Second-level units were the 107 participants and which dependent variable the score was in response to (i.e., number of correct, incorrect, confabulation details, total details or total accuracy, with the predictor of rapport condition in interviews two and three), and third-level units were the first interview's rapport-building conditions.

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<sup>3</sup> According to Tabachnick and Fidell (2013a), multilevel models should be reported by first describing the hypothesised model, followed by discussing how well the data fit the assumptions of multi-level modelling. Finally the multi-level model should be described. Multi-level models can be produced using a top-down (in which the most complex model is first created and then effects are eliminated) or a bottom-up method (in which effects are entered one at a time). The latter approach is taken in the present study, and each inclusion of a new effect is described and compared to the previous model, using -2Log Likelihood values and  $\chi^2$ .

Children's responses were mostly normally distributed for each of the dependent variables. However, the number of confabulations children included in their recall was highly positively skewed. Six univariate outliers were removed. Square root transformation reduced skew, but increased skew and kurtosis for the other variables. Multi-level modelling was, therefore, conducted separately on transformed and non-transformed responses. They resulted in identical models, and so the non-transformed model is described for ease of interpretation.

In the initial model, participant number, and which dependent variable the score came from (i.e., correct, incorrect, confabulated, total or accuracy) were entered as random intercept grouping variables, interview number as a fixed factor, and the raw scores as the dependent variable. Factors and predictors were entered into the model one at a time. Interview number did not appear to predict children's scores and removing it as a fixed predictor did not significantly affect the fit of the model,  $\chi^2(1) = 7829.267 - 7829.207 = 0.060, p > .05$ . Including the rapport-building condition experienced in interviews two and three as a fixed effect did improve the model's fit,  $\chi^2(2) = 7829.267 - 7820.096 = 9.171, p < .025$ , but adding interview one as a random effect predictor resulted in the model being unable to converge. Including interview one rapport-building as a fixed effect did not improve the model,  $\chi^2(1) = 7820.096 - 7819.546 = 0.55, p > .05$ , and neither did nesting interview two/three rapport-building within interview one rapport-building as a fixed effect,  $\chi^2(2) = 7820.096 - 7819.477 = 0.619, p > .05$ . Therefore, the final model included the participant number and dependent variable as grouping variables and interview two/three rapport condition as a predictor.

Thus, interview one rapport-building conditions did not affect children's responses in any of the interviews, but children's responses in second and third interviews were significantly different depending on the rapport-building they experienced in interviews two and three. In order to determine how children's responses differed between rapport-building groups in interviews two and three, their responses were entered into univariate mixed design ANOVAs. A MANOVA was not used due to the dependent variables violating assumptions of independence. Additionally, some of the children's scores (e.g., confabulation scores) were non-normally distributed and so separate ANOVAs allowed selective transformation of these scores without affecting the other scores' distributions. Although interview number was not found to predict scores via the multi-level models,

results could not be collapsed across time because this would break assumptions of independence. To reduce the risk of Type I errors, the critical significance was reduced to  $p < .01$ . The main effects of interview number and rapport-building condition and the interactions were non-significant for children's correct and incorrect responses and their overall accuracy,  $F_s(1-2, 97) < 3.63, p_s > .030$ . The main effect of interview number and the interactions were also non-significant for number of confabulations and total details,  $F_s(1-2, 96-97) < 1.192, p_s > .298$ . However, the main effect of second and third interview rapport-building condition was significant for both the number of confabulated details provided (square root transformed scores),  $F(2, 96) = 5.277, p = .007$ , and the total number of details provided by children,  $F(2, 97) = 6.656, p = .002$ . Gabriel's post-hoc tests revealed that children in the *standard* rapport condition provided more confabulated details,  $p = .005, d = 0.66^4$ , and more details in total,  $p = .001, d = 0.73$ , than children in the *brief* rapport conditions.

If the critical significance value for these last ANOVAs had not been decreased, the main effect of rapport-building would have been significant for number of incorrect details (square root transformed scores),  $F(2, 97) = 3.522, p = .033$ , and number of correct responses,  $F(2, 97) = 3.202, p = .045$ . Gabriel's post-hoc tests revealed that children in the *standard* rapport condition provided more incorrect details,  $p = .028, d = .51$ , and more correct details,  $p = .044, d = .46$ , than children in the *brief* rapport conditions. The main effect of interview number and the interaction would have remained non-significant,  $F_s(1-2, 97) < 2.114, p_s > .126$ . Additionally, the interaction between rapport-building and interview number would have been significant for children's accuracy scores,  $F(2, 97) = 3.623, p = .030$ . This indicates that the effect of interview number on accuracy scores was significantly different between those in the *standard* rapport-building condition and those in the *brief* rapport-building condition. The interaction graph (see Figure 4.1) shows that accuracy increased in third interviews compared to second for those in the *brief* rapport-building condition, whereas it decreased for those in the *standard* rapport-building condition. However, the main effects of rapport-building and

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<sup>4</sup> Cohen's  $d$  and  $r$  are used throughout this results section as effect sizes. These are standardized statistics which measure the importance (in terms of magnitude) of the effect. For Cohen's  $d$ , effect sizes of 0.2 are deemed small, 0.5 are deemed medium, and 0.8 are deemed large. For  $r$ , effect sizes of .10 are deemed small (accounting for 1% of variance), .30 medium (accounting for 9% of variance), and .50 as large (accounting for 25% of variance, Field, 2013).



interview number would still be non-significant if the critical significance level was not decreased,  $F_s(1-2, 97) < 2.549, p_s > .083$ .

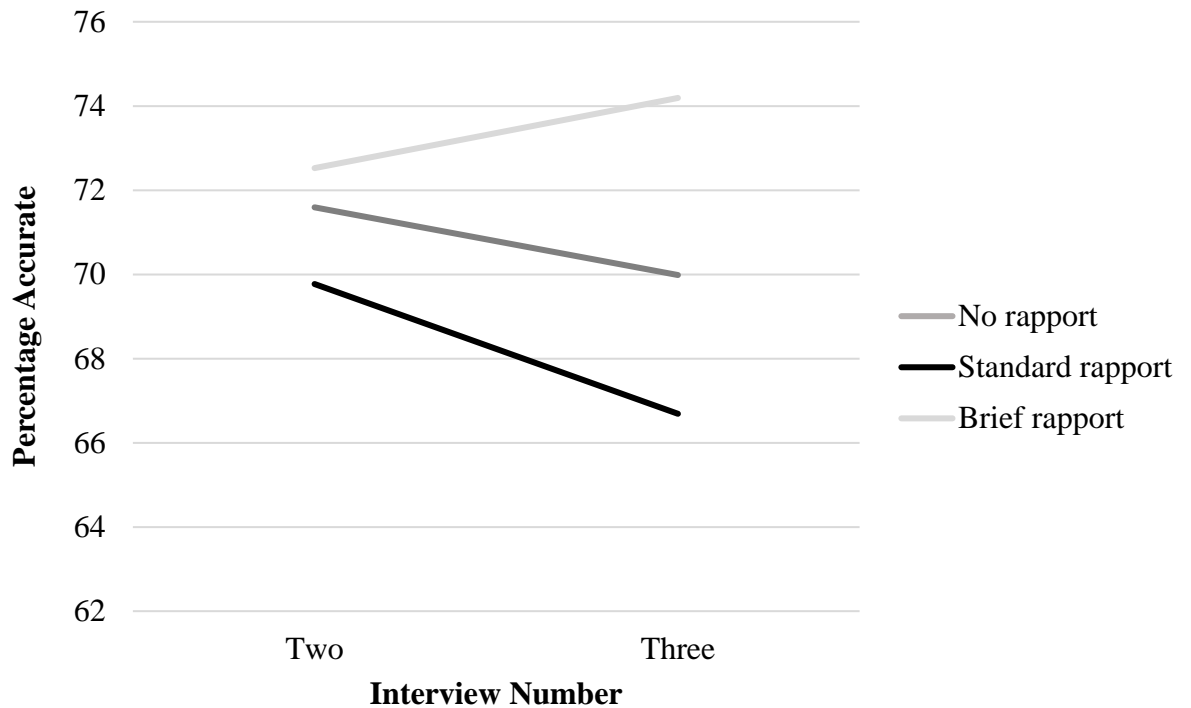


Figure 4.1. Interaction graph between rapport-building duration and interview number for accuracy scores.

*Accuracy across Interviews.* As children's overall accuracy scores were not affected by the rapport-building experienced in interviews two and three, children's scores were collapsed across this variable and a repeated-measures ANOVA was conducted with children's accuracy scores for interviews one, two and three to determine any differences between accuracy in the first interview and later interviews. The ANOVA revealed no significant differences in accuracy scores across the three interviews,  $F(2, 198) = 2.75, p = .066$ .

**Summary.** Children's recall as measured by the number of correct, incorrect, and confabulated details and total number of details they gave, as well as their total accuracy was not affected by the rapport-building condition they experienced in interview one. However, their recall in interviews two and three was affected by the rapport-building they received just before these interviews; children who experienced an additional full-length rapport-building session (*standard*) gave more confabulated details and more

details overall than those who only experienced a *brief* rapport-building session. These are not independent scores, and so the increase in total number of details may be caused by the increased number of confabulations provided. However, in interview two, on average, children in the *standard* condition gave 12.17 more details than those in the *brief* condition and only 2.8 more confabulated details (i.e., confabulations comprise 23.0% of the additional details). For third interviews, confabulated details comprise slightly more of the additional details (27.6%, or 3.96 of the additional 14.37 details on average). The recall of children in the *control* group did not differ significantly from those in the other rapport-building conditions, and children's accuracy was constant across interviews.

**New Dependent Variables.** The new dependent variables of interest (see Table 4.6), were analysed in a similar manner as described for the previously studied dependent variables. Thus, initial group differences were analysed via separate factorial ANOVAs, and then multilevel modelling was conducted to determine if rapport-building affected children's recall scores.

*Interview One Group Differences.* To check for differences based on random group allocation, two separate ANOVAs for the new dependent variables in interview one (number and percentage of high investigation-relevant details) were conducted. Again ANOVAs were used over a MANOVA as the variables were not independent. The independent variables were interview one rapport-building timing and interview two rapport-building duration group allocation. To avoid inflated Type I errors, the critical significance value was reduced to  $p < .01$ .

The number and percentage of high investigation-relevant details provided by children in the *separate* rapport x *standard* rapport group had high skew and kurtosis. Square root transformation of all groups' scores increased kurtosis and skew for other groups' scores, but reduced them for this group. Separate ANOVAs were conducted with transformed and non-transformed scores. These produced the same results and so the non-transformed ones are reported for ease of interpretation. Children's scores did not differ significantly across groups,  $F_s(1, 102) < 4.00, p_s > .048$ , although the main effect of interview two/three rapport-building group approached significance for the number of high investigation-relevant details ANOVA,  $F(1, 102) = 4.80, p = .031$ . Therefore, the groups

Table 4.6

*Mean (and Standard Deviation) group recall scores across interviews – New dependent variables*

Group	Interviews		New Correct	New Incorrect	New Confabulation	Percentage New (of all details)	High Investigation- Relevant	Percentage High Investigation- Relevant	New High Investigation- Relevant	Contradictions
	Interview One Rapport	Two and Three Rapport								
Interview One										
1	<i>Control</i>						45.79 (11.9)	80.1% (6.4)		
2	<i>Normal</i>						48.52 (11.1)	80.8% (5.5)		
3	<i>Normal</i>						40.32 (11.5)	81.1% (3.8)		
4	<i>Separate</i>						46.80 (16.4)	81.5% (6.1)		
5	<i>Separate</i>						42.40 (14.2)	85.2% (4.9)		
Interview Two										
1	<i>Control</i>	<i>Control</i>	9.75 (4.1)	6.25 (4.0)	1.92 (2.1)	33.2% (10.6)	42.71 (14.5)	80.4% (7.3)	14.75 (7.3)	1.42 (1.6)
2	<i>Normal</i>	<i>Standard</i>	14.05 (5.9)	7.05 (3.4)	2.85 (2.9)	38.0% (10.0)	49.81 (13.1)	79.1% (6.5)	20.20 (6.3)	2.19 (2.2)
3	<i>Normal</i>	<i>Brief</i>	11.50 (4.6)	5.55 (2.7)	1.18 (1.4)	36.7% (9.8)	39.05 (12.4)	80.1% (5.4)	14.64 (5.8)	1.27 (1.4)
4	<i>Separate</i>	<i>Standard</i>	11.53 (4.1)	8.63 (5.1)	4.21 (4.7)	39.3% (8.7)	49.26 (16.0)	80.9% (4.6)	19.58 (8.7)	2.21 (2.0)
5	<i>Separate</i>	<i>Brief</i>	9.65 (4.3)	6.35 (3.8)	2.20 (2.3)	35.6% (9.6)	41.85 (14.6)	83.6% (4.9)	14.60 (6.7)	0.95 (0.8)
Interview Three										
1	<i>Control</i>	<i>Control</i>	7.33 (3.6)	5.05 (2.4)	1.86 (3.8)	25.6% (8.1)	43.43 (14.5)	80.3% (6.2)	11.81 (6.2)	1.33 (1.2)
2	<i>Normal</i>	<i>Standard</i>	7.71 (3.2)	6.53 (2.7)	4.10 (6.1)	27.4% (13.1)	52.00 (11.5)	79.1% (4.6)	13.43 (6.3)	1.95 (2.0)
3	<i>Normal</i>	<i>Brief</i>	5.81 (3.7)	3.81 (3.2)	0.76 (1.5)	18.9% (8.9)	39.67 (14.9)	81.7% (6.9)	8.57 (5.1)	1.38 (1.6)
4	<i>Separate</i>	<i>Standard</i>	6.89 (3.8)	6.61 (3.7)	2.83 (2.5)	26.4% (8.4)	47.72 (12.1)	78.5% (5.1)	12.00 (5.8)	1.89 (1.7)
5	<i>Separate</i>	<i>Brief</i>	5.26 (2.5)	4.42 (3.6)	1.42 (2.0)	23.0% (9.2)	39.37 (16.2)	82.5% (5.0)	9.32 (5.8)	1.00 (1.4)

did not differ due to random group allocation. Additionally, children's scores in interview one were not affected by interview one rapport-building conditions.

If the significance value had not been reduced, there would be significant group differences caused by random allocation to the rapport duration conditions for interviews two and three (*standard vs. brief vs. control*) for the number of high investigation-relevant details,  $F(1, 102) = 4.80, p = .031$ . Gabriel's post-hoc tests show that the difference between number of high investigation-relevant details given by those in the *standard* rapport-building groups and those in the *brief* rapport-building groups is almost significant,  $p = .084, d = .50$ . Additionally, there would be group differences between the interview one rapport-building groups on percentage of high investigation-relevant details,  $F(1, 102) = 4.00, p = .048$  (although this was not significant for square root transformed scores). Gabriel's post-hoc tests show the difference between *separate* and no rapport-building groups' scores on percentage of high investigation-relevant details to near significance,  $p = .062, d = .51$ .

*Responses in Interviews Two and Three.* Multilevel modelling was then conducted with children's responses in the second and third interviews. The hypothesized model was identical to that for the previously studied dependent variables; a three-level hierarchical model with first-level units of children's scores (with the predictor of interview number, e.g., whether it was a score from the child's second or third interview), second-level units of the participant numbers and which dependent variable the score was in response to (with the predictor of rapport condition in interviews two and three), and third-level units of the first interview's rapport-building conditions.

For most of the dependent variables, children's responses were approximately normally distributed. However, the distributions of the number of contradictions and new confabulations children included in their recall were highly positively skewed. Removing eight univariate outliers reduced skew somewhat, but square root transformation reduced it further. Square root transformation of the other variables, on the other hand, increased skew and kurtosis. Multi-level modelling was, therefore, conducted separately on transformed and non-transformed responses. They resulted in identical models, and so the non-transformed model is described for ease of interpretation.

In the initial model, participant number and the dependent variables were entered as random intercept grouping variables, interview number as a fixed factor, and the raw scores as the dependent variable. Factors and predictors were entered into the model one at a time. Interview number did appear to predict children's scores, and removing it as a predictor resulted in the model fitting the data significantly less well,  $\chi^2(1) = 11226.363 - 11145.068 = 81.295, p < .001$ . Thus, interview number remained as a predictor in the model. Including the rapport durations experienced in interview two/three as a predictor significantly improved the fit of the model,  $\chi^2(2) = 11145.068 - 11131.935 = 13.133, p < .005$ . Including interview one timing of rapport as a random effect predictor resulted in the model not reaching convergence, and including it as a fixed effect did not significantly improve fit,  $\chi^2(2) = 11131.935 - 11131.748 = 0.187, p > .05$ . Additionally, nesting interviews two and three rapport-building duration within interview one timing of rapport-building did not significantly improve the fit,  $\chi^2(2) = 11131.935 - 11131.305 = 0.63, p > .05$ . Therefore, the final model included participant number and which dependent variable the score came from as random effect grouping variables and interview number and rapport duration in interviews two and three as fixed effect predictors of children's scores on new dependent variables.

Thus, interview one timing of rapport-building did not affect children's responses in any of the interviews, but children's responses were significantly different depending on the duration of the rapport-building they experienced in interviews two and three and appeared to differ between interviews. In order to determine in detail how children's responses differed between rapport-building groups in interviews two and three and across interviews, their responses were entered into univariate mixed design ANOVAs. Square root transformations were entered for both the number of contradictions and number of new confabulations ANOVAs because they reduced skew and kurtosis most. To reduce the risk of Type I errors, the critical significance was reduced to  $p < .01$ . The main effects of interview number and rapport duration in interviews two and three condition, and the interactions were not significant for the percentage of high investigation-relevant details provided,  $F_{s(1-2, 95)} < 2.83, p_{s} > .064$ , or for the number of contradictions provided,  $F_{s(1-2, 97)} < 3.221, p_{s} > .044$ . However, the main effect of interview number did affect significantly the percentage of new details provided,  $F(1, 97) = 95.95, p < .011, r = 0.71$ , the number of new correct details provided,  $F(1, 97) = 66.07, p < .001, r = 0.64$ , and the number of new incorrect details provided,  $F(1, 97) = 11.45, p =$

.001,  $r = 0.32$ . For each of these details, children provided more in interview two than in interview three. The main effect of rapport and the interactions were not significant for these variables,  $F_s(2, 96-97) < 3.85, p_s > .025$ .

However, the main effect of rapport was significant for the number of high investigation-relevant details provided in interviews,  $F(2, 97) = 0.32, p = .005$ , and the number of new confabulations provided,  $F(2, 96) = 5.98, p = .004$ . Gabriel's post-hoc tests revealed that children in the *standard* rapport condition provided more high investigation-relevant details,  $p = .004, d = 0.68$ , and more new confabulations,  $p = .003, d = 0.63$ , than children in the *brief* rapport conditions. The main effect of interview number and the interactions were not significant for the number of high investigation-relevant details or new confabulations the child provided,  $F_s(1-2, 96-97) < 3.77, p_s > .055$ .

Both the main effect of interview number,  $F(1, 97) = 51.19, p < .001$ , and the main effect of rapport,  $F(2, 97) = 5.73, p = .004$ , were significant for the number of new, high investigation-relevant details the child provided. Children provided significantly more new high investigation-relevant details in interview two than interview three. According to a Gabriel's post-hoc test, they also provided more details when interviewed with a *standard* rapport-building session than a *brief* one,  $p = .003, d = 0.58$ . The interaction between the interview number and rapport-building condition, however, was not significant,  $F(2, 97) = 1.41, p = .248$ .

In order to determine the accuracy of these new, high investigation-relevant details, the original data was examined. This showed that children in the *standard* rapport-building conditions gave, on average, 2.03 more new, accurate, high investigation-relevant details in interview two than those in the *brief* rapport-building condition, and 0.88 more in the third interview. These equate to 16.7% of the additional details provided in interview two and 6.1% of those provided in interview three.

If the significant  $p$  value had not been reduced, the main effect of rapport duration in interviews two and three would have been significant for the number of contradictions made (square root transformed scores),  $F(2, 97) = 3.22, p = .044$ , for the number of new correct details provided,  $F(2, 97) = 3.67, p = .029$ , and for the number of new incorrect details provided,  $F(2, 96) = 3.85, p = .025$ . According to Gabriel's post-hoc tests,

children in the *standard* rapport-building conditions provided more contradictions,  $p = .047$ ,  $d = .69$ , more new correct details,  $p = .026$ ,  $d = .43$ , and more new incorrect details,  $p = .021$ ,  $d = .53$ , than those in the *brief* rapport-building conditions.

**Summary.** Children's recall was again not affected by the rapport-building condition they experienced in interview one. However, their recall in interviews two and three (as measured by the variables described in Table 4.6) was affected by the rapport-building they received just before these interviews. Children in the *standard* rapport-building condition gave more high investigation-relevant details (8.95 more on average in interview two, and 10.23 more in interview three), more new confabulated details (1.84 more on average in interview two and 2.46 in interview three), and more new, high investigation-relevant details (5.23 more on average in interview two and 3.79 in interview three) than those who only experienced a *brief* rapport-building session. On average, 2.03 of the new, high investigation-relevant details given in interview two were correct, and 0.88 of those given in interview three. The recall of children in the *control* group did not differ significantly to those in either of the rapport-building conditions. Finally, children provided a greater percentage of new details and more new correct and new incorrect details in interview two than interview three. The number of contradictions and percentage of high investigation-relevant details were not affected by either rapport-building or interview number.

### 4.3.2 Children's State Anxiety and Perceptions of Rapport

#### Individual Differences

**Age.** Age did not correlate significantly with children's state anxiety scores after any of the interviews,  $r_{ss} < \pm .106$ ,  $ps > .298$ , nor their rapport questionnaire scores after any of the interviews,  $r_{ss} < \pm .173$ ,  $ps > .084$ .

**Gender.** Children's state anxiety scores and rapport-building scores, split by gender, were mainly non-normally distributed. However, their state anxiety scores after interview one were normally distributed. Thus an independent t-test was used for children's first interview anxiety scores and Mann-Whitney tests for their second and third interview anxiety scores. The independent t-test showed there to be a significant difference between boys' and girls' scores: Girls reported feeling more anxious ( $M = 29.06$ ,  $SE = 0.74$ ) than boys ( $M = 26.74$ ,  $SE = 0.66$ ),  $t(98) = -2.32$ ,  $p = .022$ ,  $d = 0.52$ . This was also

found using a Mann-Whitney test for children's state anxiety after interview two: Girls ( $Mdn = 28$ ) were more anxious than boys ( $Mdn = 26$ ),  $U = 1,719.00$ ,  $z = 2.08$ ,  $p = .037$ ,  $r = 0.20$ . However, girls' ( $Mdn = 28$ ) and boys' ( $Mdn = 25$ ) state anxiety was not found to differ significantly after their third interview,  $U = 1,435.00$ ,  $z = 1.77$ ,  $p = .076$ ,  $r = 0.18$ .

Gender was also found to be associated with children's perceived rapport with the interviewer. In all three interviews, girls' perceived rapport scores ( $Mdn = 25.5$ ,  $Mdn = 26$ ,  $Mdn = 26$ , respectively) were significantly lower than boys ( $Mdn = 26$ ,  $Mdn = 26$ ,  $Mdn = 27$ , respectively),  $846.5 < Us < 1,048.0$ ,  $z_s < -2.00$ ,  $ps < .046$ ,  $0.20 < r_s > 0.30$ . Thus, girls reported feeling less rapport with the interviewer than boys in all their interviews, and were more anxious than boys in their first two interviews.

**Narrative Ability.** Narrative ability scores (correct, incorrect, and confabulation) were not significantly correlated with either children's state anxiety scores after the interviews,  $r_{s,s} < .172$ ,  $ps > .088$ , nor their perceived rapport scores after the interviews,  $r_{s,s} < \pm .163$ ,  $ps > .105$ .

**Visual Memory.** Only one correlation between children's visual memory scores and their anxiety and rapport questionnaire scores was significant: children's BVRT scores were positively correlated with their state anxiety after interview one,  $r_s = .205$ ,  $p = .043$ . The other correlations were non-significant,  $r_{s,s} < \pm .091$ ,  $ps > .360$ .

**Trait Anxiety.** Trait anxiety scores were significantly correlated with state anxiety scores at interview one,  $r = .378$ ,  $p < .001$ , at interview two,  $r_s = .324$ ,  $p = .001$ , and at interview three,  $r_s = .206$ ,  $p = .041$ . Trait anxiety was also significantly negatively correlated with children's perceived rapport scores at interviews one,  $r_s = -.254$ ,  $p = .010$ , two,  $r_s = -.307$ ,  $p = .002$ , and three,  $r_s = -.262$ ,  $p = .009$ . To determine if the relationship between trait anxiety and perceived rapport was mediated by increased state anxiety, bootstrapped semi-partial correlations controlling for the effects of state anxiety on children's perceived rapport were conducted. The correlation for interview one was not significant,  $r_s = -.020$ ,  $p = .845$ , but they were significant for interview two,  $r_s = -.194$ ,  $p = .047$ , and interview three,  $r_s = -.207$ ,  $p = .040$ . Thus, higher trait anxiety was associated with higher state anxiety and lower perceived rapport at all three interviews, but the relationship between trait anxiety and perceived rapport in interview one was no longer



significant once the effect of state anxiety on perceived rapport had been taken into account. Trait anxiety continued to be associated with perceived rapport despite accounting for the effects of state anxiety for scores from interviews two and three.

**Summary.** Children's scores for the individual differences measured were generally not associated with their perceived rapport or their state anxiety. However, trait anxiety was found to positively correlate with children's state anxiety and negatively correlate with their perceived rapport with the interviewer. Additionally, girls were significantly more anxious than boys in the first two interviews and also perceived having built less rapport with the interviewer than boys.

### **Group Differences**

Children's mean scores for the state anxiety questionnaire and rapport questionnaire are presented in Table 4.7.

**Rapport Scores.** Children's scores on the rapport questionnaire were very highly negatively skewed. Reflect and square root transformations improved skew and kurtosis scores. One univariate outlier was removed from the data set.

*Group Differences in Interview One.* In order to ensure there were no unexpected group differences in the interview one responses (i.e., an effect of group allocation rather than rapport-building), a two-way ANOVA was conducted with children's perceived rapport scores in interview one. This confirmed there to be no main effects of interview one rapport-building condition, nor of interview two/three rapport-building group allocation, and no significant interactions  $F_s(1, 96) < 2.42, p_s > .123$ . Thus, there were no group differences that could have affected interpretation, but additionally interview one rapport condition did not affect children's scores of perceived rapport.

*Perceived Rapport Scores in Interviews Two and Three.* First interview responses were not included in this analysis to simplify interpretation. A three-level hierarchical model assessed the effects of rapport at interview one, rapport at interviews two and three, and interview number (completed after interview two or three) on children's perceived rapport scores. First-level units were the interviews which the scores came from. Second-level

Table 4.7

*Group rapport and state anxiety scores after mock-investigative interviews*

Group	Interview One Rapport	Interview One ( <i>SD</i> )		Interviews Two and Three Rapport	Interview Two ( <i>SD</i> )		Interview Three ( <i>SD</i> )	
		State Anxiety Score	Rapport Questionnaire		State Anxiety Score	Rapport Questionnaire	State Anxiety Score	Rapport Questionnaire
		1	<i>Control</i>		27.55 (6.46)	25.86 (1.08)	<i>Control</i>	27.38 (7.29)
2	<i>Normal</i>	28.55 (5.17)	24.90 (1.71)	<i>Standard</i>	27.90 (7.36)	25.00 (2.74)	26.86 (4.60)	25.14 (2.18)
3	<i>Normal</i>	26.95 (4.59)	25.75 (1.41)	<i>Brief</i>	25.23 (4.47)	26.05 (1.00)	27.43 (7.77)	25.86 (1.49)
4	<i>Separate</i>	27.63 (5.60)	25.85 (0.99)	<i>Standard</i>	28.47 (4.98)	25.72 (1.41)	26.29 (4.65)	25.06 (2.36)
5	<i>Separate</i>	29.26 (2.79)	25.63 (1.67)	<i>Brief</i>	27.20 (4.01)	25.85 (1.31)	27.53 (4.79)	25.95 (1.13)

units were the 107 participants (with the predictor of rapport condition in interviews two and three), and third-level units were the first rapport-building conditions.

In the initial model, participant number was included as a random effect grouping variable, interview number as a fixed effect, with the reflected square root rapport scores as the dependent variable. Factors and predictors were entered into the model one at a time. In this first model, the interview at which the questionnaire was completed did not significantly predict the children's score. When this predictor was removed, the model's fit did not decrease significantly,  $\chi^2(1) = 215.186 - 214.756 = 0.43, p > .05$ . When interview one rapport condition was then entered into the model as a random effect, the model did not reach convergence. The model was not significantly improved by adding interview two/three rapport condition as a fixed effect predictor,  $\chi^2(2) = 215.186 - 213.637 = 1.549, p > .05$ . When interview one rapport was entered as a fixed effect, it did not improve the model's fit significantly either,  $\chi^2(2) = 215.186 - 214.987 = 0.199, p > .05$ . Neither was the model improved by including interview two/three rapport condition nested within interview one rapport condition,  $\chi^2(2, N = 204) = 215.186 - 213.693 = 1.493, p > .05$ . Therefore, the model of best fit included no predictors or factors but did include the participant number as a random effect grouping variable.

*Perceived Rapport Scores across Interviews.* As rapport-building conditions did not seem to affect children's perceptions of rapport, the scores were collapsed across these conditions, and analysis was conducted to determine if perceived rapport changed with interview number. A one-way repeated measures ANOVA was conducted with children's reflected square root-transformed scores. Mauchly's test indicated that the assumption of sphericity had been violated,  $\chi^2(2) = 19.29, p < .001$ . Therefore, degrees of freedom were corrected using Greenhouse-Geisser estimates of sphericity ( $\epsilon = .84$ ). There was no significant effect of interview number on rapport scores,  $F(1.68, 154.49) = 0.93, p = .382$ . Thus, children's perceived rapport did not change with the number of interviews they experienced.

### **State Anxiety Scores.**

*Group Differences in Interview One.* Again, a univariate two-way ANOVA was conducted with interview one rapport-building and interview two/three group allocation as between-group independent variables and children's state anxiety scores in interview

one as the dependent variable to determine any unexpected group differences. There were no significant main effects of either interview one rapport-building,  $F(1, 95) = 0.36$ ,  $p = .549$ , or interview two/three rapport-building group allocation,  $F(1, 95) = 0.00$ ,  $p = .989$ . There was also no significant interaction,  $F(1, 95) = 1.94$ ,  $p = .167$ . Thus, there were no unexpected group differences in interview one state anxiety scores, and interview one rapport-building had no effect on children's state anxiety in interview one.

*State Anxiety in Interviews Two and Three.* Children's scores on the state anxiety questionnaire were positively skewed. Four univariate outliers were identified and removed. Two of these outliers came from the same child and so their third state anxiety score was also removed. By removing these outliers, the scores' skew and kurtosis scores were reduced. Therefore, the remaining scores were analysed using multilevel modelling. Children's first interview scores were not included in this analysis. An identical multi-level model was hypothesized for children's state anxiety scores as was for their rapport scores. An initial model with participant number as a random grouping factor, interview number as a fixed effect and anxiety scores as dependent variables showed interview number did not have a significant effect. Removing this predictor from the model had no detrimental effect on fit,  $\chi^2(1) = 1108.536 - 1108.398 = 0.138$ ,  $p > .05$ . Including rapport at interviews two/three as a fixed effect did not improve the fit of the model,  $\chi^2(2) = 1108.536 - 1108.330 = 0.206$ ,  $p > .05$ . Neither did including interview one rapport as a random effect,  $\chi^2(1) = 1108.536 - 1105.969 = 2.567$ ,  $p > .05$ , nor including rapport at interviews two/three as a fixed nested effect within interview one rapport,  $\chi^2(2) = 1108.536 - 1108.515 = 0.021$ ,  $p > .05$ . Thus, the best fit model only included participant number as a grouping variable.

*State Anxiety across Interviews.* As state anxiety scores did not seem to be affected by rapport-building in any interview, children's scores were collapsed across these groups and a one-way repeated-measures ANOVA was conducted to determine if they changed across interviews. Three univariate outliers were removed, which reduced skew and kurtosis of the scores. Mauchly's test indicated that the assumption of sphericity had been violated,  $\chi^2(2) = 20.17$ ,  $p < .001$ . Therefore, degrees of freedom were corrected using Greenhouse-Geisser estimates of sphericity ( $\epsilon = .83$ ). There was a significant effect of interview number on children's state anxiety scores,  $F(1.66, 149.65) = 6.11$ ,  $p = .005$ . Contrasts revealed that children's anxiety scores in interview one were significantly

higher than their anxiety scores in interview two,  $F(1, 90) = 8.95, p = .004, r = .30$ , but there was no significant difference between their scores in interviews two and three,  $F(1, 90) = 0.20, p = .655, r = .05$ . Thus, children were less anxious after their second interviews than their first, but their anxiety scores levelled out after this.

**Summary.** Children's perceived rapport scores and their state anxiety were not associated with the rapport-building conditions in any of the interviews. Children's perceived rapport scores also did not change over time. However, children's state anxiety did; children were less anxious in their second interviews than their first, but equally anxious in their third interviews as their second.

### 4.3.3 The Effects of State Anxiety and Perceived Rapport on Recall

To examine if state anxiety and perceived rapport had any effect on children's informativeness, correlations were conducted between the children's state anxiety scores for each interview and the total number of details provided in that interview. The same correlations were conducted with children's transformed perceived rapport scores and total number of details for each interview. To reduce the risk of Type I error inflation, the critical significance score was reduced to  $p < .01$ .

Children's state anxiety scores were not significantly correlated with the total number of details they provided for any of the interviews,  $r_s < \pm .183, p_s > .073$ . There were also no significant correlations between children's perceived rapport scores and the total number of details they provided for any of the interviews,  $r_{sS} < \pm .148, p_s > .144$ .

**Summary.** Children's state anxiety and perceived rapport scores were not associated with the number of details they provided in any of the interviews they experienced.

## 4.4 Discussion

This study is the first to examine rapport-building across multiple interviews and one of very few to compare current rapport-building procedures with a no rapport *control* group. The main findings regarding rapport-building were that the current rapport-building procedures (conducted either just before the interview or the day beforehand) made no significant difference to children's recall, perceived rapport, or their state anxiety in their first interview. In contrast, the length of rapport-building the child experienced in their

second and third interviews did affect recall: longer rapport-building led to children providing more information in total in second and third interviews than *brief* rapport-building. This information appeared to be in the forms of high investigation-relevant details (73.5% of additional details in interview two and 71.2% in interview three), some of which were new and correct (16.7% of additional details in interview two and 6.1% in interview three), and confabulations (23.0% of additional details in interview two and 27.6% in interview three). Again, some of these confabulations were new (15.1% of additional details were new confabulations on average in interview two and 17.1% in interview three). However, rapport-building in the second and third interviews also did not affect children's recall, perceived rapport or state anxiety in comparison to a *control* group. The main findings regarding multiple interviews were that approximately a third or more of children's recalled details in their second interviews were new, that very little of their recall contradicted their recall in previous interviews, and that children's accuracy did not change across interviews. However, children provided less new information in their third interviews than in their second. Children's perceived rapport with the interviewer did not differ across multiple interviews, but their state anxiety scores did; children felt less anxious in second interviews than first, but there was no difference in their anxiety scores across second and third interviews. Children's visual memory scores and narrative ability scores were found to be related to their interview recall. Their trait anxiety scores, however, were not, but were correlated with both their state anxiety and perceived rapport scores. Gender was also found to have an effect on children's state anxiety and perceived rapport. These results will now be discussed in turn in relation to the previous research and their implications for practice.

### **Individual Differences**

Unlike previous research (Brown & Pipe, 2003), the present study found narrative ability to predict some aspects of children's recall. Children who provided more correct details from the scene in the picture book, were also more detailed in their interview recall, regardless of accuracy; they provided both more correct and incorrect information in most of their interviews, but their overall accuracy was not significantly different from other children's. The dissimilarity of the present study's findings with previous studies may have been caused by the different methods used in the narrative ability tasks. Brown and Pipe (2003) limited the number of pages the child saw from the picture book, whereas in

the present study, children were provided with the entire picture book, possibly increasing the variation in children's responses.

Interestingly, the positive association between narrative ability and children's interview verbosity was only present for the number of correct details they provided during their narrative recall; the number of incorrect and confabulated details were not associated with children's interview recall scores. This may be because there are different causes for incorrect and confabulated details. In the narrative ability task, some children may have used confabulations and incorrect details consciously to make a more interesting narrative. In the interview, however, incorrect details and confabulations may have been caused by cognitive failures, such as memory failures, or detrimental interpersonal aspects of the interview.

Children's visual memory scores were also not related to how much incorrect or confabulated information children gave in their interviews. If incorrect details and confabulations were related to memory failures, we might expect a negative correlation between visual memory scores and these types of details. This is the first study to have examined children's visual memory (as measured by the Benton Visual Retention Test) and their recall in response to non-suggestive interviewing, and visual memory was only found to correlate with the amount of correct information provided in children's interviews. This suggests some of the variance in children's recall may be caused (not surprisingly) by children's differing memory capacities. However, the visual memory task may have been too simplistic a task (immediate reproduction of a geometric pattern) to have accurately measured the possible memory failures (such as those studied by Brainerd, Reyna, Howe, & Kingma, 1990) that might occur with autobiographical memory over longer delays (e.g., remembering a series of complicated visual scenes over a week).

Trait anxiety was found to have no relationship with children's recall. State anxiety was also, as predicted, found to have no effect on children's recall in the form of their informativeness. This is consistent with Davis and Bottom's (2002) study in which the recall of children over six and a half years old was not affected by their state anxiety levels. Children's trait anxiety was, however, associated with their perceived rapport, but this relationship was somewhat mediated by their state anxiety levels; children with

higher trait anxiety levels had higher state anxiety levels which was associated with children perceiving having built less rapport with the interviewer. This relationship may also explain the gender differences found in the present study. Girls generally had higher state anxiety scores than boys, and perceived less rapport with the interviewer. Reduced anxiety could be interpreted as increased calmness, and so this relationship may support Rotenberg et al.'s (2003) suggestion that children who have built rapport with an adult are calmer than those that have not. However, it appears to be not only state anxiety, but also trait anxiety that is associated with children's perceptions of rapport. Thus, even if a child is not particularly anxious during the interview, she/he may feel less rapport with the interviewer if she/he is generally predisposed to anxiety (particularly in second and third interviews). Some implications of this are that children with higher trait anxiety levels may benefit from more time building rapport with interviewers, and may take longer to disclose personal details to them (Rotenberg et al., 2003).

### **Rapport-Building**

As in K. Collins' (2012) thesis, *normal* rapport-building as described and encouraged in the ABE guidelines (Ministry of Justice, 2011) had no effect on children's recall or state anxiety in comparison to a *control* group that received no specific rapport-building. The present study also found that *normal* rapport-building had no effect on children's perceived rapport (although see limitations below) and that conducting this type of rapport-building the day before the interview made no difference to children's well-being or recall in comparison to conducting *normal* rapport-building on the day of the interview or the *control* group. Thus, these results add to the small literature suggesting that the rapport-building phase as it currently stands is not effective at building rapport and easing children's anxieties about the interview. However, the length of all of the present study's rapport-building phases (*normal*, *separate*, *standard*, and *brief*) could be considered relatively short for investigative interviews (Davies, et al., 2000, see limitations section below for further discussion), and so the effects of rapport-building may be limited by this, despite most children reporting they felt high levels of rapport with the interviewer. Additionally, the children in the present study were not exposed to any risk of harm or trauma, and so may not have needed rapport with the interviewer to disclose in the way that children who are victims of crime or witnesses to more unpleasant crimes may do. On the other hand, if a rapport-building process is discovered which is effective with children at low stress/trauma levels, this may be even more effective for child victims



experiencing high levels of stress or trauma. Further (perhaps more ecologically valid) studies are necessary (although see limitations regarding ethical considerations), but the present findings could question the validity of including this form of rapport-building in investigative interviews with children who are bystanders to a non-traumatic event.

Although the present study did not find any beneficial effects of social support in the form of rapport-building, it can add some support to studies that have examined why social support might affect recall. Like Davis and Bottoms (2002), the present study found no relationship between children's state anxiety and their informativeness. This suggests that although social support may affect children's anxiety (but it did not in the present study), the reason this impacts on recall is unlikely to be through reducing anxiety and therefore children's cognitive busyness.

The present study suggests that conducting the rapport-building phase the day before does not affect children's recall or well-being any differently to conducting it on the same day as the interview. These results are useful for practitioners who are concerned about the length of rapport-building (Burrows & Powell, 2014), and for supporting the already existing practices revealed in chapter two's survey. Conducting the rapport-building the day before reduces the risk of this phase tiring child interviewees and thus reducing their recall (Roberts et al., 2004). Additionally, it may make it easier for children's interviews to be shown without the rapport-building phase in court, as this phase could be considered irrelevant material (Krähenbühl, 2012). Visiting the interviewee the day before may also improve children's interviewing experience by giving them warning of the upcoming interview. Previously, children have described not being given warning and finding this a distressing aspect of their interviewing experience (Westcott & Davies, 1996a).

Previous studies have found that well-conducted rapport-building (e.g., involving open-ended questions) can have beneficial effects on children's recall in comparison to poorly-conducted rapport-building (e.g., using closed questions; Brown, et al., 2013; Roberts, et al., 2004; Sternberg, et al., 1997). However, the present study's rapport-building involved best practice, including open questions and asking for recall of a neutral event, and found no significant difference in children's recall in comparison to a *control* group. Thus, it may be that poor rapport-building is detrimental to children's recall and good rapport-building just maintains children's abilities to respond to open questions. Studies that have

examined rapport-building in the field have often found it to be conducted poorly (Westcott & Kynan, 2006; Wood, et al., 1996), and so the inclusion of rapport-building in interviews with child witnesses as is currently recommended may actually risk reducing children's recall rather than enhancing it.

Importantly, there are methods that have been studied that could provide a better alternative to the rapport-building described in ABE (Ministry of Justice, 2011). For example, K. Collins (2012) found a play rapport-building phase improved children's recall, although did not affect their state anxiety or any other indicators of rapport, suggesting it may not necessarily increase children's perceived rapport. Another alternative is the revised National Institute of Child Health and Development's (NICHD) protocol which focuses on improving interviewers' provision of social support to child interviewees. However, this may demand a more holistic change in attitude towards rapport-building. This protocol emphasises rapport *throughout* the interview, involving increased instruction on how to build rapport effectively and to behave supportively in a non-suggestive manner beyond the rapport-building phase (Ahern, Hershkowitz, Lamb, Blasbalg, & Winstanley, 2014; Hershkowitz, Lamb, & Katz, 2014; Hershkowitz, Lamb, Katz, & Malloy, 2015). This supports the adult literature which suggests that in some circumstances rapport maintenance can be even more important than rapport-building (Walsh & Bull, 2012). Additionally, the revised protocol includes socially supportive non-verbal behaviours that have been found to be effective in improving children's well-being and recall in other research, such as smiling and eye contact (Almerigogna, Ost, Akehurst, & Fluck, 2008; Almerigogna, et al., 2007; Bull & Corran, 2003; Carter, Bottoms, & Levine, 1996; Davis & Bottoms, 2002; Goodman, Bottoms, Schwartz-Kenney, & Rudy, 1991; Quas, Rush, Yim, & Nikolayev, 2014). This revised NICHD protocol has been found to be effective in obtaining disclosures from children in field studies. However, it has not been examined in the laboratory setting as of yet. Thus, research is needed to determine its effects on accuracy and children's well-being, and to compare it to existing ABE methods and to a no rapport-building *control* group.

Rapport-building in the second and third interviews also was not related to children's reduced anxiety or increased perceptions of rapport with the interviewer. Additionally, it was not associated with any change in children's recall in comparison to the *control* group. However, *brief* and *standard* rapport-building in second and third interviews were

associated with significant differences in children's recall; children who experienced *standard* rapport-building provided more new confabulations, confabulations in total, new high investigation-relevant details, high investigation-relevant details in total and total details than children in the *brief* rapport-building condition. These are not independent, but further examination determined that very few of the additional details were new confabulations. However, of the additional information, the number of new, high investigation-relevant, correct details and new confabulations were similar for interview two (2.03 and 1.84 respectively), but there were more new confabulations (2.46) than new, high investigation-relevant, correct details in interview three (0.88). Although these different reporting patterns did not affect their total accuracy scores, this is a troubling finding; confabulations reflect completely erroneous information, rather than just slightly misremembered details. These could lead the investigation astray, especially if they are of high investigation-relevance.

The difference in recall in second and third interviews between the *standard* and *brief* conditions may be explained by a criterion shift (Memon & Higham, 1999). The criterion shift theory suggests that we consciously or sub-consciously set criterion that a memory must match in order to be reported. Experiences can cause a criterion shift (such as experience of rapport-building) and thus the criterion that a memory has to match in order to be reported changes. For example, in this case, children in the *standard* condition may be lowering the criterion for memory strength and reporting less strong memories, some of which are accurate and some of which are not. Thus, although *standard* rapport-building in second interviews may lead to additional information in comparison to *brief* rapport-building, *standard* rapport-building in third interviews may increase the risk of obtaining confabulations without the benefits of new, correct, high investigation-relevant details. However, neither *brief* nor *standard* rapport-building were associated with significant improvements in children's recall in comparison to no rapport-building and so excluding this form of rapport-building may be a better option for child bystander witnesses' recall.

### **Multiple Interviewing**

In the present study, children's accuracy was constant across interviews. For the majority of prior research that has examined more than two interviews, recall accuracy has been found to decrease with interviews (e.g., Bjorklund, Bjorklund, Douglas Brown, & Cassel,

1998; La Rooy, Pipe, & Murray, 2007; Peterson, 2010; Pipe, Gee, Wilson, & Egerton, 1999). This difference is likely to be caused by the longer delays between interviews in these studies in which children were interviewed over a minimum period of six weeks to two years after the to-be-remembered event. Thus, the present study's accuracy may be caused by children's memories of the event still being comparatively fresh.

However, despite their memories being relatively recent, children provided less new information (correct, incorrect, and high investigation-relevant) in their third interviews than second. This is consistent with Peterson, Moores, and White's study (2001) in which children provided proportionally more repeated details in their third than their second interviews. Peterson (2010), on the other hand, found children between three and six years provided more new information over interviews, but this may reflect developmental changes (such as improved language) counteracting forgetting.

Despite providing less new information in third than second interviews, children in the present study were still providing high levels of new information in their third interviews (averaging at least 25% new information). This has also been found in studies with longer delays. For example, Pipe, et al. (1999) found that about a third of the correct information children provided in third interviews conducted one year after the to-be-remembered event was new (i.e., they had not previously recalled it) and nearly half of the correct information provided in third interviews two years after the event was new. Furthermore, in the present study children provided very few direct contradictions of their earlier recall in multiple interviews. In combination with chapter three's findings, this suggests that children do not naturally provide many contradictions of their previous recall in multiple interviews, either in laboratory or field settings. Thus, multiple interviewing beyond just a second interview appears to be useful for eliciting new information from children, without resulting in many contradictions that could be used as points in cross-examination to undermine perceptions of children's reliability (Burrows & Powell, 2014; Fisher, Brewer, & Mitchell, 2009).

Another positive aspect of multiple interviews was that they were associated with children's reduced state anxiety. Children were significantly less anxious in their second interviews than their first interviews, irrespective of the rapport-building they had experienced. However, their state anxiety in third interviews was no different to their

state anxiety in second ones, and children's perceptions of rapport did not seem to differ across multiple interviews. One concern regarding multiple interviewing is that it may sometimes be traumatic for children (Plotnikoff & Woolfson, 2001). This is the first study to examine children's well-being across multiple interviews and the findings suggest that although children may still feel anxious about the experience, they may not find second interviews as unpleasant as first interviews. However, as previously discussed, the effects of rapport and multiple interviewing on children's anxiety may be different when children experience an event which causes extreme distress, and so these results may be more appropriately generalised to child bystander witnesses than victims. Research examining children's anxiety scores when interviewed more than once about a more stressful event or one in which they took part are vital for determining if this is still the case under more ecologically valid conditions.

#### **4.4.1 Limitations**

A number of aspects of the present study's methodology limit how ecologically valid and reliable the results are. First, children watched a video of the to-be-remembered event. Although this allowed for the event to be crime-relevant (ethical constraints may have made a live crime event challenging), it meant that children were not personally involved in the event. Studies have found children's memory for self-performed experiences to differ from that for observed ones (Baker-Ward, Hess, & Flannagan, 1990), and children's anxiety regarding the interview may differ between talking about an event they watched and one they were personally involved in, especially a very abusive one. Research examining rapport-building across multiple interviews using a live event is necessary to strengthen the present study's findings.

The use of a non-traumatic video event also limits the generalisability of the present study to cases in which children are victims. The stress that the participants experienced in the present study is likely to have been negligible in comparison to children who are having to recount their own sexual or physical victimisation. However, ethically, it is not possible or desirable to expose children to real crimes, particularly as victims, in order to study their recall under differing interview conditions. Furthermore, if rapport-building is shown to be effective in less stressful situations, it is possible it would be particularly effective for children experiencing high levels of distress. Thus, research using children as witnesses is valuable and should be continued, but additional research that examines

children's memories for unavoidable stressful situations (such as Peterson and colleagues' [1996, 1998, 1999, 2001, 2010] research into memories for emergency medical care) should also be conducted to examine rapport-building across multiple interviews. This would allow the findings to be more readily generalisable to victims than the present study's findings.

Conducting the interview within the school setting introduced a number of variations that may affect validity. The interview timings could be improved to have better ecological validity. Teachers' wishes that children were not away from the classroom for long periods of time introduced time pressures that are unlikely to be present in investigative interviews. It has been observed that interviewers often do not take longer than ten minutes building rapport with their interviewees (Davies, et al., 2000) and so the findings here may be ecologically-valid, but it may be that rapport-building is only effective if it is given more time. On the other hand, some studies have argued that longer rapport-building may tire children and offset the possible benefits rapport may have on recall (Roberts et al., 2004). These time pressures may also have affected the interviews; children who provided less free recall may have been asked more questions than those who provided more free recall. Additionally, children who were in the *normal* rapport-building condition in the first interview may have experienced a shorter interview than those in the *separate* and *control* conditions. However, this is unlikely to have affected children's overall scores as the interviewer generally extended the interview if key questions had not been asked, and mostly children who provided a lot of information in response to free recall voluntarily provided the details that would have been asked for (i.e., what the man looked like). Furthermore, children who experienced the *standard* rapport-building in second and third interviews (which was identical in length to the *normal* rapport-building in first interviews) actually provided more information than those in the *brief* or *control* conditions, who may have experienced longer interviews. Another issue with conducting the interviews in school is the possibility that children discussed the video and the interviews with each other. Although the parents and teachers were asked not to discuss the research with the children, no precautions were put in place to stop children talking to each other. Thus, reminiscence may have been due to such discussions. To control for this, future research should encourage participants not to discuss the study outside of the interviewing situation. However, it would be difficult to monitor if this occurred or not.

The location of the interviews may also affect the ecological validity of the results. Children were all interviewed in their school, which may be less anxiety-provoking than being interviewed in an unknown interviewing suite. The interviews were also conducted in different areas within the school depending on the availability of rooms from week to week. This introduces the possible confounding variable of context reinstatement (La Rooy, et al., 2007); some children were (unavoidably) interviewed in the same room as they viewed the film event. However, children within different schools were allocated to different groups randomly and almost equally, and mostly were interviewed in the same rooms as each other each week. Thus, the same number of children in each experimental group should have been exposed to context reinstatement and so the possible effect should have been equally spread across conditions.

Limitations also relate to the interviewer. As the interviewer knew the content of the video watched, the experimental group that the child was allocated to, and the hypotheses, the interviews may have been conducted in a biased manner. For example, questions may have been chosen or phrased to encourage accurate recall in some groups and not others. Furthermore, the same interviewer conducted all of the interviews over a period of 11 months and so the interviews and expertise of the interviewer may have changed over this time. However, interviews followed a protocol and were standardised in as far as possible, and so this should not have affected the lack of significant differences between conditions found in the present study.

Finally, the results from the rapport questionnaire may not be entirely reliable or valid. Although significant differences were found, children's responses were often near ceiling, suggesting that it may not have been sensitive enough to variations in children's perceived rapport. Despite children conducting the questionnaires with a research assistant and being told their answers would not be seen by the interviewer, their answers may have been affected by social desirability. Additionally, even though the questionnaire was designed on theories of rapport-building and advice was given by a developmental psychologist, rapport is very difficult to define and thus difficult to measure (Saywitz, Larson, Hobbs, & Wells, 2015). The rapport questionnaire in the present study may not have necessarily been measuring children's perceived rapport with

the interviewer. This is, however, the first attempt to create a self-reported rapport measure for use with children.

#### 4.4.2 Conclusions

The present study is the first to have examined rapport-building's effects on children's well-being and recall across multiple interviews. The findings suggest that alternatives to the current rapport-building described in the ABE (Ministry of Justice, 2011) guidelines should be examined for bystander witnesses to non-abusive events. ABE (2011) rapport-building was found to be ineffective at increasing children's perceived rapport or decreasing their anxiety in comparison to a no rapport-building condition. Additionally, it was found to have no effects on children's recall in first, second and third interviews in comparison to a no rapport-building *control* group. In second interviews, full ABE rapport-building was shown to increase children's recall without affecting their accuracy in comparison to a shortened version. Full ABE rapport-building sessions in third interviews also led to children recalling more information than those who experienced shortened versions but the additional information they recalled involved fewer new, correct, high investigation-relevant details. Furthermore, children's recall in either *brief* or *standard* rapport-building conditions was no different to those in the no rapport-building conditions for either their second or third interviews. Children's recall was equally accurate across first, second, and third interviews with very few contradictions, and their state anxiety decreased from first to second interviews. Children's state anxiety scores were also related to their perceived rapport with the interviewer. In conclusion, the present study found that rapport-building as it is currently conducted does not improve children's recall or well-being, but children perceived second and third interviews as less anxiety-provoking than their first interviews.

Taking together the findings of the three studies presented suggests that the benefits of multiple interviewing in practice may outweigh the risks reported by police officers in chapter two. Multiple interviews are effective for obtaining new and accurate information from children without eliciting many contradictions across interviews, and possibly without causing as much distress to a child as might be expected from their anxiety in first interviews. However, interviewers have been found to use little social support in the substantive phases of first and subsequent interviews. Additionally, although they seem to use rapport-building across multiple interviews, the recommended rapport-building



techniques have been shown not to necessarily improve children's recall or well-being. The effect of these interviewing techniques, however, have additional impacts on the criminal justice system. Children's interviews may be shown in court and thus could have direct impact on the verdict of a trial. The following chapter, therefore, examines how multiple interviewing and rapport-building affect mock-jurors' perceptions of a child's testimony, the interview, and case progression decisions.

## **Chapter Five**

### **Mock-Juror Reactions to Multiple Interview Presentation Styles and Rapport-Building**

#### **5.1 Introduction**

In the previous three chapters, studies have been presented which address the multiple interviewing and social support of children from the perspective of the investigators and the child interviewee. Although these have generally found positive outcomes of multiple interviewing and null findings in relation to rapport-building, their impact on a case does not end with the investigation. According to the special measures/circumstances afforded child witnesses in court (Youth Justice and Criminal Evidence Act, 1999), video recordings of children's interviews may be shown as a replacement to their live testimony in court (although cross-examination may not currently be pre-recorded and must occur live; ABE, 2011). Thus, along with assessing children's well-being and recall in response to differing interviewing conditions, it is important to determine how these interviewing conditions affect people's (e.g., mock-jurors') perceptions of the child and their testimony. This chapter describes an online mock-juror study in which a child's interviews were presented as either one interview with a short break, or two interviews separated by a week, and shown either with or without the rapport-building section. Mock-jurors' perceptions of the child's testimony, the interview, and case progression decisions were assessed and compared across differing testimony presentations.

##### **5.1.1 Mock-Juror Studies**

The United Kingdom has an adversarial judicial system. This means that criminal cases often involve a prosecuting team and a defence team arguing their points in front of a jury and a judge. According to s.8 of the Contempt of Court Act 1981, it is an offence to discuss jury deliberations other than during the deliberation itself, when giving the verdict, or in any subsequent court proceedings about alleged offences occurring during the jury deliberation. Therefore, because it is illegal to discuss with jury members how they came to their decision, and it is also illegal to record real jury deliberations, it is impossible to know which factors of a court case are influential in jury's decision-making. However, knowing how jurors come to their decisions is crucial for determining

whether juries are fair. For example, if jurors are using extra-legal factors (such as their pre-existing biases and prejudices) rather than the evidence to make their verdict decisions, then they are not giving to the court a fair evaluation of the evidence and so are denying the defendant (and the witnesses) a fair trial.

To overcome the difficulties of researching real juries, many researchers have studied mock-jurors and mock-juries. These are groups (mock-juries) or individuals (mock-jurors) who are jury-eligible. They are shown trial information, which varies from written summaries of evidence (e.g., Yozwiak, Golding, & Marsil, 2004), to transcripts or videos of witness testimony (e.g., Goodman, Golding, Helgeson, Haith, & Michelli, 1987; Krähenbühl, 2012), to full court trials conducted with actors (e.g., Goodman et al., 1998). The mock-jurors are then asked to come to an individual or group verdict and make other judgements about the evidence, in some studies also explaining how they came to their judgements. Perceptions can be measured at different points of the mock-court process. Some studies examine immediate responses to individual features of the court process (for example, a witness's testimony, as in the present study), others measure mock-jurors' pre-deliberation perceptions by providing a full court case to individual participants, and finally some present the full court case to groups who then deliberate and so also obtain participants' group decisions and post-deliberation perceptions. All these types of study give some insight into how people who may be called for jury service react to different forms of evidence and how this may influence their final verdict decisions.

Mock-juror and mock-jury studies have found that certain aspects of trials in which children testify have consistent effects on mock-jurors' perceptions (for a review, see Bottoms, Golding, Stevenson, Wiley, & Yozwiak, 2007). The majority of this research has focused on witness characteristics (such as the child's age or gender) and juror characteristics (such as their gender or race). For example, younger children have been found to be judged as less reliable bystander witnesses than adults and adolescents (e.g., Goodman, et al., 1987), but as testifying victims of child sexual abuse, young children are often perceived to be as reliable as adults and adolescents and sometimes more so (e.g., Golding, Fryman, Marsil, & Yozwiak, 2003).

Demographic features of the mock-jurors have also been found to be related to their perceptions. For example, in child sexual abuse cases, gender has been found to have a

relatively reliable effect with women often being more pro-child than men (Bottoms, Golding, et al., 2007; Cossins, 2008). Some studies have found men to rate child victims/witnesses as less believable, less credible, and less competent than female participants (Cossins, 2008). These gender differences are thought to be related to differences in more general attitudes, including how opposed they are to child/adult sex, how much empathy they have for child victims, and how believable they find children (Bottoms, et al., 2014). Other juror demographics have been found to have little effect on mock-juror judgements of children's testimony, including their age and their experience with children (Goodman et al., 1998; Orcutt, Goodman, Tobey, Batterman-Faunce, & Thomas, 2001), but it should be acknowledged that the research relating to these factors is limited. Another area that has rarely been examined is whether mock-jurors' prior experience of taking part in a real jury affects their perceptions of a child victim/witness. Ridley, Van Rheede, and Wilcock's (2015) study of police officer, barrister and mock-juror perceptions of a child interview found significant differences between the groups. This suggests that experience of investigations and court may significantly affect perceptions. However, Orcutt et al. (2001) found experience of jury service to have no effect on mock-jurors' perceptions of a child's testimony about innocuous adult touches that they had experienced. Thus, mock-jurors' demographic characteristics appear to affect their perceptions of a child's testimony and so demographics were measured and analysed in the present study.

Other mock-juror studies have compared different forms of presentation of children's evidence-in-chief. For example, a number of studies have examined mock-jurors' perceptions of child evidence given live in open court in comparison to via a live CCTV link (Davies, 1999; Goodman, et al., 1998; Orcutt, et al., 2001), or via a video-recorded interview (Landström & Granhag, 2010; Landström, Granhag, & Hartwig, 2007). Other studies have compared adult's 'hearsay' evidence of a child's interview with the child's interview itself (Redlich, Myers, Goodman, & Qin, 2002; Warren, Nunez, Keeney, Buck, & Smith, 2002), or live testimony (Goodman, et al., 2006; Myers, Redlich, Goodman, Prizmich, & Imwinkelried, 1999). These studies generally found live evidence provided by children was perceived more positively than that provided via CCTV link or testimony video-recorded in advance of the trial. However, evidence provided by an adult summarising the child's evidence was found to have mixed effects on jurors' perceptions.

Thus, it is likely that the manner in which a child's evidence is presented in court will have significant effects on mock-jurors' perceptions.

Presenting a child's video-recorded investigative interview in court instead of the child providing live testimony is an option to courts in several countries currently, including the UK and New Zealand (Anderson, Gross, Sonne, Zajac, & Haynes, 2016). Despite the documented benefits of the use of video-recorded interviews for decreasing children's stress (Davies, Wilson, Mitchell, & Milsom, 1995), concerns have been raised in both New Zealand and the UK regarding the possible length of the interviews. For example, the Crown Prosecution Service suggest that a child's video-recorded interview is "likely to have more impact with the court if it is not unnecessarily lengthy" (Crown Prosecution Service, Editing visually-recorded interviews section, para 1). Thus, they recommend careful editing in some cases. However, few studies have looked at how presenting different sections of a child's interview to court can affect juror judgements. Two that have, provided mock-jurors with verbatim, fictitious transcripts of child interviews that had been modified (Anderson et al., 2016; Krähenbühl, 2012). Krähenbühl's (2012) study modified non-substantive aspects of the transcripts; namely, the child victim's age and gender, and whether the participant read the verbatim rapport-building section of the transcript or merely read that rapport-building had occurred. Anderson et al. (2016), conversely, edited the number and bizarreness of additional allegations the participants read alongside a 'core' allegation. Both studies found that omitting sections of the interview had significant effects on mock-jurors' perceptions of the child victim. For example, Anderson et al. (2016) found that a core allegation in context (i.e., within an interview including other allegations) was perceived as more or equally believable than an out of context allegation (i.e., a single allegation within an interview), irrespective of how bizarre the additional allegations were. Furthermore, although the number of allegations mock-jurors read had little effect on their perceptions of the child, those that believed the core allegation had more positive opinions of the child. In particular, they thought the child was more honest than participants who did not believe the core allegation. Although the direction of this effect may be somewhat surprising (the authors hypothesised that additional, less plausible allegations would undermine perceptions of the core allegation), it is perhaps not surprising that modifying the provision of testimony addressing details of the relationship between the victim and suspect affected mock-jurors' perceptions of the victim and suspect.

A more surprising finding, however, is that modifying participants' exposure to non-substantive aspects of the interview affects their perceptions of the testimony. Krähenbühl (2012) found that when jurors were presented with the full rapport-building transcript as well as the substantive section (compared to the substantive section alone), they judged the child as more accurate, honest, credible and confident, as well as judging the interview as of better quality, the child having understood more about the interview concept and to have given more complete and clear information. Thus, mock-jurors' ratings of the child witness and the interview were more positive when they read the full rapport-building transcript than when they just read the substantive section. Krähenbühl gave two possible explanations for this. One explanation was that the full rapport-building transcript gave jurors a greater insight into why and how the interview was being conducted and confirmed that the child understood why and how the interview was to be conducted (the verbatim rapport-building section included a 'ground rules' section that described how the interview would play out and discussion of the child's understanding of truth and lies). She argued that this extra information affected the way that jurors made their credibility judgements. However, it was impossible to judge whether this change in credibility judgement was an improvement (e.g., increasing the accuracy of mock-jurors' judgements) because the written transcript was based on two real child sexual abuse cases and therefore was somewhat fictional. Mock-jurors have been found to not be very skilled at judging accuracy in children's recall (Bottoms, Quas, & Davis, 2007), and so modifications that have been shown in experimental studies to improve mock-jurors' detection of inaccuracies would be particularly beneficial for court cases. Alternately, Krähenbühl suggested that these results may have been caused by the increased length of the transcript including the full rapport-building section. However, she suggested this was unlikely as other studies have shown interview length to have no effect on trial convictions in the field (e.g., Wilson & Davies, 1999).

An alternative explanation to either of these is that reading the rapport-building gave mock-jurors a greater understanding of the interviewer-interviewee relationship. Rapport-building is, in theory, meant to ease children's anxieties regarding the investigative interview and to create camaraderie between the interviewer and the interviewee. Thus, Krähenbühl's (2012) participants who read the full rapport-building transcript may have perceived there to be a better interviewer-interviewee relationship

than those who were not exposed to the rapport-building section and thus viewed the child more positively. Bottoms, Rudnicki, and Nysse-Carris (2004, as cited in Bottoms, Quas, et al., 2007) found that the amount of social support provided to a child during an interview did affect adults' perceptions of the believability of the child. However, they found the opposite effect to Krähenbühl (2012); that social support decreased adults' perceptions of the child's believability and credibility. The present study will separate the 'ground rules' section from the rapport-building phase in order to examine whether another aspect of rapport-building is affecting mock-jurors' perceptions.

### **5.1.2 Mock-Juror Studies and Multiple Interviews**

It seems there has been only one study that has examined mock-jurors' opinions of testimony provided in multiple interviews (Yozwiak et al., 2004). Due to reminiscence (i.e., new information provided in a later recall session), counsel may wish to show more than one of the child's interviews in court. However, this stands against Crown Prosecution Service advice that showing the jury lengthy videos should be avoided. Yozwiak et al. (2004) examined how different recall in repeated interviews could affect mock-jurors' opinions. Mock-jurors were given a written account of a fictional child sexual abuse case, including descriptions of the alleged victim's testimony, the defendant's testimony, the testimony of a friend of the defendant and the detective, and the judge's instructions. There were two different versions of the summary of the victim's interviews. In one version, the child victim gave complete disclosure in both interviews, and in the other, the child victim partially disclosed in the first interview and then fully disclosed in the second. They found that mock-jurors perceived the latter child as less believable than the former, and that they also gave significantly more guilty verdicts in the former case. This finding is troubling, as Yozwiak et al. mention, because children often do not fully disclose in their first investigative interview, and this may in fact be the cause and benefit of a second interview in some cases (including some analysed in chapter three). Therefore, jurors being presented evidence of children's part disclosure across multiple interviews may be a relatively common occurrence in courts, which may be having detrimental effects on jurors' decision-making. However, there are a number of limitations to the ecological validity of this study. Firstly, participants were only provided with summaries of the interviews, which is unlikely to occur in a court. Secondly, as in Krähenbühl (2012) and Anderson et al.'s (2016) studies, the mock-jurors had to read the information about the trial. Brief written summaries of a child's recall in

two interviews may make it very easy to determine how consistent the child is being. Watching two real interviews with questions and answers may affect their perceptions of consistency differently. In addition, mock-jurors are likely to use non-verbal and tonal cues to judge a child's testimony. Thus, these studies may not accurately portray mock-jurors' perceptions of the testimony as it would be presented in court.

Other studies support the concept that mock-jurors perceive inconsistent testimony as less reliable than consistent testimony. In Leippe, Manion, and Romanczyk's (1992) study, mock-jurors' ratings of a child's consistency within an interview strongly predicted their ratings of the child's believability and memory accuracy; children perceived as more consistent were also rated as more believable. Additionally, when asked to what extent participants agreed with two statements about consistency, some participants agreed with incorrect statements aligning inconsistency with inaccuracy (Quas, Thompson, & Clarke-Stewart, 2005). The first statement, to which 25% of participants agreed, was that "When a child's description of sexual abuse is disclosed over time, with more details being reported each time the child is interviewed, this clearly indicates that the child's description is false" (Quas, et al., 2005, p. 439). Slightly more participants (29%) agreed that "Inconsistencies in a child's report of sexual abuse indicate that the report is false" (Quas et al., 2005, p. 439). Thus, perceived inconsistency appears to affect some mock-jurors' perceptions of a child's testimony. The present study will examine whether inconsistent details are rated as less believable than consistent ones, and whether perceived believability is affected by whether the inconsistencies appeared to occur within one interview or across two separate ones.

### **5.1.3 The Present Study**

The present study aims to act as a crucial second study of the effect of the presentation of rapport-building on mock-jurors' perceptions of child witness testimony, along with acting as the first study to examine mock-jurors' responses to viewing videos of multiple interviews in comparison to viewing a video of a single interview. Thus, the same interviews will be presented with and without the rapport-building phase, and written descriptions will state that the interviews shown are either one interview with a ten-minute refreshment break between them, or two interviews with a week delay between them.



Unlike previous studies, the effect of viewing the rapport-building phases on mock-jurors' opinions of the interviewer and the warmth of the interview will be analysed along with their perceptions of the child and her testimony. Another change in the present study is that the child's testimony will be presented via a video-recording rather than in a written transcript. This will increase the ecological validity of the findings, but may not affect the results themselves; previous studies have found the form of presentation (visual or written) to have no significant effects on experimental outcomes (Goodman et al., 1987).

The present study also aims to disentangle the effects of rapport-building from that of viewing the 'ground rules' of the interview. Thus, all mock-jurors will only be provided with a brief written account of the 'ground rules', and those that watch the rapport-building section will only view the neutral discussion phase. Finally, participants will be asked to rate the likelihood that specific details provided within the child's testimony actually occurred in the film the child watched. These details differed according to the consistency with which they were provided (once, twice, or contradicted), and so we can determine if the consistency of recall of individual details affects mock-jurors' perceptions of the child's credibility regarding those specific details. These perceptions may also be affected by how long a delay the participants believe there to have been between the two interviews (i.e., a matter of minutes or a week). Therefore, the effect of delay on these perceptions will also be examined.

Based on the literature reviewed above, the following hypotheses were put forward:

- Mock-juror demographics were expected to affect their perceptions of the child, and case progression. Specifically, women were expected to perceive the child's testimony more positively than men. On the other hand, mock-jurors' ages, jury experience, and experience of children were not predicted to affect perceptions.
- Viewing the rapport-building phase of the interview(s) was predicted to significantly affect mock-jurors' perceptions of the child's testimony and the interview.
- Due to the lack of prior research examining mock-jurors' perceptions of single in comparison to multiple interviews, no hypotheses were made as to how or if

perceptions would be affected by whether participants believed they were watching a single interview or two separate interviews.

- Mock-jurors were expected to rate repeated details as more likely to have happened than those provided in only one interview, or contradicted from one interview to the next.

## **5.2 Method**

### **5.2.1 Sample**

One hundred and twenty-five participants completed the survey. However, some of these completions took too little time for the participants to have viewed the videos in full (likely due to technical problems) and some completed the survey over a period of more than 24 hours. These 22 participants were removed from the final sample as it was probable that they did not complete the survey correctly. This left 103 participants in the final sample, and between 25 and 26 participants per condition. Previous studies have often included between 13 and 20 participants per condition (e.g., Anderson et al., 2016; Krähenbühl, 2012; Pathak & Thompson, 1999), and so the present study has a larger sample and thus more power.

The resulting sample ranged in age from 19 to 69 years ( $M = 39.47$ ,  $SD = 15.73$ ). The majority of participants were female (64.1%), and described themselves as *English, Welsh, Scottish, Northern Irish, or British* (87% of the 100 participants who provided this information). The full sample stated they were jury eligible, but only 14 participants had ever been part of a real jury (13.6%). Twelve participants stated they currently provided childcare for a child between the ages of six and 11 more than once a week (11.7%) and 38.8% of the participants were or had been parents or guardians to children. There were only 13 students in the present sample.

### **5.2.2 Recruitment**

A referral sampling design was utilised. Participants were recruited via social media. Friends and family were asked to complete the survey themselves via a Facebook page and status updates. They were also asked to invite their own friends and family to the page, and to circulate the link to the survey to people they knew. Email links were also sent to those that requested it.

### 5.2.3 Design

The study had a 2 (rapport-building phase: shown vs. not shown) x 2 (description of number of interviews: two vs. one) between-participants design. However, a within-subjects aspect of the design, the consistency of the detail (provided in clip one only, provided in clip two only, provided in both clips, contradicted in second clip) was added as a further independent variable.

### 5.2.4 Materials and Procedure

#### *The Interview Videos*

A sub-sample of children's interviews were selected from those conducted for the experimental study described in chapter four. These were selected on the following criteria:

1. In the consent form for the study for chapter four, the child's parent had not only consented to the interviews being video-recorded, but also provided contact details in order for the researcher to provide further information and a consent form for the current study.
2. The child and the interviewer made no reference to the delay between the two interviews.
3. The child looked similar in their first and second interviews. This included wearing the same clothes and having a similar hairstyle.
4. His/Her first and second interviews were conducted in the same room, with no significant changes to the background.
5. The child provided mainly accurate information in both interviews but some inaccurate details.
6. He/She provided repeated and new accurate information in their second interview.
7. He/She directly contradicted themselves across interviews, but only on one or two points (e.g., having said the thief's hair was blonde in the first interview and black in the second).

The parents of the first six children who had appropriate interviews were contacted and asked to provide a postal address (in order to send details of the present study and a consent form) if they were still interested in their child's interviews being used in the current study. Two parents responded to this request, and both gave their consent for

their child's interviews to be used. In order to limit the length of time participants had to spend on the study, the child with the shorter videos was chosen.

Thus, the first and second interviews of a seven year old girl were used. These were anonymised by cutting sections in which the child's name or personal details (such as discussion of the child's family in the rapport-building section) were mentioned, and pixelating the school badge on the child's jumper. The rapport-building section was then separated from the substantive section.

### *The Online Survey*

The survey was put online using a surveying software called Qualtrics. The video recordings were uploaded to YouTube, using the strictest privacy settings, and embedded in the Qualtrics survey.

Participants were first directed to a page where they were asked to give fully informed consent. They were then asked to confirm that they were eligible to be a member of a UK jury. A detailed explanation of the criteria for jury eligibility in the UK was given, and the participant had to then state whether they were eligible or not (see Appendix F). Prior to watching the interviews, the participants were asked to provide demographic details, specifically their age, gender, and profession, as well as whether they had ever sat on a real jury. After they had watched the video recordings and completed the perceptions questionnaire, participants were asked three questions on their experience with children. These were (a) Are you, or have you ever been, a parent or guardian to any children? (b) How much experience of children do you have? which involved a response on a ten-point Likert scale from *No experience at all* to *A lot of experience*, and (c) Are you currently providing childcare for a child between the ages of six and eleven more than once a month? This was followed by a question asking participants for their ethnic group.

Prior to the videos, participants were provided with the following information:

You will shortly view some videos of a child being interviewed. The child is being asked about a film they have seen of an incident. However, for the purpose of this study, we would like you to consider their testimony as if they were speaking about something they had witnessed live, as part of the following trial.

This testimony is part of a criminal trial for the alleged theft of the victim, Jade Richards', handbag by the defendant, Jon Ellis. It is alleged that Jon Ellis stole Jade Richards' handbag in Kingston, London, in the afternoon of the 15<sup>th</sup> November, 2014. The state is charging Jon Ellis with theft. The trial started after the defendant entered a plea of "not guilty." The videos you are about to watch consist of the investigative interview of Mary Lakes, a seven year old witness for the prosecution.

Mary Lakes was not the child's real name. The next instructions differed according to the rapport-building condition.

*Participants in the rapport condition.* Participants who were going to view the rapport-building recording were informed that the interview/s "includes a rapport-building session prior to the discussion of the alleged theft, which you will be shown", and were reminded to turn up their computer's volume, only watch the video once and pay attention throughout. They then watched the rapport-building video. Prior to watching the substantive section, they were given the following details:

At this point, the interviewer checked Mary's understanding of truths and lies, which she understood, and explained to Mary a number of ground rules about the interview.

The interview then continued with the interviewer asking her to tell everything she remembered about the event.

*Participants in the no rapport condition.* Participants who were not to view the rapport-building videos were given the following information:

You will be shown the interview from the point at which Mary and the interviewer began discussing the theft. Just prior to this, the interviewer discussed Mary's recent trip to the aquarium with her in order for Mary to feel more relaxed and for her to get to know the interviewer and build a relationship. The interviewer also checked Mary's understanding of truth and lies, which she understood, and explained to Mary a number of ground rules about the interview. In total, this took

five minutes. The interview then continued with the interviewer asking her to tell everything she remembered about the event.

These participants then watched the substantive part of the interview, after having been instructed to turn up their computer’s volume, only watch the video once and pay attention throughout. Neither group, therefore, viewed the ground rules section of the video.

*One versus two interview condition.* After having watched the first substantive section, the participants were presented with a page which either informed them that “the following interview was conducted one week later” or that “the interview was then paused for a 10 minute refreshment break. The interview then continued with the interviewer asking Mary to tell everything she remembered again.”

In the one interview manipulation, none of the participants viewed the rapport-building part of the second interview. Participants in the two interview manipulation viewed the second rapport-building recording only if they had seen it as part of the first interview (see Table 5.1).

Table 5.1

*Videos watched in each group condition.*

Condition	Interview One Videos		Interview Two Videos	
	Rapport- building	Substantive	Rapport- building	Substantive
One interview x No rapport		✓		✓
One interview x Rapport	✓	✓		✓
Two interviews x No rapport		✓		✓
Two interviews x Rapport	✓	✓	✓	✓

After the appropriate group had viewed the second rapport-building video, they were informed that “Mary Lakes was then reminded of the ground rules, including the importance of telling the truth. The interview then continued, with the interviewer asking Mary to tell everything she remembered again.” After reading this, participants watched the substantive section of the interview.

Participants in the two interview x no rapport group were given the following information:

The following interview was conducted one week later. After a discussion of Mary's recent walk in the park, to make her feel at ease with the interviewer, the interviewer asked Mary to tell everything she remembered again.

They then watched the substantive section of the interview.

After the participants had watched the relevant recordings, they were presented with the perceptions questionnaire (see below). After this and the questions on child experience and ethnicity, participants viewed a page which provided debriefing information and thanked them for their participation.

#### *Mock-Juror Perceptions Questionnaire*

Participants were first asked questions about their general perceptions of the child witness and the interview (see Table 5.2 for questions and Appendix F for the full online study). These were all responded to on a ten-point Likert scale.

Participants were then asked about their memories for specific comments the child made in the interview which varied according to their accuracy and the consistency with which the child made the statements (see Table 5.3). The contradictions were details for which the child had provided conflicting information in an alternative interview. For example, the child said “the victim was wearing leggings and a skirt” in the second interview, but in the first interview had said the victim was wearing a dress and tights. For each detail, the participants were first asked if they remembered the child mentioning the detail in her interview. If they did remember her saying it, they were then asked how likely (on a ten-point Likert scale) they felt it was that that detail had actually happened in the film. Finally, the participants were asked two questions about the case. Firstly, ‘If you were in charge of the prosecution’s case (e.g., the side trying to persuade the jury that the

defendant is guilty), how likely would you be to show these interview clips in court?’ Participants were asked to respond on a ten-point Likert scale from Very Likely to Very Unlikely. The second question was ‘If other evidence in the case was equally balanced, what would your verdict be based on the child’s evidence?’, to which participants could answer Guilty or Not Guilty.

Table 5.2  
*Mock-juror perceptions questions*

Questions	Likert Scales	
	1	10
<b>Child Witness</b>		
How believable was the child witness?	Very Believable	Unbelievable
How credible do you think the child witness was?	Very Credible	Very uncredible
How accurate do you think the child was?	Very accurate	Very inaccurate
How truthful do you think the child was?	Very truthful	Very untruthful
How clear was the child’s testimony?	Very clear	Very unclear
How anxious do you think the child was when they were interviewed first?	Very calm	Very anxious
How anxious do you think the child was when they were interviewed after the break?	Very calm	Very anxious
How well do you think the child understood the questions asked to them?	Understood completely	Did not understand at all
<b>Interview</b>		
How fair do you think the interviewer was being to the child?	Very fair	Very unfair
How friendly do you think the child’s interviewer was?	Very friendly	Very unfriendly
How clear do you think the questions the child was asked were?	Very clear	Very unclear

*Note.* Responses were all reverse scored in the results section for ease of interpretation.

After filling out these questions, the participants were asked to identify in which interview clip they remembered the child recalling each of the details in Table 5.3 (i.e.,



interview clip one, two, or both). They were then asked if the child had contradicted herself on any of these points. If they answered yes, they were asked to indicate how she had contradicted herself. This was designed to determine whether participants remembered these contradictions (without it necessarily affecting their initial perceptions of the child and her testimony).

Table 5.3

*Accuracy and Consistency for Specific Detail Questions*

Detail in Question	Accuracy	Consistency
Lady said “Oh no” when she got her bag back.	Correct	Repeated
Bag that was stolen was beige.	Incorrect	Interview One only
The “nice” man that gave the bag back had short hair.	Correct	Interview One only
The victim (whose bag was stolen) went to get the police.	Contradiction	Interview One only
The thief and the “nice” man were by a factory.	Incorrect	Repeated
The thief took credit cards out of the lady’s bag.	Correct	Interview Two only
The victim was wearing leggings and a skirt.	Contradiction	Interview Two only

**5.2.5 Pilot Study**

A pilot study was conducted with six participants who were asked to complete the survey and comment on the clarity of the questions and information provided. One participant stated they had taken notes while watching the videos. This would be allowed in a jury setting and so a sentence was added to the online survey to inform participants that they could take notes during the recordings if they wanted to. This was included in the sections in which participants were asked to concentrate fully on the videos. A question was also added at the end to determine whether they had taken notes. Additionally, some of the Likert scales in the perceptions questionnaire had originally been reversed in order to counteract response bias. However, after feedback from the participants, this was amended so that all Likert scales were aligned. No changes to the questions themselves were made, and so pilot participants’ responses were included in the final sample.

### 5.3 Results

The results were analysed in three phases. The first involved analysing how juror demographics might have affected their perceptions of the child witness, the interview and case progression. The second examined how rapport and interview number conditions might have affected mock-juror perceptions. The final phase involved a within-subject comparison of mock-juror perceptions of the reliability of specific recall statements according to their novelty in the interviews.

**Transformation.** Prior to running any analyses, participants' ratings of the child's testimony, the interview, their likelihood of using the video recordings in court, and the likelihoods of specific details having occurred were reverse coded. This was for ease of interpretation and meant that higher scores now indicated positive responses (e.g., very believable, very likely) and lower responses indicated negative responses (e.g., very anxious, very inaccurate).

When analysed for the relevant groups, many of the child witness and interview perception dependent variables had non-normal distributions. This was generally due to a large negative skew of the scores. Thus, when necessary, scores for dependent variables were subjected to reverse log, reverse square root, and reverse reciprocal transformation. Any extreme outliers after transformation were removed. For none of the analyses did these transformations normalise all groups' dependent variable responses. Thus, the results were unlikely to meet the assumption of multivariate normality required for MANOVAs. However, Tabachnick and Fidell (2013b) state that MANOVA is robust to nonnormality as long as the sample size in the smallest cell is at least 20. All cells continued to have a count of over 20 (unless otherwise stated in analysis), and therefore the appropriate transformed scores (decided based on maximum numbers of dependent variables for which skew was reduced) were entered into factorial MANOVAs and ANOVAs, irrespective of the lack of normality in their distributions.

**Multicollinearity and Singularity.** Multicollinearity describes the situation in which dependent variables are highly correlated, and singularity describes a situation where two variables are so correlated that they may be measuring the same thing, making one of the

variables redundant. According to Tabachnick and Fidell (2013c), statistical problems related to multicollinearity and singularity occur when the correlation between two variables ( $r$ ) is greater or equal to .90. Logical problems occur when  $r > .70$ . In the current study, the majority of child witness dependent variables' correlation scores are below .70. However, for the relationship between credibility and believability ( $r = 0.767$ ) and truthfulness and believability ( $r = .760$ ), the correlations are higher than .70. Despite this, all three variables are still included in the MANOVAs described below. This is because although truthfulness, believability, and credibility are similar concepts, they are thought to be different perceptions of the child, and their correlations are only high enough to cause interpretational issues. The correlations between the interview perception scores were below the .70 threshold ( $r_s < .574$ ) and so all of these dependent variables were also included in the interview perception MANOVAs.

### 5.3.1 Juror Demographics

**Transformations.** For the following analyses, reverse log-transformations were most effective at reducing skew for the child witness questions, and log square root-transformations for the interview questions (see Table 5.2). Thus, for all MANOVAs, these transformations were used.

**Age.** Separate correlations were conducted for age and all eight child witness perception questions (see Table 5.2). Age was found to be non-normally distributed (positively skewed and platykurtic), but no outliers were identified. The dependent variables were also non-normally distributed, and no outliers were identified. Thus, individual Spearman's correlations were conducted between age and the eight child witness perception questions. The critical significance value was reduced to  $p < .01$  to reduce Type I errors. No correlations were found to be significant,  $r_{sS} < \pm .21$ ,  $ps > .032$ , so age was not related to participants' perceptions of the child witness.

Spearman's correlations were also conducted between participants' ages and their three ratings of the interview (see Table 5.2). No significant correlations were found,  $r_{sS} < \pm .03$ ,  $ps > .767$ ; age did not affect participants' perceptions of the interview.

A Spearman's correlation was also conducted between age and participants' ratings of how likely they would be to use the child's evidence in court. This was non-significant,  $r_s$

= .08,  $p = .443$ . A point-biserial correlation between age and participants' verdicts was non-significant,  $r_{pb} = .18$ ,  $p = .087$ . Thus, age also did not affect participants' case progression decisions.

**Gender.** Male and female participants' child witness ratings were not normally distributed. Neither were their interview perception ratings, nor their likelihood of showing the video recordings in court. After transformation, two ratings, identified as extreme outliers, were removed. A MANOVA was conducted with gender as the independent variable and reverse square root-transformed child witness perceptions as the dependent variable. Using Roy's largest root, there was no significant effect of gender on mock-jurors' child witness perceptions,  $\Theta = 0.07$ ,  $F(8, 89) = 0.77$ ,  $p = .632$ . Reverse square root-transformed responses to interview perception questions were then entered into another MANOVA with gender as the independent variable. Gender again had no effect on mock-juror perceptions using Roy's largest root,  $\Theta = 0.02$ ,  $F(3, 98) = 0.73$ ,  $p = .536$ .

Regarding the question about their use of the video clips in court if they were in charge of the prosecution's case, a Mann-Whitney test with non-transformed responses showed no significant effect of gender,  $U = 1,187.0$ ,  $z = -0.24$ ,  $p = .811$ ,  $r = .02$ . There was also no significant association between gender and verdict,  $\chi^2(1) = 3.38$ ,  $p = .066$ . Thus, gender did not affect participants' case progression decisions.

### **Child Experience.**

*Parent/Guardian.* Neither parents' nor non-parents' responses to child witness, interview, or case progression questions were normally distributed. Two outliers were removed. A MANOVA with reverse square root-transformed child witness perceptions as the dependent variable and whether the participant was a parent or not as the independent variable indicated no effect using Pillai's trace,  $V = 0.13$ ,  $F(8, 90) = 1.72$ ,  $p = .105$ . Pillai's trace was used to overcome the unequal sample sizes in the parent and non-parent groups. A MANOVA with reverse square root-transformed interview perception data also found no effect of whether the participant was a parent or not on perception scores,  $V = 0.01$ ,  $F(3, 98) = 0.39$ ,  $p = .760$ . Parents and non-parents were also equally likely to use the video clips in court,  $U = 1,034.5$ ,  $z = -1.56$ ,  $p = .119$ ,  $r = .15$ , and whether the participant was a parent or not did not affect their verdict,  $\chi^2(1) = 1.36$ ,  $p = .243$ .

*Child Experience.* Participants' ratings of their experience with children were not normally distributed. The mock-jurors' results were also non-normally distributed and no outliers were identified. Thus, Spearman's correlations were conducted with rating scores, and the critical significance was again reduced to  $p < .01$  to reduce the risk of Type I errors. There were no significant correlations between child experience and mock-juror perceptions of the child witness or the interview,  $r_{ss} < \pm .21$ ,  $ps > .034$ . Experience did not correlate with how likely the participant would be to use the video clips in court,  $r_s = -.09$ ,  $p = .346$ , or with their verdicts,  $r_{pb} = .13$ ,  $p = .197$ .

*Current Childcare.* Ratings provided by participants who did and did not currently provide childcare at least once a month to a child between six and 11 years old were not normally distributed. After transformation, two outliers were removed, and most scores were fairly normally distributed. However, the cell count for those who did provide childcare was low ( $n = 12$ ) and so we should be cautious of the results as the assumption of multivariate normality may have been violated (as described in the transformation section above). Reverse square root-transformations for child witness perceptions were entered as the dependent variable into a MANOVA with whether the participant provided childcare or not as the independent variable. Using Pillai's trace, the MANOVA indicated no significant effect of current childcare provision on child witness perceptions,  $V = 0.04$ ,  $F(8, 90) = 0.42$ ,  $p = .908$ . Reciprocal transformations were entered into a MANOVA examining participants' interview perceptions. Using Pillai's trace, there was also no effect of childcare provision on these perceptions,  $V = 0.02$ ,  $F(3, 98) = 0.50$ ,  $p = .680$ . Whether they currently provided childcare was also not associated with participants' ratings of how likely they would be to use the recordings in court,  $U = 567.5$ ,  $z = 0.23$ ,  $p = .821$ ,  $r = .02$ , nor their verdicts,  $\chi^2(1) = 0.03$ ,  $p = .873$ . However, for this last chi-square test, one of the four cells (i.e., 25%) had an expected count of less than five (1.81).

**Jury Experience.** Participants' responses divided into those with and without jury experience were, in the majority, non-normally distributed for questions related to the child witness, the interview, and their likely use of the video clips in court. One extreme outlier was identified and removed, resulting in most child witness ratings being normally distributed, but the smallest cell size was less than 20 ( $n = 14$ ). The child witness

MANOVA with reverse log-transformations of participants' child witness ratings as the dependent variable and whether the participant had sat on a jury or not as the dependent variable revealed, using Pillai's trace, that there was no significant effect of jury experience on child witness perceptions,  $V = 0.14$ ,  $F(8, 91) = 1.88$ ,  $p = .073$ . The second MANOVA was conducted with reverse square root-transformed interview perceptions. Some of the distributions of ratings within groups were still non-normal and the smallest cell size was 14, indicating that we should interpret the results with caution. Using Pillai's trace, the MANOVA found no significant effect of jury experience on interview perceptions,  $V = 0.02$ ,  $F(3, 98) = 0.56$ ,  $p = .646$ . Additionally, jury experience did not affect participants' ratings of how likely they would be to show the video clips in court,  $U = 610.0$ ,  $z = -0.13$ ,  $p = .898$ ,  $r = .01$ , or their verdicts,  $\chi^2(1) = 0.47$ ,  $p = .492$ . However, one cell in this final analysis had an expected count of less than five (2.10).

**Summary.** Juror demographics in the form of age, gender, child experience and jury experience were not associated with participants' perceptions of the child witness, the interview, or their case progression decisions (i.e., verdict and whether they would show the interview clips in court).

### 5.3.2 Group Comparisons

**Transformations.** For the following analyses, reverse square-root-transformations were most effective at reducing skew for the largest number of dependent variables for child witness and interview ratings. Thus, this transformation was used. Two outlier ratings were identified and removed. The smallest cell size was larger than 20 for all of these analyses.

**Child Witness Perceptions.** Mean non-transformed scores for each group are provided in Table 5.4. A factorial MANOVA was conducted with rapport condition (watched rapport-building phase x did not watch it) and interview number condition (presented as one interview x presented as two) as the independent variables, and participants' reverse square root-transformed responses to the eight child witness questions (see Table 5.2) as the dependent variables. Using Pillai's trace, there was a significant effect of rapport condition,  $V = 0.18$ ,  $F(8, 88) = 2.37$ ,  $p = .023$ , and a significant effect of the number of interviews on child witness perceptions,  $V = 0.18$ ,  $F(8, 88) = 2.40$ ,  $p = .022$ . The interaction between rapport condition and number of interviews was not significant,  $V =$

0.06,  $F(8, 88) = 0.74$ ,  $p = .654$ . Separate two-way ANOVAs revealed differences between groups for three of the eight dependent variables. For ratings of believability, both the number of interviews,  $F(1, 98) = 8.98$ ,  $p = .003$ , and rapport condition,  $F(1, 98) = 5.54$ ,  $p = .021$ , had an effect. Participants who believed they were viewing two separate interviews rated the child as more believable ( $M = 8.64$ ,  $SD = 1.51$ ) than those who believed they were viewing one ( $M = 8.00$ ,  $SD = 1.52$ ), and participants who did not view the rapport-building also rated the child as more believable ( $M = 8.56$ ,  $SD = 1.45$ ) than those who did watch the rapport-building recording/s ( $M = 8.06$ ,  $SD = 1.61$ ).

Participants' credibility ratings were also affected by whether they saw the rapport-building recordings or not,  $F(1, 99) = 7.17$ ,  $p = .009$ ; those who did not watch the rapport-building videos rated the child as more credible ( $M = 8.27$ ,  $SD = 1.65$ ) than those who did ( $M = 7.37$ ,  $SD = 1.95$ ). Additionally, participants' ratings of the child's truthfulness were affected by whether they believed they were watching one interview with a ten minute break, or two separated by a week,  $F(1, 99) = 6.02$ ,  $p = .016$ ; those in the latter condition rated children as more truthful ( $M = 8.82$ ,  $SD = 1.10$ ) than those in the former ( $M = 8.04$ ,  $SD = 1.78$ ). Thus, number of interviews and whether the participants saw the rapport-building or not affected mock-jurors' perceptions of the child witness.

Table 5.4

*Non-transformed Average Scores (and Standard Deviations) for Child Witness and Interview Perceptions*

	Rapport-building video		No rapport-building video	
	One interview	Two interviews	One interview	Two interviews
Child Witness Perceptions				
Believable	7.73 (1.66)	8.40 (1.50)	8.26 (1.35)	8.88 (1.51)
Credible	7.04 (1.99)	7.72 (1.88)	8.15 (1.68)	8.40 (1.63)
Accurate	6.85 (1.57)	7.16 (1.68)	7.11 (1.99)	7.44 (1.61)
Truthful	7.81 (2.00)	8.96 (1.10)	8.26 (1.53)	8.68 (1.11)
Clear	7.15 (2.09)	7.96 (1.21)	7.31 (2.11)	7.68 (1.68)
Anxious in First Clip	5.04 (2.09)	5.58 (2.02)	5.33 (1.78)	5.92 (1.89)
Anxious in Second Clip	7.42 (1.55)	6.84 (1.86)	7.04 (1.37)	7.20 (1.50)
Understood	8.73 (1.12)	9.24 (0.66)	8.78 (1.31)	8.96 (1.02)
Interview Perceptions				
Fair	9.12 (0.82)	9.40 (0.96)	9.52 (0.64)	9.36 (0.70)
Friendly	9.23 (1.07)	9.40 (0.87)	9.19 (1.42)	9.28 (0.79)
Clear Questions	8.58 (1.24)	9.04 (1.02)	9.07 (1.44)	8.60 (1.19)
Case Progression Perceptions				
Likelihood of Using Clips in Court	7.00 (2.28)	7.96 (2.44)	8.22 (1.78)	7.84 (2.19)
Percentage Guilty Verdict	79.2%	75.0%	88.0%	91.7%

*Note.* All scores were on a scale of one to ten and reverse scored so one indicated the least positive response (e.g., Not friendly at all, Very unlikely, or Very anxious) and ten indicated the most positive (e.g., Very clear, or Very friendly).

Perceptions of the witness's anxiety in the first and second video recordings were also entered into a mixed design ANOVA with the video recording (first and second) as the repeated-measures independent variable, and whether the participant watched the rapport-building phase and the number of interviews the clips appeared to be as the two between-subjects variables. Participants' ratings of anxiety were normally distributed within groups, and so the raw scores were entered as the dependent variable. There was a



significant difference between the ratings for the first and second interviews,  $F(1, 97) = 120.89, p < .001, r = .74$ , indicating that the child witness was rated as significantly more anxious in the first than the second interview. There was also a significant interaction between the number of interviews the participant thought they were watching and the ratings for the first and second interview clip,  $F(1, 97) = 5.62, p = .020, r = .23$ . The interaction graph (see Figure 5.1) shows that although both groups perceived the child as less anxious in the second interview, those who believed they were watching one interview with a short break perceived a greater difference in the child's anxiety between first and second interview clips than those who believed they were watching two separate interviews. The remaining interactions, and the main effect of watching the rapport-building and the number of interviews they thought they were watching were non-significant,  $F_s(1, 97) < 1.48, p_s > .227$ .

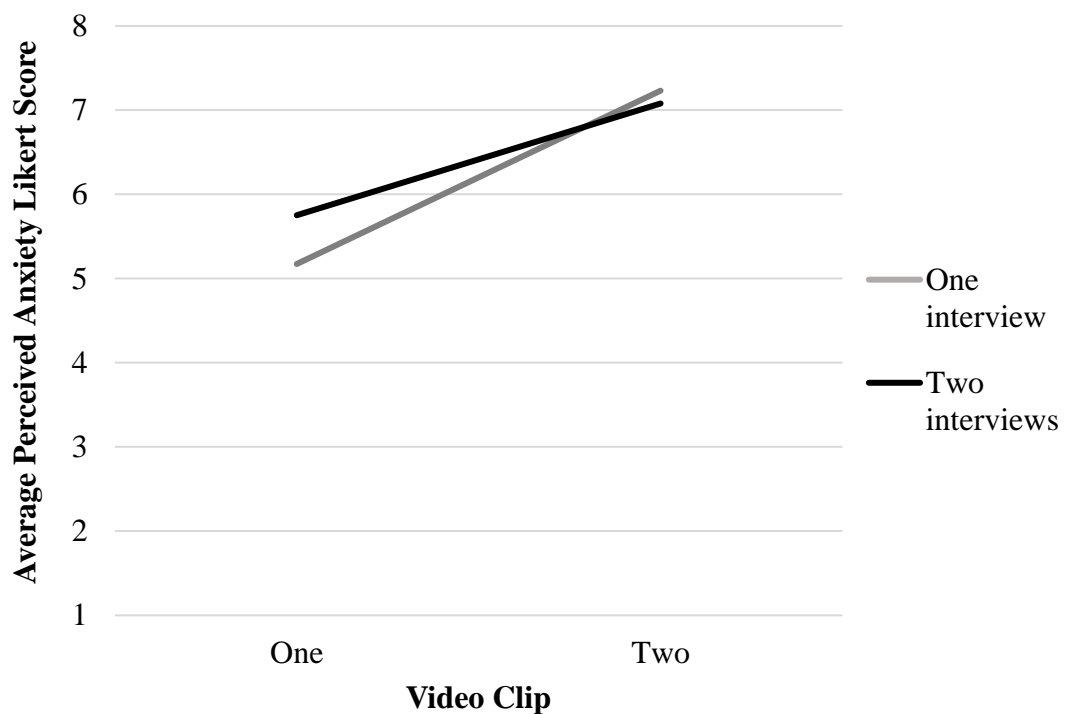


Figure 5.1. Interaction between average perceived anxiety in interview clip one and two and number of interviews participant believed they were watching.

Note. The Likert scales here are such that one indicates 'very anxious' and ten 'very calm'.

**Interview Perceptions.** Mean scores by group are provided in Table 5.4. Another factorial MANOVA was conducted with the same independent variables, and

participants' reverse square root-transformed responses to the three interview perception questions (see Table 5.2) as the dependent variables. Pillai's trace results were non-significant for rapport,  $V = 0.01$ ,  $F(3, 96) = 0.46$ ,  $p = .714$ , number of interviews,  $V = 0.01$ ,  $F(3, 96) = 0.23$ ,  $p = .874$ , and the interaction between these variables,  $V = 0.04$ ,  $F(3, 96) = 1.38$ ,  $p = .254$ . Thus, interview perceptions were not affected by whether the participant saw the rapport-building phase or not, or whether they thought the video clips were from one interview with a short break or two interviews separated by a week.

**Case Progression Perceptions.** Table 5.4 shows the average scores for each groups' ratings of how likely they would be to use the clips in court if they were in charge of prosecution, and the percentage of participants who stated that if all other evidence was equal, based on the child's videos they would vote guilty in a trial. A factorial ANOVA with the same independent variables was conducted with the dependent variable of mock-jurors' reverse square root-transformed responses regarding how likely they would be to use the video clips in court. There was no significant effect of watching the rapport-building phase,  $F(1, 99) = 1.42$ ,  $p = .237$ , or believing the interviews to be one continued interview or two separate ones,  $F(1, 99) = 0.79$ ,  $p = .377$ , and no significant interaction between the two,  $F(1, 99) = 2.82$ ,  $p = .096$ .

A three-way loglinear analysis was conducted with rapport and number of interviews as the independent variables, and verdict as the dependent variable. The expected counts for this analysis reduced the power of the results (four of the eight cells had an expected count of approximately four). However, the final model retained only verdict as an effect, suggesting that none of the higher-order interactions (rapport x number of interviews x verdict, rapport x number of interviews, rapport x verdict, number of interviews x verdict), nor rapport or number of interviews condition were significant predictors,  $\chi^2(1)s < 2.90$ ,  $ps > .089$ . Verdict was the only significant predictor of verdict,  $\chi^2(1) = 47.60$ ,  $p < .001$ . An odds ratio indicated that the odds were 5.06 higher that participants would give a guilty verdict than a non-guilty one.

To overcome the power issues related to the loglinear analysis, chi-square tests were conducted separately for number of interviews and rapport-building conditions and participants' verdicts. No cells had an expected count of lower than five. However, the number of interviews was still found to have no relationship with verdict,  $\chi^2(1) = 0.002$ ,  $p$

= .964, and neither was whether the participant viewed the rapport-building recordings or not,  $\chi^2(1) = 2.85, p = .092$ . Thus, participants' verdicts did not seem to be affected by how the clips were presented to them.

**Summary.** Watching the rapport-building section of interview(s) or believing the video clips came from one interview or two had no effect on perceptions of the interview or their case progression perceptions. The presentation format of the interview(s), however, did have an effect on child witness perceptions. Those that thought they were watching two interviews of the child had more positive perceptions of the child than those that thought they were watching one interview with a short break, and those who did not watch the rapport-building phase of the interview(s) also perceived her more positively than those who did.

### 5.3.3 Consistency and Believability

On average, participants remembered the child recalling 5.95 of the seven specific details they were questioned about (see Table 5.3). For the majority of details, at least half of the participants correctly remembered when these details were given (see Table 5.5). However, a large number of participants did not remember the child saying the “nice” man had short hair ( $n = 44$ ). When asked whether the child had contradicted herself, 65.7% of participants (correctly) stated she did. Fifty-two participants (50.5%) correctly stated she was contradictory about the victim's clothing, 44 participants (42.7%) incorrectly stated she was contradictory about the thief stealing credit cards, and 32 (31.07%) correctly stated she was contradictory about whether the victim went to get the police. Fewer than ten participants stated the child was contradictory about each of the other specific details asked about (for which she had, in fact, not been contradictory).

In order to examine whether details that were repeated were thought to be more likely to have occurred than those that were mentioned only once, within-subject comparisons were conducted for participants' responses to the questions about the likelihood of specific details occurring. Thirty-two participants remembered the child recalling all of the seven details and responded to all of the follow-up questions regarding how likely they thought the detail was to have happened. Mean scores for these participants for each detail are provided in Table 5.5. Five of these seven scores were non-normally distributed, but no outliers were identified.

Table 5.5

*Average Scores (and Standard Deviations) of Likelihood of Specific Events to have Occurred*

Detail	Type of Detail	Correctly Recalled n (%)	Likelihood of
			Having Occurred <i>M (SD)</i>
Lady said “Oh no” when she got her bag back.	Correct / Repeated	81 (78.6)	7.09 (2.41)*
Bag that was stolen was beige.	Incorrect / Clip One only	71 (68.9)	7.63 (1.43)*
The “nice” man that gave the bag back had short hair.	Correct / Clip One only	24 (23.3)	8.13 (1.41)*
The victim (whose bag was stolen) went to get the police.	Contradiction / Clip One only	63 (61.2)	6.03 (2.25)*
The thief and the “nice” man were by a factory.	Incorrect / Repeated	67 (65.0)	6.81 (2.16)*
The thief took credit cards out of the lady’s bag.	Correct / Clip Two only	91 (88.3)	6.59 (1.81)*
The victim was wearing leggings and a skirt.	Contradiction / Clip Two only	65 (63.1)	6.78 (1.31)*

*Note.* Likelihood scores provided on a ten-point Likert scale, with ten signifying ‘Very likely’ and one ‘Very unlikely’.

\*  $n = 32$

To determine whether the perceived likelihood of the details significantly differed from each other or were affected by the delay the participants believed had occurred between the two interviews (i.e., ten minutes or one week), the square-root transformed likelihood scores were entered into a mixed design ANOVA. A priori power analysis shows a sample size of 36 to have enough power to detect large effect sizes ( $f > .40$ ). The present sub-sample is not dissimilar to this number ( $n = 32$ ). The ‘number of interviews’ condition was entered as the between-subject independent variable and the details were

entered as the within-subject independent variable. Reverse square-root transformed likelihood scores were used as this reduced skew for the majority of dependent variables. The mixed design ANOVA found a significant main effect of detail,  $F(6, 180) = 5.82, p < .001$ , but no main effect of number of interviews,  $F(1, 30) = .064, p = .802$ , nor any significant interaction,  $F(6, 180) = 1.69, p = .126$ . Pairwise comparisons with Bonferroni-corrected  $p$ -values showed that there were four pairs of significantly different scores. One detail provided in interview one only (that the ‘nice’ man had short hair) was perceived as significantly more likely to have happened than either of the details that had been contradicted (that the ‘victim’ had gone to get the police,  $p = .001, d = 1.16$ , or that the lady was wearing leggings and a skirt,  $p = .019, d = 0.89$ ). This same detail (the ‘nice’ man had short hair) was also rated as more likely to have happened than the detail only provided in interview two (that the thief took the lady’s credit cards,  $p = .004, d = 0.92$ ). The final significant difference was between the other piece of information provided in interview one only (that the stolen bag was beige) and the contradiction mentioned in interview one (that the ‘victim’ had gone to get the police). The information provided in interview one that was not later contradicted was scored as more likely to have happened than the detail that was later contradicted ( $p = .045, d = 1.05$ ).

**Summary.** Participants generally remembered the majority of details that they were specifically asked about. They also mostly correctly remembered when they had heard these details (i.e., in which video clip), but their memory for contradictions was less reliable. Additionally, details provided in the first interview, in particular that the ‘nice’ man had short hair, were viewed as more reliable than either of the contradicted details and the non-contradicted detail provided for the first time in interview two.

#### **5.4 Discussion**

Mock-juror perceptions of a child’s testimony and interview were, in the present study, very positive, and rarely affected by juror demographics or interview presentation formats. As in previous studies, the juror demographics of age, jury experience, and child experience had no effect on participants’ perceptions of the child witness, the interview and their case progression. Unlike previous studies, gender also had no effect on these perceptions. Whether the mock-juror viewed the rapport-building section(s) of the interview and whether they were told the interview was one session with a ten minute break or two sessions with a week long delay had no effect on their opinions of the

interview, their verdicts, or whether the interviews should be used in court. However, participants who viewed the clips believing they were two interviews separated by a week had more positive views of the child (more believable and truthful) than those that viewed the clips believing they were one interview with a ten-minute break. Those who did not watch the rapport-building phase also had more positive views of the child (more believable and credible) than those who did watch it. Additionally, all participants viewed the child witness as more anxious in the first than second interview clip (regardless of rapport-building and number of interviews conditions). Finally, participants did believe some specific details provided by the child more than others, and in particular those provided only once in the first interview clip, but this was not affected by the believed delay between interviews.

These findings suggest that mock-jurors are not necessarily biased against multiple interviewing. In fact, if anything, perceptions of children who experienced multiple interviews were more positive, without negatively affecting perceptions of the interview, verdicts, or perceptions of whether the videos should be used in court. The results also suggest that viewing the rapport-building phases of interviews may have negative effects on viewers' perceptions of the child. Thus, how the interview is presented in court may not have a significant effect on jurors' initial perceptions of the child's interview or their case progression decisions and viewing multiple interviews may not be detrimental to the prosecution's case, but viewing the rapport-building will not necessarily improve perceptions of the child. The current findings also suggest that mock-jurors do not rate the likelihood of specific details actually occurring based solely on when the child provided the detail and how consistent she was about it.

These findings are somewhat different from Krähenbühl's (2012) who found that reading the rapport-building section of a child interview transcript positively affected mock-juror perceptions of the child's testimony and understanding, as well as their perceptions of the interview itself. The present study, on the other hand, like Bottoms et al. (2004, cited in Bottoms, Quas, et al., 2007), found no effect of watching the rapport-building section of an interview on most of the mock-jurors' perceptions. However, viewing the rapport-building section had a negative effect on their perceptions of the child's believability and credibility. An important difference in the methodologies used is that Krähenbühl's rapport-building included the verbatim transcript of the 'ground rules' and truth and lies

sections of the interview along with a neutral rapport-building discussion, whereas the participants in the present study only read brief referrals to ‘ground rules’ plus truth and lies and instead just viewed the neutral discussion section of the rapport-building phase. Krähenbühl’s suggested explanation of why rapport-building affected perceptions was that mock-jurors were more aware of how the interview was meant to proceed and more aware that the child knew what was going to happen during the interview. If this is the cause of the positive effects Krähenbühl found, then it could be due to the participants’ exposure to the ‘ground rules’ section specifically, in which the interview and the child’s role within it is explained. The present study’s findings suggest that it is unlikely to have been exposure to the neutral rapport-building discussion that improved perceptions. Krähenbühl’s alternative explanation of the effect of rapport-building (that the increased length of the transcript affected perceptions rather than the content) is not supported by the present study’s findings. The condition in which the participants spent most time watching interview clips (two interviews x rapport-building shown) did not result in significantly different perceptions from the other conditions. Alternatively, the change in medium (i.e., from reading a transcript to watching an interview) may explain the difference in results. Krähenbühl’s (2012) participants may have been influenced by the addition of the verbatim rapport-building section because they had no visual cues as to how comfortable the child was within the interview. In the present study, involving a video recording, participants had more cues (including non-verbal ones) as to how well the child understood what was going on during the interview, and so the rapport-building may not have been so integral to participants’ perceptions of the child. The child may also have provided visual cues in the rapport-building which led the participants to believe she was less trustworthy. However, some studies have directly compared perceptions of written mock-trials with video-recorded ones and found no significant effect on mock-juror perceptions (Goodman, et al., 1987).

A novel finding of the present study was that participants who believed they were viewing multiple interviews (i.e., two interviews separated by a week) rated the child as more believable and truthful than those that thought they were watching one interview with a ten-minute break. This suggests that information provided across two interviews is not immediately perceived as unreliable, and that instead, a child’s inconsistencies may be viewed as more understandable and judged more positively when they are provided across two interviews with a delay than when they are perceived as part of the same

interview. Thus, research that has found that mock-jurors perceive inconsistencies as indications of inaccuracy (Leippe, et al., 1992; Quas, et al., 2005) could be oversimplifying the situation; mock-jurors may take into account aspects of the interviewing conditions that might affect likely consistency (such as delay). Further research could manipulate the number of inconsistencies (including a condition with no inconsistencies) and when they occur within single or multiple interviews and see how this affects mock-jurors' perceptions. From this it would be possible to determine whether inconsistencies in recall within a first or second interview (i.e., contradicting themselves within the same interview) affect mock-juror perceptions more than those provided across multiple interviews (i.e., contradicting something said in an earlier interview), or if multiple interviews are generally perceived more positively than single interviews, regardless of a child's inconsistencies.

Alongside examining how demographics and video presentation affected mock-jurors' perceptions, this study also looked at how believable participants perceived specific details within the child's testimony to be. On average, participants did remember the child recalling the majority of the specific details enquired about. However, of particular interest was whether the timing of the detail (i.e., provided in clip one, clip two, or both) and how consistently it was provided (i.e., once, repeated, or contradicted) affected participants' perceptions of how likely they were to have occurred. Only two details were perceived as being more likely to be true than others. These were both details provided only in interview one (one correct and one incorrect). Although this suggests that details provided in interview one were perceived as more reliable than other details (and in particular contradicted ones), it may be that the nature of the detail itself could explain this finding. The detail that was perceived as the most likely to be true was that the 'nice' man had short hair. It may be that the participants did not necessarily believe this more because it was provided only once in the first interview, but because this detail fitted their own schema of how a 'nice' man would look, and so was quite a 'safe bet' in comparison to the more specific other details. Alternatively, this could reflect a memory primacy effect; participants may have had stronger memories for the details provided in the first interview clip than those in the later one and perceived them as more reliable (Ashcraft, 2006b). However, only participants who remembered all of the details asked about were included in this analysis, and so they should have had some memory of all of the details.



Yozwiak et al.'s (2004) study suggested that children who provided details at a later date and not during a first interview were perceived as less believable than those who provided the same details at both. This was not found in the present study. On the micro-level, participants in the present study did not rate repeated details as more likely to have happened than those provided in only one interview, or even those that were contradicted. They also did not rate details provided only in the second interview as any less believable than other details. There are many methodological dissimilarities that may explain this difference between these two studies' findings, including that Yozwiak et al. used written summaries of interviews rather than a video recording, exposed their participants to more of the trial than did the present study (i.e., they also read testimony from other witnesses in the fictional trial), and compared overall perceptions rather than individual details. Both studies have their strengths and weaknesses in terms of ecological validity; although a written summary is unlikely to be used in court as evidence (as in Yozwiak et al.'s study), a trial is very likely to include more than just the child's interviews as evidence (unlike the present study). Thus, the present study may have obtained accurate measurements of participants' immediate judgements of a child's testimony, but mock-jurors' perceptions of believability and its relationship with the child's consistency may be affected by other aspects of a trial. Nevertheless, the present findings suggest that, despite the evidence that indicates repeated details and those provided in the first recall session can be the most reliable (La Rooy, Lamb, & Pipe, 2009), mock-jurors do not judge reliability of a specific detail solely on when it was stated or how often it was repeated, regardless of delay between the interviews.

Another unexpected finding is that participants did not rate contradictions as less reliable than other details. This may be due to varying definitions of 'contradiction'. When participants described the contradictions that they remembered, some stated that they remembered the child mentioning a detail in one interview and not the other, suggesting that they interpret the omission in one interview as contradiction rather than inconsistency (as suggested in Fisher, Brewer, and Mitchell, 2009). Thus, some mock-jurors may have perceived the details provided in only one interview as contradictory and equally unreliable as details directly contradicted from one interview to the next. However, as discussed above, participants did not rate repeated details as any more reliable, suggesting that if participants did view omissions as inconsistencies, this did not appear to affect their perception of the omitted details. This again contradicts those studies that have

found mock-jurors to perceive inconsistencies as an indicator of unreliable testimony (Leippe, et al., 1992; Quas et al., 2005).

#### **5.4.1 Limitations and Future Research**

There are a number of methodological issues which limit the ecological validity and generalisability of this study and its findings. First, the sample size is small in comparison to some previous mock-juror studies (e.g., Goodman et al., 1998) and so may not have had the power to identify small effects of the independent variables. Second, all participants viewed the same interviews. Although this allows standardisation of extra-legal cues which may affect mock-jurors' perceptions (such as the child's age, gender, or non-verbal communication), it also limits how generalisable the findings are to other children's testimony. There may have been some aspect of the child which resulted in unique perceptions of her, in particular within the rapport-building videos. Additionally, these results may be unique to children of seven years old. Previous research has shown age to affect mock-jurors' opinions (e.g., Goodman et al., 1987), and so the effects of viewing the rapport-building and multiple interviews on mock-juror perceptions may be different for children of older and younger ages. This is not an unusual methodology; other studies have also used only one transcript or video to measure mock-juror responses (e.g., Redlich, Ghetti, & Quas, 2008; Warren et al., 2002), but a useful next step would be to compare responses to different children's interviews. Another limitation is the relative homogeneity of the sample. Very few participants identified as having a non-British ethnicity, had experience of sitting on a real jury, or were parents. This may not adequately reflect the variety of people who take part in juries in the UK. A larger study with a variety of children's interviews and a more varied sample of participants would increase generalisability.

The difference in the written details provided to each condition may also have had an effect on participants' perceptions of the interview. For example, in the no-rapport condition, the rapport-building was described as being conducted "in order for Mary to feel more relaxed and for her to get to know the interviewer and build a relationship" and "to make her feel at ease with the interviewer". This may have implied that the rapport-building had successfully done these things and thus given a better impression of the rapport between the child and the interviewer than watching the rapport-building session did. Thus, this wording could explain the unexpected rapport-building results. Future

research could explain the purpose of rapport-building to all participants prior to introducing them to the specific case. Then, in the no rapport-building versions, it could merely be stated prior to watching the substantive videos that the rapport-building phase had occurred.

A further limitation is that the child was not recalling a live event, and that the mock-jurors were aware of this. It is possible that mock-jurors may believe children are better at recalling a video recording than a live (crime) event, possibly due to there being fewer distractions when watching a video recording. Furthermore, the child was discussing a relatively minor crime (theft), and so the findings may not be comparable to studies that have examined mock-juror perceptions of sexual abuse cases, or generalizable to such cases in court. Additionally, children may be less likely to testify in cases such as theft as there may be adult witnesses and other evidence that means the child's evidence is not necessary. As mentioned in the introduction, this study is also only an examination of mock-jurors' immediate, pre-deliberation perceptions of a child's testimony. Both additional evidence (including that which may contradict the child's account) and jury deliberation may affect these perceptions in real cases, as well as influencing their verdicts. Ecological validity would be improved by children recalling live rather than video events in their interviews, and the participants taking part in a full mock-jury deliberation. Using a live, controlled event would be particularly interesting for determining if interview presentation formats can improve mock-jurors' accuracy detection.

In addition, the interviews watched were conducted by the present author. Many of the participants (due to the snowballing recruitment design) may have recognised her voice which may have influenced their responses regarding the interviewer. Using videos of interviews conducted by an unknown, trained police officer would also benefit validity and generalisability.

Conducting the study online may also have had negative effects on the reliability of the results. The questions did not include any 'catch' questions to ensure that participants were still paying attention to the study. Thus, it is not certain that respondents were still responding meaningfully by the end. However, by excluding those who took too long or not enough time to complete the study, the results are more likely to include only those

who were conducting the study as instructed. In future research, ‘catch’ questions should be utilised to check that participants are still paying attention to the question and not just clicking on any response.

To examine whether the differences in findings between the present study and Krähenbühl’s (2012) could be caused by the differing aspects of rapport-building that were shown (i.e., just the neutral discussion, vs. the neutral discussion with ‘ground rules’ and truth and lies), a study comparing mock-jurors’ perceptions of child testimony presented with or without the different rapport-building sections would be useful. In particular, conditions that presented the neutral discussion only, the ground rules section only, both sections, or neither, would provide useful comparisons for determining which, if any, affect jurors’ perceptions. This is important given the view of judges in England and Wales that jurors should not watch ‘over-long’ child interviews (Burrows & Powell, 2014).

Finally, in the present study, to control for effects of length of the substantive section on mock-jurors’ perceptions, both conditions had equally long substantive sections. This is unlikely to reflect real cases. The majority of circumstances in which multiple interviewing is recommended by ABE (Ministry of Justice, 2011) do not involve a first interview being cut short, but instead an additional full interview being conducted. Thus, real cases in which only one interview has been conducted are likely to result in fewer video-recorded minutes than one in which two full investigative interviews have been conducted. Furthermore, it may be that the number of contradictions involved in multiple interviews is greater than those involved in single interviews. Although the previous studies described in this thesis have shown there to be very few contradictions across interviews, they have not examined the frequency with which within-interview contradictions occurred. Thus, children may provide as many within-interview contradictions in second interviews as first, which would result in multiple interviews including more contradictions than single ones, which may lead to less positive perceptions of multiple interviews. Therefore, studies that compare multiple to single interview perceptions without controlling for length or number of contradictions would be useful additions to the literature. Also, the present study only included one week’s delay between the two interviews. A study examining how, if at all, varying the length of this delay affects mock-jurors’ perceptions would also be beneficial for understanding

whether there are particular situations in which presenting multiple video-recorded interviews of a child victim/witness may be detrimental to the case.

#### **5.4.2 Conclusions**

This study provided the first examination of mock-juror perceptions in response to a single interview of a child in comparison to multiple interviews with a child (i.e., two). The findings indicate that mock-jurors do not disbelieve details provided by a child over two interviews more than those provided in one, and instead have slightly more positive views of the child's testimony when it was perceived to have been given across multiple interviews. Thus, showing multiple interviews in court as the child's evidence-in-chief may not negatively affect jurors' perceptions. Additionally, the findings suggest that viewing the rapport-building sections of these interviews can actually have negative effects on mock-jurors' pre-deliberation perceptions of the child. The present study also found that the juror demographics of age, gender, jury experience and child experience had no effect on mock-jurors' perceptions of a child witness's testimony, the interview she experienced, or their case progression decisions.

Based on the findings from the four studies described here, multiple interviewing should be considered as a beneficial interviewing technique that might appropriately be introduced into practice more regularly. In study one, police officers reported that multiple interviews are conducted and expressed an interest in conducting more of them. In addition, they have been shown to elicit additional, accurate details from children, without obtaining many new contradictions or detrimentally affecting mock-jurors' perceptions of the testimony. Thus, the following chapter presents a Study Space Analysis to determine if the multiple interviewing experimental literature is sufficient for such a change in policy/practice to be fully empirically-supported.

## Chapter Six

### A Study Space Analysis for Multiple Interviewing

#### 6.1 Introduction

In the previous chapters, multiple interviewing has been examined from a number of different angles. Examination of police officers' opinions of multiple interviews, their behaviours during them, and children's responses in both real and mock-investigative interviews have shown very few negative effects of multiple interviewing. Furthermore, mock-jurors were found to view a child who had experienced multiple interviews more positively than one who experienced a single interview. This chapter moves on to put this work into the context of the multiple interviewing literature, to establish if and where any important gaps are in this literature, and to determine if the literature is sufficient for policy changes to be enacted. This is accomplished through a Study Space Analysis of previous published experimental studies which involve multiple interviewing of child participants.

##### 6.1.1 Study Space Analyses

The Study Space Analysis (henceforth SSA) is an alternative way of amalgamating and evaluating the existing published research on a subject. Unlike the meta-analysis, the SSA does not look at whether a technique has a statistically robust effect on outcomes, or indeed the results of the studies at all, but looks at the topics the current research has covered, the breadth of these topics and their relation to the associated field of practice (Malpass et al., 2008). The benefits of this method include detecting variables or conditions which have not been explored, and determining whether a topic has been sufficiently progressed to warrant evidence-based policy changes.

Policy changes should only be based on a literature which comprises high quality, methodologically-rigorous experiments that address the diverse variables related to both theory and changing ecological conditions (Malpass et al., 2008). For example, for most areas of investigative interviewing literature, it is important to compare your chosen technique to the current interviewing practice and other theorised improvements that are similar to yours. Furthermore, it is important to determine whether your technique compares favourably to other techniques for an array of participants; varied in age,

participation in the to-be-remembered event (e.g., participant or observer, victim or witness), and gender, among other factors. If a technique, in this instance a form of interviewing, were to be brought into practice, it is likely that it may be used with a variety of witnesses and victims in different situations (for example, different lengths of delay between the crime and the interview). Therefore, it should have been experimentally tested with a similarly broad group of mock-interviewees under varying conditions. Policy decisions made based on a literature which omits some of these participants or conditions will be based on incomplete understanding and may limit the beneficial effects the technique could have, or even result in less well-conducted interviews for those unstudied participants/conditions.

The SSA reveals gaps in the literature by creating a merged visual representation of all of the relevant studies, their independent, dependent, and methodological (or cross-study) variables, and their relationships (Malpass et al., 2008). Matrices are created with the frequencies of each individual variable plotted against the other variables. Areas of the matrices with low or null frequency counts demonstrate a lack of research.

This methodology has been used for a number of topics within the psychology and law area. Malpass et al. (2008) themselves included two abbreviated exemplary SSAs; one looking at eyewitness identification line-ups and the other the research on alcohol and eyewitness memory. Memon, Meissner, and Fraser (2010) conducted a full SSA on the Cognitive Interview. All of these SSAs revealed areas of strength and weakness within the available research. For example, Memon et al.'s (2010) SSA highlighted the under-representation of non-student populations in the Cognitive Interviewing research, as well as the lack of studies using a live event for participants to recall (instead of relying on filmed events). Thus, the SSA methodology has previously been used to good effect in the forensic psychology field.

### **6.1.2 Policy Changes and Multiple Interviewing**

Multiple interviewing of child witnesses is an area ripe for policy change, or at least policy expansion, in the UK, and this has been noted in the literature. La Rooy, Katz, Malloy, and Lamb (2010) argue that the robust literature on reminiscence (when a person recalls new information during a second recall attempt) warrants a change in guidelines encouraging the use of multiple interviews in a broader range of circumstances. As

described in chapter one, the current guidelines stipulate the strict circumstances under which second interviews of child victims/witnesses could be conducted (Ministry of Justice, 2011). La Rooy et al. (2010), on the other hand, state that multiple interviews should be used in cases purely to obtain further information, with the limitation that these interviews should be conducted according to best practice (as all investigative interviews should be). However, many of the studies discussed in La Rooy et al.'s (2010) review use word or picture lists as stimuli. Therefore, the generalisability of such research to multi-sensory experiences involving a myriad of people, actions, locations, and feelings is questionable. The present analysis aims to determine whether there are sufficient experiments using more ecologically valid methods to support La Rooy et al.'s (2010) recommendations.

Furthermore, it aims to focus on examining the literature that addresses key aspects of conducting multiple interviews which are not currently specified in the ABE guidelines (Ministry of Justice, 2011). These are *who* should conduct multiple interviews, *when* they should be conducted and *how*. In addition, motivational implications of multiple interviewing will be examined in this chapter, namely *why* multiple interviews should be conducted; how might they be beneficial? Independent and dependent variables that address these questions should be adequately covered within the research across a range of cross-study variables (e.g., differing stimuli) for policy changes to be made. Thus, the SSA will focus on independent, dependent and cross-study variables that are central to answering the above questions (Who? When? Why? How?) and to determining whether the expansion of the use of multiple interviews to circumstances not currently described in the ABE guidelines (Ministry of Justice, 2011) is warranted.

## **6.2 Method**

### **6.2.1 Studies**

The studies included in the present analysis were obtained via online searches of the PsycINFO and PsycARTICLES databases. Searches using the terms 'child', 'interview', 'memory', 'multiple', 'repeat', 'twice', 'three', or 'four' were conducted, along with searches in which 'child' was replaced with 'adolescent' and 'teenage'. Additionally, the reference lists of key multiple interviewing papers (including La Rooy, Lamb, and Pipe's review, 2009) were searched for relevant papers. Studies were included based on the following criteria:



1. They involved more than one interview of a participant recalling information about the same event.
2. They included a child sample (i.e., some participants were under 18 years of age).
3. They compared children's responses in multiple interviews; either through direct statistical comparisons, or through comparing the information provided in different interviews (e.g., coding children's recall as repeated or novel).
4. They had a sample size of 40 participants or more.
5. All the interviews in the studies were ecologically valid in terms of:
  - a. Including some free recall of the to-be-remembered event.
  - b. Involving face-to-face recall (e.g., not completed via telephone or written).
  - c. Attempting to replicate multiple investigative interviews rather than cross-examination conditions. Studies that used second interviews in order to replicate cross-examination, and therefore used a different type of interviewing technique, were excluded from the SSA.
  - d. Not aiming to create false memories. Studies that conducted multiple interviews in an attempt to implant false memories were excluded. Studies that included some misleading questions without this specific aim were, however, included.
6. They did not analyse field interviews. Studies that examined real forensic interviews of children were excluded because these methods make it challenging to determine the child's accuracy about the event. Additionally, the interviews are not standardised. Thus, various confounding interview variables may affect the results, including differing interview quality.

These criteria were chosen in order to include only studies of relatively high ecological validity, with a reasonable sample size and high levels of control over any possible confounding variables.

This literature search revealed 45 published articles that were appropriate for the Study Space Analysis. One article included two appropriate experiments and four experiments were extensions of other experiments included in the analysis (i.e., studies that re-interviewed the same sample, or re-coded and analysed the data from another experiment). Thus, 42 independent samples were included in the analysis.

### 6.2.2 Procedure

For all of the relevant studies, their independent, dependent and cross-study (methodological factors which vary between studies but not within the study, such as whether the event was live or on a video) variables were identified. Separate matrices were created for each of these types of variable, and all the appropriate variables for the relevant studies were listed in each matrix (e.g., all 39 samples' independent variables in one, their dependent in the next, and their cross-study variables in the third). The independent variables were listed along the top of each matrix, and frequency counts were entered for each independent variable against its corresponding independent, dependent and cross-study variables (i.e., IV x IV, DV x IV, CV x IV). For the present chapter the numbered interviews (i.e., the first, second, third, etc.) are interviews at which children were asked to recall the event, and their recall was analysed. Interviews that did not include recall of the event or for which the children's recall was not analysed were termed 'intervening' interviews.

For studies which were extensions of previous experiments, only the new aspects of the experiment were included. For example, Pipe, Gee, Wilson, and Egerton's (1999) study involved two experiments. The first was an extension of Pipe and Wilson's (1994) work. Pipe and Wilson's (1994) study was entered into the matrices as normal with age (5-7/8-10) as one independent variable, event involvement (participant/observer) as another, and type of interview as the third (including contextual cues/ relevant cues only/ irrelevant cues/ no cues). The dependent variables included the number of correct details and errors provided in free recall (separated into details about the people, actions, objects and context) for the first and second interviews. Children's responses to specific questions (a mixture of leading, misleading and yes/no questions) and their overall accuracy during free recall (and split into actions and objects) were also measured as dependent variables. The cross-study variables related to the type of to-be-remembered event used (e.g., length, emotionality, whether it was staged, a life experience or a video), the type of interviews (e.g., question types included, any suggestive techniques, who the interviewer was) and the timing of the interviews. The new aspects of Pipe et al.'s (1999) first experiment were then added. The main extension of the study involved a further interview of the sample. However, this was only conducted for the younger age group and participation in the event was no longer considered as an independent variable. Thus, the new dependent variables were only added for the 'type of interview' independent

variable and not age or event participation. Pipe et al. (1999) also re-analysed the prior interviews and so the frequencies for all the following dependent variables were increased by one: total correct information, total errors and total accuracy for the first, second, and third interviews, proportion of new accurate and new repeated details for the second and third interviews. Therefore, Pipe et al.'s (1999) study was not treated as a separate study but as a continuation and so the factors previously examined were not repeated within the SSA, only new variables added in.

## **6.3 Results**

### **6.3.1 The Independent Variables**

The Study Space Analysis identified a wide array of independent variables. The majority of the 35 categories of independent variable included variables that were only examined in one or two studies (for example, the use of social support in multiple interviews, or whether the to-be-remembered event was conducted by someone known to the child or a stranger, Goodman, Bottoms, Schwartz-Kenney, & Rudy, 1991; Lepore & SESCO, 1994 respectively). However, some of the independent variables were included more frequently. In particular, age (e.g., Gobbo, Mega & Pipe, 2002; all of Peterson and colleagues' studies), the initial retention interval (i.e., time between the to-be-remembered event and the first interview; Gross & Hayne, 1999; Pipe, Sutherland, Webster, Jones, & La Rooy, 2004; Powell & Thomson, 1997), the number of interviews the child experienced (particularly whether experiencing an intervening interview between two interviews affected memory in the last interview, e.g., Baker-Ward, Hess, & Flannagan, 1990; Cassel & Bjorklund, 1995; Ornstein, Baker-Ward, Gordon, Pelphrey, Staneck Tyler, & Gramzow, 2006; Peterson, 1999) and the delay between the first two interviews were examined in many studies with multiple interviews (e.g., Baker-Ward, Gordon, Ornstein, Larus, & Clubb, 1993; Ornstein, Gordon, & Larus, 1992; Powell & Thomson, 1997). Another topic that was studied more than once was whether the child participated directly in the to-be-remembered event or merely observed it (Baker-Ward et al., 1990; Gobbo et al., 2002; Pipe & Wilson, 1994). Most studies included more than one independent variable and often manipulated the types of interviews experienced by the child (such as including human body diagrams, or suggestive questions, e.g., Brown, Pipe, Lewis, Lamb, & Orbach, 2012; Bjorklund et al., 2000 respectively). Multiple interviews with child interviewees have, therefore, been studied under a variety of

interviewing conditions. However, in the majority, no more than three studies of each condition have been conducted.

After examining the representativeness of the samples included in these experiments and the ecological validity of the studies, the following results sections will examine the dependent and cross-study variables that have been included to answer the questions asked in the introduction to this chapter, namely:

- Why re-interview?
- Who should re-interview?
- What delay should there be between the interviews?
- How should multiple interviews be conducted?

### **6.3.2 Sample Representativeness**

The following tables show the number of studies that have included certain design features against the age group of the participants involved in that study. Some studies included an age group that spanned more than one age bracket, and in some cases different ages were compared as an independent variable. Thus, the age groups are split in order to include as many of the contrasting age groups as possible. Therefore, the following tables present every age group in all of the experiments and every variable they experienced.

No studies of the effects of multiple interviews included a sample of children aged between 14 and 18 years (see Table 6.1). Only five independent samples included participants aged between 11 and 13 years. The most studied age group was children between five and eight-years-old, closely followed by children aged between three and five.

### **6.3.3 Ecological Validity**

As can be seen from Table 6.1, the majority of studies used a live event; either one that was naturally occurring (e.g., Peterson and colleague's studies [1996, 2005, 2010] examining children's memories of paediatric examinations or medical emergencies), or one that was staged for the experiment itself (e.g., visits from pirates or magic shows; Jack, Simcock, & Hayne, 2012, La Rooy, Pipe, & Murray, 2005). A large number of

studies used real life events as their to-be-remembered event (henceforth TBR). These were generally not standardised in length of time. Experiments with younger age group samples (2-5 years), in particular, very rarely involved interviews about events of a known, standardised length. When studies did use standardised length events, these were mainly very short. In particular, the number of events that lasted less than two minutes was quite high (25.0% of the known standardised length TBR events). On the other hand, a large proportion of these events were between half an hour and an hour long (27.8%). Only two studies involved events that the child was exposed to repeatedly.

The majority of the TBR events involved children actually participating in the event (rather than watching or hearing about the event; see Table 6.1), and many were negative in emotion or based around an injury (although more were positive or neutral). These included well-child visits to the doctors and trips to the dentist as children often find these stressful, even if there is no pain involved. Very few of the studies included in the Study Space Analysis used a crime as the TBR event. When crimes were used, they were presented in video format and thus the child would not have participated in the event at all, merely observed it.

Examining the last section of Table 6.1, it can be seen that many studies included abuse-related aspects in their methodology. For example, many of the real-life events used in the studies included adult touch of the child (including, in some doctor visits, touch of the genital area). Some studies included an adult taking a photograph of the child, and some involved removing clothes from a toy. However, a large number of studies did not include any abuse-related aspects and only one study with one age group involved a TBR event that the child was asked to keep a secret.

Table 6.1

*An extract of the Study Space Analysis involving descriptors of the to-be-remembered event*

Cross-Study Variable	Age						
	2-3	3-5	5-8	8-11	11-13	14-18	Adult
Event Medium							
Life experience	7 (8.2)	14 (16.5)	9 (10.6)	<b>3 (3.5)</b>	<b>3 (3.5)</b>	<b>0 (0)</b>	<b>1 (1.2)</b>
Staged/live	<b>4 (4.7)</b>	10 (11.8)	19 (22.4)	5 (5.9)	<b>2 (2.4)</b>	<b>0 (0)</b>	<b>1 (1.2)</b>
Video	<b>0 (0)</b>	<b>1 (1.2)</b>	<b>3 (3.5)</b>	<b>2 (2.4)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>1 (1.2)</b>
Length of Time of Event							
Less than 2 minutes	<b>0 (0)</b>	2 (2.4)	4 (4.8)	2 (2.4)	<b>0 (0)</b>	<b>0 (0)</b>	<b>1 (1.2)</b>
3-5 minutes	<b>0 (0)</b>	<b>1 (1.2)</b>	3 (3.6)	<b>0 (0)</b>	<b>1 (1.2)</b>	<b>0 (0)</b>	<b>0 (0)</b>
6-10 minutes	<b>0 (0)</b>	<b>0 (0)</b>	3 (3.6)	<b>1 (1.2)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
11-30 minutes	<b>0 (0)</b>	2 (2.4)	4 (4.8)	<b>1 (1.2)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
31 minutes – 1 hour	<b>1 (1.2)</b>	4 (4.8)	3 (3.6)	<b>1 (1.2)</b>	<b>1 (1.2)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Over an hour	<b>0 (0)</b>	<b>0 (0)</b>	<b>1 (1.2)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Varied	7 (8.3)	9 (10.7)	6 (7.1)	3 (3.6)	3 (3.6)	<b>0 (0)</b>	<b>0 (0)</b>
Unknown	3 (3.6)	7 (8.3)	7 (8.3)	2 (2.4)	<b>0 (0)</b>	<b>0 (0)</b>	<b>1 (1.2)</b>
Repetition of Event							
Single	11 (12.9)	24 (28.2)	30 (35.3)	8 (9.4)	<b>5 (5.9)</b>	<b>0(0)</b>	<b>2 (2.4)</b>
Repeated	<b>1 (1.2)</b>	<b>2 (2.4)</b>	<b>1 (1.2)</b>	<b>0(0)</b>	<b>0(0)</b>	<b>0(0)</b>	<b>1 (1.2)</b>

	Type of Event						
Crime	<b>0 (0)</b>	<b>1 (1.2)</b>	<b>2 (2.4)</b>	<b>1 (1.2)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Injury/Negative	7 (8.3)	14 (16.7)	10 (11.9)	4 (4.8)	3 (3.6)	<b>0 (0)</b>	<b>1 (1.2)</b>
Neutral	<b>0 (0)</b>	<b>1(1.2)</b>	<b>1 (1.2)</b>	<b>1 (1.2)</b>	<b>1 (1.2)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Positive	4 (4.8)	9 (10.7)	18 (21.4)	4 (4.8)	<b>1 (1.2)</b>	<b>0 (0)</b>	<b>1 (1.2)</b>
	Participation						
Participated	10 (10.5)	22 (23.2)	24 (25.3)	8 (8.4)	4 (4.2)	<b>0 (0)</b>	<b>1 (1.1)</b>
Little participation	<b>1 (1.1)</b>	<b>1 (1.1)</b>	<b>1 (1.1)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Observed	<b>1 (1.1)</b>	<b>3 (3.2)</b>	10 (10.5)	5 (5.3)	<b>1 (1.1)</b>	<b>0 (0)</b>	<b>1 (1.1)</b>
Narrative	<b>1 (1.1)</b>	<b>1 (1.1)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
	Abuse-Related Aspects						
Touch	6 (6.8)	14 (15.9)	12 (13.6)	3 (3.4)	3 (3.4)	<b>0 (0)</b>	<b>0 (0)</b>
Photograph	<b>2 (2.3)</b>	3 (3.4)	<b>2 (2.3)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Asked to keep secret	<b>0 (0)</b>	<b>0 (0)</b>	<b>1 (1.1)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Removal of toy's clothes	<b>0 (0)</b>	<b>1 (1.1)</b>	<b>1 (1.1)</b>	<b>1 (1.1)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
None	4 (4.5)	9 (10.2)	17 (19.3)	5 (5.7)	<b>2 (2.3)</b>	<b>0 (0)</b>	<b>2 (2.3)</b>

*Note.* Cells in bold represent areas in which the number of experiments is lower than that expected if all studies were evenly distributed across variables and ages.

### 6.3.4 Why re-interview?

An excerpt of the DV x CV matrix is presented in Table 6.2. Most studies included more than one dependent variable in their design. For Table 6.2, the dependent variables were defined quite broadly; the variables include general measures of each variable, as well as measures that were specified by the type of question asked or by the topic of the detail. Thus, the dependent variable ‘Number of Details’ includes studies that measured the total number of details the child provided, but also studies that measured the number of details provided in response to open questions only, and studies that measured only the number of details provided about people. Each study, however, was only coded once for each cell even if it measured more than one form of this variable (e.g., total number of details and number about people).

Table 6.2 shows, not surprisingly, that many of the studies included in the Study Space Analysis measured some form of accuracy of the child’s recall as a dependent measure. This included coding for numbers of correct and incorrect information as well as calculating percentage accuracy. Accuracy of children’s recall was often measured for both the first and second interviews in a study. This was also the case for the third interview when these were conducted.

Additionally, the accuracy and consistency of children’s recall across interviews was often examined. This involved separate measures of the accuracy of the new and the repeated details recalled by the participants. The amount and proportion of unique and repeated recall was less frequently explored. However, as shown by the bold sections of Table 6.1, the dependent variables were not equally studied across age (as discussed above), with children aged eight and over being particularly under-represented in the studies.

The details children recalled were classified into different topics in many studies, and the topics tended to be based around temporal classifications. For example, in Fivush, McDermott Sales, Goldberg, Bahrick and Parker’s study (2004) of children’s memory for Hurricane Andrew, children’s recall was split into preparation for the storm, the storm itself, and its aftermath. Some studies separated children’s recall into other forms of topics, such as actions, people, objects and context (e.g., Pipe & Wilson, 1994), and some coded children’s responses according to the details’ centrality to the event (e.g., central



vs. non-central; Bjorklund, Bjorklund, Douglas Brown, & Cassel, 1998). Thus, some studies had examined the type of information being recalled across multiple interviews.

Table 6.2

*An excerpt of the Dependent Variable x Cross-Study Variable matrix showing key dependent variables for the first, second and third interviews*

Dependent Variables	Age						
	2-3	3-5	5-8	8-11	11-13	14-18	Adult
	First Interview						
Number of Details	3 (3.2)	6 (6.4)	7 (7.4)	3 (3.2)	<b>2 (2.1)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Accuracy	<b>7 (7.4)</b>	23 (24.5)	28 (29.8)	<b>7 (7.4)</b>	<b>5 (5.3)</b>	<b>0 (0)</b>	<b>3 (3.2)</b>
	Second Interview						
Number of Details	3 (1.9)	6 (3.8)	7 (4.4)	3 (1.9)	<b>2 (1.3)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Accuracy	<b>8 (5.0)</b>	23 (14.4)	28 (17.5)	<b>7 (4.4)</b>	<b>5 (3.1)</b>	<b>0 (0)</b>	<b>3 (1.9)</b>
Misled Details	1 (0.6)	2 (1.3)	1 (0.6)	<b>0 (0)</b>	1 (0.6)	<b>0 (0)</b>	<b>0 (0)</b>
Unique Recall	<b>1 (0.6)</b>	4 (2.5)	4 (2.5)	<b>1 (0.6)</b>	<b>1 (0.6)</b>	<b>0 (0)</b>	<b>1 (0.6)</b>
Repeated Recall	2 (1.3)	4 (2.5)	4 (2.5)	<b>1 (0.6)</b>	<b>1 (0.6)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Accuracy and Consistency	<b>3 (1.9)</b>	7 (4.4)	13 (8.1)	<b>3 (1.9)</b>	<b>2 (1.4)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Omissions	<b>0 (0)</b>	2 (1.3)	1 (0.6)	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	1 (0.6)
Change in Answers	1 (0.6)	1 (0.6)	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Cumulative Recall	<b>0 (0)</b>	<b>0 (0)</b>	2 (1.4)	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>

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	Third Interview						
Number of Details	1 (2.0)	1 (2.0)	2 (4.0)	2 (4.0)	1 (2.0)	<b>0 (0)</b>	<b>0 (0)</b>
Accuracy	3 (6.0)	7 (14.0)	8 (16.0)	<b>2 (4.0)</b>	<b>3 (6.0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Misled Details	<b>0 (0)</b>	1 (2.0)	<b>0 (0)</b>	<b>0 (0)</b>	1 (2.0)	<b>0 (0)</b>	<b>0 (0)</b>
Unique Recall	<b>0 (0)</b>	1 (2.0)	2 (4.0)	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	1 (2.0)
Repeated Recall	1 (2.0)	1 (2.0)	2 (4.0)	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Accuracy and Consistency	2 (4.0)	2 (4.0)	4 (8.0)	<b>1 (2.0)</b>	<b>1 (2.0)</b>	<b>0 (0)</b>	<b>0 (0)</b>

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*Note.* Cells in bold represent areas in which the number of experiments is lower than that expected if all studies were evenly distributed across ages.

### **6.3.5 Who should re-interview?**

The majority of studies' interviews were conducted by someone involved in the research (i.e., one of the authors or their research assistant or a trained student), rather than a professional (see Table 6.3). Three studies involved professionals conducting the interviews and these all included samples of children under eight years old.

It was not always clear whether the same interviewer conducted all of the interviews with a child or not. However, a large proportion of studies used a different interviewer in all of their interviews with a child (46.1%). Nearly one third of studies, on the other hand, included interviews with the same interviewer as the child had previously encountered (31.5%). In some studies, children were interviewed by a mixture (7.9%), which means that they may have had two or more interviews with the same interviewer and other interviews with new interviewers, but only one study examined the effects of familiarity with the interviewer as an independent variable.

### **6.3.6 When should subsequent interviews be conducted?**

The vast majority of first interviews were conducted within one month of the children's exposure to the TBR event (91.4% of all groups; see Table 6.4). The delay between the first and second interview tended to be longer, with only 40.2% occurring within a month of the first interview. Nearly as many groups of children were interviewed between one and six months after their first interview (35.6%), and only slightly fewer were interviewed over six months after their first interview (23.8%). When children were interviewed a third time, they often were interviewed over six months after their second interview (37.8% of age groups). Three to eight year olds experienced a more wide range of delays than older children.

Table 6.3

*An extract of the Study Space Analysis involving interviewer details*

Cross-Study Variable	Age						
	2-3	3-5	5-8	8-11	11-13	14-18	Adult
Interviewer Profession							
Experimenter / Researcher / Research Assistant	4 (4.7)	9 (10.5)	9 (10.5)	<b>1 (1.2)</b>	<b>1 (1.2)</b>	<b>0 (0)</b>	<b>1 (1.2)</b>
Student	<b>0 (0)</b>	<b>2 (2.3)</b>	5 (5.8)	<b>2 (2.3)</b>	<b>1 (1.2)</b>	<b>0 (0)</b>	<b>1 (1.2)</b>
Professional	<b>1 (1.2)</b>	<b>1 (1.2)</b>	<b>2 (2.3)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Mixed (including professionals and researchers)	<b>0 (0)</b>	<b>1 (1.2)</b>	<b>1 (1.2)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Unknown	6 (7.0)	12 (14.0)	15 (17.4)	7 (8.1)	3 (3.5)	<b>0 (0)</b>	<b>1 (1.2)</b>
Interviewer Consistency							
Same	<b>3 (3.4)</b>	8 (9.0)	10 (11.2)	<b>3 (3.4)</b>	<b>2 (2.2)</b>	<b>0 (0)</b>	<b>2 (2.2)</b>
Different	5 (5.6)	12 (13.5)	13 (14.6)	6 (6.7)	<b>3 (3.4)</b>	<b>0 (0)</b>	<b>2 (2.2)</b>
Mixed	<b>1 (1.1)</b>	<b>3 (3.4)</b>	<b>3 (3.4)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Unknown	<b>2 (2.2)</b>	4 (4.5)	6 (6.7)	<b>1 (1.1)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>

*Note.* Cells in bold represent areas in which the number of experiments is lower than that expected if all studies were evenly distributed across variables and ages.

Table 6.4

*An extract of the Study Space Analysis involving interview timings*

Cross-Study Variable	Age						
	2-3	3-5	5-8	8-11	11-13	14-18	Adult
	First Interview Delay (or Retention Interval)						
Immediate/Same day	4 (4.3)	11 (11.8)	16 (17.2)	5 (5.4)	<b>0 (0)</b>	<b>0 (0)</b>	2 (2.2)
1-7 days	7 (7.5)	11 (11.8)	9 (9.7)	3 (3.2)	5 (5.4)	<b>0 (0)</b>	<b>1 (1.1)</b>
8 days – 1 month	<b>1 (1.1)</b>	3 (3.2)	4 (4.3)	2 (2.2)	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
1-2 months	<b>0 (0)</b>	<b>0 (0)</b>	2 (2.2)	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
2-6 months	<b>0 (0)</b>	<b>1 (1.1)</b>	2 (2.2)	<b>1 (1.1)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
6 months – 1 year	<b>0 (0)</b>	<b>0 (0)</b>	<b>1 (1.1)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Short (immediate - 1 week)	<b>0 (0)</b>	<b>0 (0)</b>	<b>1 (1.1)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Long (1-6 months)	<b>0 (0)</b>	<b>0 (0)</b>	<b>1 (1.1)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
	Second Interview Delay (from first interview)						
Immediate/Same day	<b>0 (0)</b>	<b>1 (1.0)</b>	<b>2 (2.0)</b>	<b>1 (1.0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
1-7 days	3 (3.0)	6 (5.9)	7 (6.9)	<b>1 (1.0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>1 (1.0)</b>
8 days – 1 month	<b>2 (2.0)</b>	6 (5.9)	8 (7.9)	<b>2 (2.0)</b>	<b>1 (1.0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
1-2 months	3 (3.0)	4 (4.0)	5 (5.0)	3 (3.0)	<b>0 (0)</b>	<b>0 (0)</b>	<b>1 (1.0)</b>
2-6 months	<b>1 (1.0)</b>	5 (5.0)	10 (9.9)	3 (3.0)	<b>1 (1.0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
6 months – 1 year	3 (3.0)	5 (5.0)	7 (6.9)	<b>2 (2.0)</b>	3 (3.0)	<b>0 (0)</b>	<b>0 (0)</b>
Over 1 year	<b>1 (1.0)</b>	<b>2 (2.0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>1 (1.0)</b>

Third Interview Delay (from second interview)							
Immediate/Same day	<b>0 (0)</b>	<b>0 (0)</b>	1 (2.7)	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
1-7 days	<b>0 (0)</b>	1 (2.7)	3 (8.1)	2 (5.4)	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
8 days – 1 month	<b>0 (0)</b>	3 (8.1)	2 (5.4)	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	1 (2.7)
1-2 months	1 (2.7)	1 (2.7)	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
2-6 months	1 (2.7)	3 (8.1)	3 (8.1)	1 (2.7)	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
6 months – 1 year	2 (5.4)	2 (5.4)	4 (10.8)	3 (8.1)	2 (5.4)	<b>0 (0)</b>	<b>0 (0)</b>
Over 1 year	<b>0 (0)</b>	<b>0 (0)</b>	1 (2.7)	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>

*Note.* Cells in bold represent areas in which the number of experiments is lower than that expected if all studies were evenly distributed across variables and ages.

### **6.3.7 How should multiple interviews be conducted?**

For most of the age groups in the studies, children were only re-interviewed once (55.5%; see Table 6.5). However, they were sometimes interviewed three times (20.0%).

Approximately one in ten was interviewed four times (10.9%) and a similar number were interviewed five times (11.8%). Only one study involved children completing six interviews (Bjorklund, et al., 1998).

In regards to the types of questions asked in the multiple interviews conducted, the majority of studies included interviews that correspond with best practice. This was predominantly evident for very young participants (i.e., 2-3 year olds), where studies involving question types that elicit less accurate or less complete details (e.g., misleading, forced choice and yes/no questions) were under-represented (see Table 6.6). However, approximately half of all the studies with 3-8 year old participants purposely included suggestive questions in their interviews (e.g., misleading questions).

The vast majority of studies included a second interview in which interviewers used the same question types as in the first interview (see Table 6.6). These were all studying multiple interviews as defined in chapter one (e.g., addressing the same memories again) rather than extended interviews (e.g., asking for recall on a different topic within the same event).



Table 6.5

*An extract of the Study Space Analysis depicting the number of interviews conducted with each age group*

Number of Interviews	Age						
	2-3	3-5	5-8	8-11	11-13	14-18	Adult
Two	6 (5.5)	20 (18.2)	23 (20.9)	5 (4.5)	4 (3.6)	<b>0 (0)</b>	<b>3 (2.7)</b>
Three	<b>3 (2.7)</b>	5 (4.5)	9 (8.2)	<b>3 (2.7)</b>	<b>1 (0.9)</b>	<b>0 (0)</b>	<b>1 (0.9)</b>
Four	<b>1 (0.9)</b>	<b>2 (1.8)</b>	5 (4.5)	<b>3 (2.7)</b>	<b>1 (0.9)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Five	<b>2 (1.8)</b>	4 (3.6)	4 (3.6)	<b>2 (1.8)</b>	<b>1 (0.9)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Six	<b>0 (0)</b>	<b>1 (0.9)</b>	<b>1 (0.9)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>

*Note.* Cells in bold represent areas in which the number of experiments is lower than that expected if all studies were evenly distributed across variables and ages.

Table 6.6

An extract of the Study Space Analysis involving question types used in the first and second interviews

Question Types	Age						
	2-3	3-5	5-8	8-11	11-13	14-18	Adult
First Interview							
Free Recall	12 (3.9)	26 (8.5)	31 (10.1)	8 (2.6)	<b>5 (1.6)</b>	<b>0 (0)</b>	<b>3 (1.0)</b>
Open-ended	9 (2.9)	18 (5.9)	23 (7.5)	<b>4 (1.3)</b>	<b>2 (0.7)</b>	<b>0 (0)</b>	<b>2 (0.7)</b>
Wh-	7 (2.3)	13 (4.2)	18 (5.9)	<b>6 (2.0)</b>	<b>5 (1.6)</b>	<b>0 (0)</b>	<b>1 (0.3)</b>
Yes/No	<b>6 (2.0)</b>	14 (4.6)	15 (4.9)	<b>3 (1.0)</b>	<b>2 (0.7)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Misleading	<b>5 (1.6)</b>	13 (4.2)	14 (4.6)	<b>3 (1.0)</b>	<b>2 (0.7)</b>	<b>0 (0)</b>	<b>1 (0.3)</b>
Leading	<b>5 (1.6)</b>	8 (2.6)	10 (3.3)	<b>3 (1.0)</b>	<b>2 (0.7)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Forced-Choice	<b>0 (0)</b>	<b>1 (0.3)</b>	<b>3 (1.0)</b>	<b>2 (0.7)</b>	<b>1 (0.3)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Second Interview							
Free Recall	12 (3.9)	26 (8.4)	31 (10.1)	8 (2.6)	<b>5 (1.6)</b>	<b>0 (0)</b>	<b>3 (1.0)</b>
Open-ended	9 (2.9)	18 (5.8)	23 (7.5)	<b>4 (1.3)</b>	<b>2 (0.6)</b>	<b>0 (0)</b>	<b>1 (0.3)</b>
Wh-	8 (2.6)	13 (4.2)	18 (5.8)	7 (2.3)	<b>5 (1.6)</b>	<b>0 (0)</b>	<b>1 (0.3)</b>
Yes/No	<b>6 (1.9)</b>	14 (4.5)	15 (4.9)	<b>3 (1.0)</b>	<b>2 (0.6)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Misleading	<b>4 (1.3)</b>	12 (3.9)	14 (4.5)	<b>3 (1.0)</b>	<b>2 (0.6)</b>	<b>0 (0)</b>	<b>1 (0.3)</b>
Leading	<b>4 (1.3)</b>	8 (2.6)	11 (3.6)	<b>3 (1.0)</b>	<b>2 (0.6)</b>	<b>0 (0)</b>	<b>1 (0.3)</b>
Forced-Choice	<b>0 (0)</b>	<b>2 (0.6)</b>	<b>3 (1.0)</b>	<b>2 (0.6)</b>	<b>1 (0.3)</b>	<b>0 (0)</b>	<b>1 (0.3)</b>
First and Second Interview Question Type Similarity							
Same	10 (11.0)	20 (22.0)	26 (28.6)	7 (7.7)	<b>5 (5.5)</b>	<b>0 (0)</b>	<b>0 (0)</b>
Different	<b>2 (2.2)</b>	7 (7.7)	9 (9.9)	<b>2 (2.2)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>3 (3.3)</b>

*Note.* Cells in bold represent areas in which the number of experiments is lower than that expected if all studies were evenly distributed across variables and ages.

## **6.4 Discussion**

From this Study Space Analysis, we can determine that a variety of independent variables and a number of relevant dependent variables have been examined in research that involves re-interviewing children. A crucial finding was that none of the studies included in the Study Space Analysis involved children between the ages of 14 and 18, and very few included children aged eleven or over. This is in contrast to the age ranges with which most multiple interviews are conducted (i.e., 12 to 17 year olds according to chapter two's findings). Although studies have been conducted with adults and younger children, we should not immediately assume that if multiple interviewing is an effective way of gathering new evidence from these age ranges, it will be for adolescents too.

The TBR event was often a real-life or staged event that the children took part in, a large number of which were, surprisingly, either very short (less than 2 minutes long) or quite long (between 30 and 60 minutes). Some varied between children within a study due to involving real-life events, such as trips to hospital. The majority of these events were negative in emotion and most involved some characteristic designed to replicate unusual but undamaging aspects of abuse. However, not many studies used crimes as the TBR event and very few examined children's recall of a repeated event over multiple interviews.

The interviewers were mainly people related to the research itself (e.g., researchers or students). The first interview they conducted was often within a month of the TBR event, followed by a second interview which was also frequently conducted with a delay of a month or less from the first interview. However, the delay between the first and second interview was more likely to be over a month than the delay between the TBR event and the first interview. These findings will now be discussed in relation to each of the questions and conditions mentioned in the introduction.

### **6.4.1 Why re-interview?**

The dependent variables that have been measured in the research adequately address the question of why multiple interviews should be conducted. Most studies compared first and subsequent interviews in terms of accuracy and number of details provided. Additionally, new and repeated information and their accuracy were also often examined in subsequent interviews. The main potential benefit of multiple interviews is obtaining

further accurate information about an alleged crime. Thus, examining new information provided in subsequent interviews using these dependent measures in combination provides a fairly comprehensive overview of the potential benefits associated with multiple interviews. One downside of multiple interviews that has been discussed in the literature is the risk of recovering contradictory memories (Krix, Sauerland, Lorei, & Rispens, 2015). Although providing any new information in a second interview could be perceived by some as contradictory (rather than inconsistent), no studies examined direct contradictions in children's recall (as was done in chapter four). Some studies, on the other hand, coded children's recall according to the centrality of the event, which can be helpful for determining if the new, accurate information is particularly key to the event or more peripheral, and therefore possibly less useful for the investigation.

#### **6.4.2 Who should conduct multiple interviews?**

Conversely, the question of who should conduct multiple interviews is less well answered by the current literature. The studies were split fairly evenly into those that use the same interviewer for all interviews and those who used different interviewers. However, comparison of these two groups is necessary to determine which might produce better recall and only one study actually made this comparison (Bjorklund et al., 2000). One further study evaluated different types of interviewers, comparing police interviewers with clinicians (Melinder et al., 2010). As discussed in section 1.4.2 in chapter one, some countries other than the UK have non-police interviewers who conduct forensic interviews of child victims/witnesses. From the current experimental literature, we are unable to determine if this results in more successful interviews or not. This highlights two key areas for further research; (1) Research that examines whether children experiencing multiple interviews benefit from a change in interviewer or from experiencing the same interviewer again, and (2) Research that examines the benefits and disadvantages of police vs. non-police interviewers.

#### **6.4.3 What delay should there be between interviews?**

The delays between the first and subsequent interviews varied widely. Similar proportions were conducted within one month, as were between one and six months later, or over six months later. Only four comparisons between different delays were conducted in the studies included in the current sample, and thus further research is crucial. Knowing the ideal length of time between multiple interviews for obtaining the most

accurate, detailed and useful information from children could be helpful for those planning interviews, especially if policy change encourages pre-planned multiple interviewing schedules.

#### **6.4.4 How should multiple interviews be conducted?**

The majority of studies included in this SSA used best practice interviews, including free recall, open questions and wh- questions. However, some also included suggestive question types. This is beneficial in that research that has looked at interviewers' use of question types shows that even after training, they do not stop using poor interviewing practice, including suggestive questions (e.g., Lamb et al., 2009). Therefore, looking at a range of interviewing practice is important for determining whether multiple interviewing would work in practice.

On the other hand, recommendations regarding the optimal number of follow-up interviews are limited by the under-representation of studies examining more than a first and second interview. Given that in some countries children are regularly interviewed more frequently than that (for example, testifying children were interviewed an average of five times in Goodman et al.'s study, 1992, and children were interviewed an average of 2.52 times in the sample for chapter three), this area of research should be developed.

#### **6.4.5 Ecological Validity of the TBR Event and Interviews**

It could be argued that multiple interviewing might be of greatest value to investigations of child abuse. These cases often do not progress to court (National Society for the Prevention of Cruelty to Children, 2014), have serious psychological and social consequences for children (Norman, Byambaa, De, Butchart, Scott, & Vos, 2012; Tyler, 2002) and often rely heavily on children's testimony as the only source of information about what happened (other than the perpetrator; Malloy, La Rooy, Lamb, & Katz, 2011). Thus, there are strong arguments for the allocation of both monetary and time resources for these types of cases, especially for techniques that may lead to further evidential leads and evidence. Hence, the most appropriate TBR events for experimental studies would be those that replicate aspects of child abuse cases, within ethical boundaries. When making this comparison, the Study Space Analysis reveals a number of areas where the ecological validity of studies could be improved.

Issues related to the TBR events' ecological validity were:

1. Length: The majority of events used were less than two minutes or over 30 minutes long.
2. Rare use of crimes as stimulus: The only crime events included in these studies were presented in video format, preventing any child involvement in the event.
3. Emotion: Most events were of positive or neutral valence for children. This is likely to be due, however, to the ethical issues related to exposing a child to a negative event.
4. Repetition: Only two studies included events that the child was exposed to more than once (Jack, et al., 2012; Powell & Thomson, 1997). Repeated abuse occurs frequently, in around a quarter to a third of cases in some studies (Bottoms, Rudnicki, & Epstein, 2007; Goodman et al., 1992). Thus, forensic interviewers are likely to come across repeated abuse cases relatively frequently and so understanding the possible advantages and disadvantages of multiple interviewing in these situations could be especially beneficial.

The interviews could also be adapted to improve their ecological validity as follows:

1. Use professional forensic interviewers. Very few studies in the current sample did, but the differences between how trained students and researchers with knowledge of the interviewing literature conduct interviews and how professional interviewers with vast experience of interviewing could be myriad. Thus, although the researchers may have experienced the same training and be able to conduct a good quality interview, research using professional interviewers is necessary to be more representative of real forensic interviews.
2. Increase the delay between the TBR event and the first interview. The timing of the child's first interview should not, theoretically, be affected by whether they are going to experience one or more than one interview. According to ABE (Ministry of Justice, 2011), children should be interviewed as quickly as possible after the allegation is made. This is based on sound research that shows children's (and adults') memory to decrease with time (Lamb, Hershkowitz, Orbach, & Esplin, 2008). Thus, studies that examine multiple interviews should involve an initial retention interval similar to those found in

real interviews, as this is a realistic representation of both delays related to disclosure and those related to the investigation. The majority of first interviews in the present SSA were conducted within a month of children's exposure to the TBR event. The limited research suggests that a high proportion of cases are not even reported to the police within one month (e.g., at least 32% of cases, Goodman et al., 1992), and that the retention interval can be highly varied (Leander, 2010, found 15 children had been interviewed within three days of the assault but a further ten up to a year later and two over a year later). Although the literature is not vast on the subject, it suggests that research using an initial retention interval of more than a month would be more representative of real forensic investigations.

3. Using only ABE-recommended techniques in the interviews. Some of the interviewing techniques included in the studies are not encouraged in current interviewing guidelines (such as the use of anatomical dolls), and hence the number of studies with comparable interviews to current practice are reduced. However, in many countries good practice guidelines and/or training are not available and so this area of research is more widely applicable.

On the other hand, there were some studies that used events which were of high ecological validity. For example, a significant sub-sample used life experiences as their TBR event, which were mainly visits to the doctor or medical emergencies which the child suffered. These incidents could be argued to have numerous similarities with child abuse; they involve negative emotions (including pain), the child is often touched by an adult, sometimes in intimate areas, the child is directly involved in the event, and they can last a significant amount of time. The disadvantage of using this type of TBR event is the lack of control over the event; it is not standardised and therefore an array of confounding variables could affect the ensuing results. Also, assessing the correctness of some recall can be problematic.

Authors that used a more standardised event also often took measures to include forensically-appropriate aspects in their events. This included unaccompanied interaction with an adult, some involving touch or a photograph being taken of the child, and the majority were live events rather than video recordings. Thus, replicating a situation

where the child is the sole source of information about an event taking place with an adult.

#### **6.4.6 Conclusions**

A comprehensive literature on the multiple interviewing of children is gradually forming. The Study Space Analysis conducted here showed there to be a large number of studies focusing on five to eight year old children, with the majority using somewhat ecologically valid events. However, crucial gaps in the research have also been uncovered, suggesting that researchers should be cautious in advocating policy change at this stage. Research with the following characteristics is urgently required prior to making policy decisions regarding multiple interviewing:

- First interviews conducted more than one month after the TBR event,
- More than two interviews conducted with each child,
- 11-18 year old participants,
- Repeated TBR events,
- Interviews conducted by professional interviewers.

In combination with the four previous chapters, it can be concluded that multiple interviewing appears to have great potential as an interviewing technique that could improve children's informativeness. However, further research is required prior to possibly changing policy and practice to ensure these findings apply to more ecologically-valid conditions and a broader population of interviewees and possible abuse types. The following chapter describes the findings of this thesis in combination in more detail, discusses the possible implications and applications of them, and puts them into the context of previous research.



## **Chapter Seven**

### **Discussion**

#### **7.1 Introduction**

The present thesis described four new studies and a Study Space Analysis focusing on methods for interviewing child victims/witnesses, in particular the use of social support and multiple interviews. The first study, described in chapter two, obtained police officers' self-reported opinions about and uses of multiple interviewing and rapport-building. This was followed up by an analysis of transcripts to determine how multiple interviews are conducted by police officers, and how a sample of child victims respond in them. Next, an experimental study was conducted, manipulating the rapport-building seven to ten year old children experienced across three mock-investigative interviews and its effects on their recall and well-being. The impact of viewing multiple interviews and rapport-building on mock-jurors' perceptions of the child witness, the interview, and their case progression decisions was then examined and described in chapter five. The Study Space Analysis in chapter six was conducted to determine whether the experimental literature on multiple interviewing with children is sufficient at this point in time to act as the driving force behind policy changes. The present chapter will bring together the findings from these previous chapters, highlighting links between them and with previous research. It will examine the implications these findings have for training investigative interviewers, the practice of child forensic interviews and court procedures. Additionally, it will address possible directions for future research and methodological issues that have arisen in this research and should be considered in future research.

#### **7.2 Summary of Findings**

The first study in the present thesis ascertained that multiple interviewing is an important research topic for investigative interviewing practice. This is apparently the first study to look at police officers' attitudes towards multiple interviewing and it was found that the vast majority of these police officers felt there were circumstances in which multiple interviews are appropriate and useful. Additionally, they reported that they would have liked to have conducted second interviews but were unable to in nearly a sixth of cases they had been involved in during the previous year. However, they also reported feeling less comfortable conducting second than first interviews and often had received no

relevant training. Officers were aware of risks associated with multiple interviewing and consciously considered these risks when evaluating re-interviewing. In particular, police officers mentioned the increased potential for the child to provide inconsistent accounts, and the risk of such interviews having a negative impact on the child's well-being. Police officers' ratings of the efficacy of the rapport-building phase for obtaining information from children were found to be similar to previous research (La Rooy, Lamb, & Memon, 2011; Wheatcroft, Wagstaff, & Russell, 2014), but they reported feeling least comfortable conducting this phase of all the ABE interview phases, and rated the ABE guidelines and training for this phase as the least useful. They also reported being least likely to use the rapport-building phase in second interviews.

When transcripts of actual multiple investigative interviews were analysed in chapter three, however, interviewers were found to be equally supportive in second as in first interviews (although analysis of the occurrence of rapport-building was hampered by inconsistent prior transcription of this phase). Interviewers were also found to use a similar proportion of question types across multiple interviews. Thus, interviewers appeared to be consistent in their interviewing technique, although this technique was generally poor (i.e., a high reliance on option-posing questions), and involved very little social support. The child interviewees were also consistent in their interview performance across multiple interviews, providing a similar number of details and types of details, including many new and high investigation-relevant details in second and third interviews, and very few contradictions.

Along with probably being the first study to have analysed in detail interviewer and interviewee behaviours in multiple investigative interviews with typically-developing children, a new methodology was created in chapter three in order to 'visualise' these interviews. The Waterhouse Answer Grid and the Griffiths Question Map were used to depict where in the interview questions were asked and details given. These highlighted poor practice in even the sub-sample of 'good' interviews. However, children were found to provide high investigation-relevant details earlier in second than first interviews and to provide details throughout (rather than just at the beginning of the interview when they could be expected to be less tired). The WAG and GQM methodology could be utilised in future research to examine in detail children's disclosure patterns within interviews, the

relationship this has with interviewer question style, support, and their timing within the interview, and to make in depth evaluations of interviewing practices.

The fourth chapter further examined rapport-building across multiple interviews by presenting an experimental study in which children experienced varying approaches to rapport-building across three mock-investigative interviews. In the first interview, they experienced no rapport-building, *normal* rapport-building (as described in ABE), or *separate* rapport-building (as described in ABE, but conducted the day before). For the second and third interviews, children either continued to experience no rapport-building, or experienced a *standard* rapport-building session (identical to *normal* in the first interview), or a *brief* rapport-building session (where discussion of the neutral subject was restricted). In comparison to the no rapport-building group, those children who experienced either type of rapport-building exhibited no significant differences in their recall or their well-being (as measured by a self-report rapport questionnaire and a state anxiety questionnaire) across all three interviews. However, *standard* rapport-building in the second and third interviews was associated with increased total recall in comparison to the *brief* rapport-building. Children reported more high investigation-relevant details, but additionally more confabulated details. For the second interview, the number of new, correct, high investigation-relevant details outweighed the number of new confabulations, whereas the reverse was true in third interviews. Thus, in support of previous research (K. Collins, 2012), the rapport-building techniques recommended in ABE were found to fall short of either improving children's recall or their well-being in comparison to no rapport-building. It was suggested that the studies that have found benefits of 'good' rapport-building (involving open-ended questions) in comparison to 'poor' rapport-building (involving direct questions, Brown, et al., 2013; Roberts, Lamb, & Sternberg, 2004; Sternberg, et al., 1997) may instead have been measuring the detrimental effects of 'poor' rapport-building. A limitation of this research is that the children had not originally experienced a traumatic event, and so they may not have needed rapport to help them disclose in the way that child victims may do. However, many children are involved in the criminal justice system as witnesses. Some research suggests they are more frequently involved in trials as bystander witnesses to crimes such as breaches of the peace, assaults, and indeed thefts, than as victims of sexual offences (Flin, Bull, Boon, & Knox, 1993). Thus, the present findings add to the literature indicating that, for child witnesses, conducting no rapport-building may be preferable to conducting poor rapport-

building (which has often been found to occur in real interviews, Davies, Westcott, and Horan, 2000; Westcott and Kynan, 2006; Wood, McClure, and Birch, 1996).

Irrespective of their rapport-building conditions, children in chapter four did provide a large number of reminisced details (i.e., new information) in second and third interviews (as in previous studies: Bruck, Ceci, & Hembrooke, 2002; Fivush, McDermott Sales, Goldberg, Bahrick, & Parker, 2004; La Rooy, Pipe, & Murray, 2005; 2007; Salmon & Pipe, 1997; 2000). Additionally, children were less anxious in second than first interviews, and directly contradicted themselves very infrequently across interviews (as in chapter three).

Multiple interviews were shown to have a positive effect on mock-jurors' perceptions of a child witness in chapter five, whereas rapport-building had a negative one. When a child's interviews were manipulated to appear as one interview with a ten minute break, or two interviews with a week's delay, mock-jurors in the latter condition rated the child as more believable and truthful. This is in contrast to previous research that had found inconsistencies across multiple interviews to lead to more negative perceptions of the testifying child (Yozwiak, Golding, & Marsil, 2004). On the other hand, when mock-jurors viewed the rapport-building phase of the child's interviews, they rated her as less believable and credible than those who did not watch the rapport-building phase. Again, this is contrary to previous research (Krähenbühl, 2012), but in combination these studies do suggest viewing the rapport-building phase of an interview affects mock-juror perceptions of the witness, possibly because mock-jurors have an enhanced knowledge of the interviewer-interviewee relationship which affects their judgements of the child. Thus, it is important that jurors' exposure to children's rapport-building sessions is standardised in order for the victim and perpetrator to obtain a fair outcome and juries' perceptions of child victims/witnesses to be based on the same information across cases.

Given the positive (or at worst, null) findings regarding multiple interviewing consistently found within this thesis, the final chapter entailed a Study Space Analysis, a novel reviewing process that systematically reveals gaps in the literature. This analysis demonstrated that despite the findings presented here, the experimental literature on multiple interviewing contains some crucial gaps that indicate further research is necessary prior to making evidence-based policy recommendations. In particular, the

scarcity of research with an adolescent sample is significant, as is the lack of studies that have used delays between to-be-remembered events and initial interviews that are in line with practice (i.e., although research of crime disclosures made during childhood has found vast variety in delays, many have found very long delays on average, such as 45 days based on the transcripts presented in chapter three, or 300 days in Cederborg, La Rooy and Lamb's study, 2008).

### **7.3 Theoretical and Practical Implications**

#### **7.3.1 Multiple Interviews**

The research presented in this thesis generally supports the use of multiple interviews in cases where children's testimony is vital. In chapter two, officers mentioned a number of risks associated with multiple interviewing. Namely, that children are afforded another opportunity to provide inconsistent testimony, and that they could be further traumatised by the interviewing experience. The risk of inconsistency has previously been discussed in research (Burrows & Powell, 2014; Fisher, Brewer, & Mitchell, 2009). However, inconsistency can be defined in a number of ways, including 1) contradictions, by which children make two statements which are mutually exclusive, indicating at least one must be inaccurate, and 2) reminiscence and forgetting, by which children provide new information when later recounting an event, or omit details they have previously mentioned. Regarding this first form of inconsistency (contradictions), the subsequent studies in this thesis indicate that concern about this risk may be unjustified. Detailed analysis of children's behaviours across multiple investigative interviews (in chapter three) showed children to respond similarly across first and subsequent interviews, providing very few direct contradictions of their prior testimony. This was supported by the experimental study presented in chapter four, in which children also made very few contradictions across three interviews and were equally accurate in all of them. The lack of contradictions was not caused by children's reduced informativeness: Children in both studies reminisced, providing a large proportion of new information in second and third interviews, much of which was of high investigation-relevance. Thus, although multiple interviews could afford children the opportunity to produce accounts in which they frequently contradict their previous evidence, findings in the present thesis suggests that they often do not, either in real or mock-investigative interviews.

Attitudes towards children's reminiscence in multiple interviews are mixed; although the recall of new details comprises the main benefit of multiple interviewing, reminiscence can be viewed as a form of inconsistency (as mentioned above). Mock-jurors have been found to use inconsistency as an indication of unreliability (Leippe, Manion, & Romanczyk, 1992; Quas, Thompson, & Clarke-Stewart, 2005), and furthermore, barristers often perpetuate this myth by emphasising such inconsistencies in cross-examination (Burrows & Powell, 2014; Fisher, et al., 2009). The final study in this thesis, however, suggests that inconsistencies (in the form of contradictions, reminiscence and forgetting) across interviews do not negatively affect mock-jurors' perceptions of a child any more than do their inconsistencies within interviews. In fact, mock-jurors who believed they were seeing two separate child interviews perceived the child more positively than those who thought they were watching a single child interview. It is possible that this was because the mock-jurors could understand from their own experience memory inconsistencies that occur through delayed recall, but were less forgiving of those that occurred with merely a ten minute break between recalls. These findings are positive as mock-jurors' perceptions of children's recall in multiple interviews should not be affected by unrealistic expectations of their recall consistency. On the other hand, research has shown reminiscence with very short delays between interviews too (e.g., Katz & Hershkowitz, 2012; Hershkowitz & Terner, 2007). Thus, it may be beneficial for jurors' perceptions of a child witness that they receive expert testimony on memory to alert them to the frequency with which reminiscence occurs. However, the findings also differ from previous research, and so further research looking at how inconsistencies affect mock-juror perceptions are crucial. Examining the effects of possible expert testimony on reminiscence would also help determine whether mock-jurors use their knowledge of memory to evaluate the accuracy of children's testimony. Additionally, although mock-jurors did occasionally categorise the child's reminiscence and/or forgetting as contradictions, they rated repeated details (consistent details) as no more reliable than non-repeated (forgotten or reminisced) or even contradicted details provided by the child in her interviews. Thus, although it would be challenging for the investigation to have directly contradicting information, neither contradictory nor reminisced or forgotten details appear to have negative effects on jurors' opinions of the child's testimony.

Another risk officers mentioned in their reasoning for being cautious of multiple interviewing was the risk of further trauma to the child, which again has been picked up as a concern in other research (Plotnikoff & Woolfson, 2001). Conversely, the present thesis suggests that children find second interviews less traumatic than first: Children self-reported feeling less anxious in second interviews and mock-jurors perceived a child as less anxious in a second interview clip than the first regardless of the stated delay between these clips. However, as previously mentioned, the children in this study were not abused, and so multiple interviews may have a different effect on the anxiety levels of victims of traumatic crimes. Thus, although second interviews may still be distressing for a child, this research indicates it may not be as distressing as the initial interview, particularly for witnesses.

The present thesis has, therefore, addressed a number of risks related to multiple interviewing that appear to be less significant than perhaps was thought by the police participants in chapter two's survey. In particular, concerns regarding opportunities for inconsistency and confabulations have been addressed in field and laboratory studies. Some evidence has also been presented that suggests multiple interviews may not cause repeated stress in the expected manner (although caution should be taken here due to the lack of ecological validity associated with stress levels in laboratory studies). Additionally, the benefits have been shown to be considerable in terms of additional information of particular relevance to the investigation. On the other hand, some concerns related to multiple interviewing have not been addressed. Although the research in chapter three showed no increased suggestibility in the questions used in multiple interviews, it is possible that children will be increasingly compliant across one or more interviews which utilise poor interviewing techniques (as found in Leichtman and Ceci's study, 1995). Furthermore, it is possible that there may be external influences on child interviewees which make their testimony less reliable in subsequent interviews, such as intentional or unintentional provision of misinformation or pressure by interested parties. Finally, this thesis did not address whether English and Welsh police forces actually have the necessary resources to conduct multiple interviews. However, it could be argued, as it has been by Block, Foster, Pierce, Berkoff, and Runyan (2013), that if multiple interviews lead to increased convictions, this could save the Criminal Justice System money in the long run.

In conclusion, the findings presented in this thesis suggest that allocating resources towards improving multiple interview training is advisable. Although the Study Space Analysis indicates that the research is not advanced enough to create evidence-based policy changes and there are still possible concerns regarding multiple interviewing practice, the majority of police officers in chapter two reported having conducted multiple interviews. Furthermore, they reported feeling significantly less comfortable conducting all of the ABE phases in second than first interviews, and had often had no training on how to conduct a second interview. Although these second interviews were found to be conducted as well as first interviews in chapter three, they were still conducted fairly poorly. Thus, changes in training may well be required to improve officers' confidence and ability to conduct multiple interviews, which this thesis indicates is a valuable investigative technique.

### **7.3.2 Social Support and Rapport-Building**

Despite often reporting that they used a supportive approach towards children in first and second ABE interviews, the research in chapter three shows that, in practice, interviewers very infrequently use verbally supportive techniques in child interviews in the field. This may be because interviewers feel uncomfortable about being socially supportive in interviews. Although rapport-building is more than just socially supportive behaviours and vice versa, police officers reported feeling least comfortable conducting this phase of the ABE interview. Additionally, they felt it was the phase for which the ABE training and guidelines were least useful. The training and guidelines, therefore, may not prepare officers adequately for building and maintaining rapport with child interviewees and using socially supportive behaviours to do so.

On the other hand, the rapport-building techniques currently encouraged by ABE were found to be ineffective for improving bystander children's interview performance, and led to more negative perceptions of the child when mock-jurors viewed the rapport-building phase. Supporting the only previous study to compare ABE rapport-building to a control group (K. Collins, 2012), the study in chapter four found no significant effect of the rapport-building phase on children's recall or well-being, indicating that these techniques are not necessarily having the desired effect. Thus, finding an alternative to ABE's described rapport-building may be beneficial to interviewing practice, both in terms of improving children's well-being and their recall. Although this research has not



examined the effects of ABE rapport-building on traumatised children (for whom ABE was largely designed), it could be argued that rapport-building which is effective for reducing even low levels of stress related to being interviewed about non-traumatic events could be particularly effective with children who are experiencing high levels of stress.

Possible alternatives that have found some empirical support are play-based rapport-building, in which the interviewer and interviewee complete a play activity together (K. Collins, 2012), and the National Institute of Child and Health Development's Revised Protocol, in which instructions on behaving supportively in a non-suggestive manner and building rapport effectively are emphasised (Ahern, Hershkowitz, Lamb, Blasbalg, & Winstanley, 2014; Hershkowitz, Lamb, & Katz, 2014; Hershkowitz, Lamb, Katz, & Malloy, 2015). However, both require further research to determine if they consistently improve rapport or recall or both in comparison to a control group or the present ABE's rapport-building techniques.

Conducting the rapport-building session the day before the interview, replicating the pre-interview contact described by officers in chapter two, had no effect on children's recall or well-being in comparison to conducting it just prior to the interview or not at all. Some papers have suggested that rapport-building tires children (Burrows & Powell, 2014; Davies, et al., 2000) and others have suggested that this explains why they did not find any beneficial effects of ABE rapport-building (Roberts et al., 2004). The study in chapter four, however, does not support this explanation; it would be expected that conducting the rapport-building the day before would still lead to benefits but without tiring the child, but this was not the case. Furthermore, the children in the *normal* rapport-building group did not appear to be tiring during the interviews. Thus, separate rapport-building may be useful for longer interviews, but is unlikely to explain the lack of experimental findings in Roberts et al.'s (2004) study. This is the first study to have looked at such a separation of the substantive and non-substantive sections of the investigative interview. The findings do indicate that although there were no benefits of conducting the rapport-building on a different day as police officers described doing in chapter two, and as recommended by ABE in certain cases (such as with young children, Ministry of Justice, 2011), there were also no detrimental effects. Thus, according to this research, conducting a separate rapport-building session could be an effective option with

no associated risks to the child's testimony or well-being, when the interviewer is concerned about tiring the child.

Conducting the rapport-building the day before may make it easier to separate the rapport-building and substantive phases for presentation in court, helping to ensure jurors are not subjected to watching overly-long video recordings (Crown Prosecution Service). The research conducted in the present thesis suggests, unlike previous research (Krähenbühl, 2012), that watching the rapport-building phase may have detrimental effects on mock-jurors' perceptions of the child interviewee. Regardless of the direction of the effect, being exposed to the rapport-building phase appears to have an effect on mock-jurors' perceptions of the child. This could be caused by mock-jurors in this condition having less cognitive capacity (due to tiring) for evaluation of the child's substantive testimony (Krähenbühl, 2012). Therefore, a policy decision should be made to standardise whether rapport-building phases are shown or not in order to ensure jurors' perceptions of child witnesses are made on the same aspects of the child's testimony.

Although this research appears to suggest that the ABE rapport-building that is currently in place does not benefit child interviews, it is also possible that it has effective interviewing outcomes that have not been measured in the studies presented here. For example, in chapter two, police officers explained how they often used this phase of the interview to assess the child interviewee's mental and linguistic competence. This was not examined in any of the present studies. Additionally, it is possible that in some cases children's recall may improve with rapport-building because it provides an opportunity to practice recalling open-ended questions (although note this was not found in the studies presented here). Finally, as mentioned above, ABE rapport-building may be effective at helping children build confidence and feel supported when they are recalling an embarrassing and possibly painful memory, a situation that is extremely challenging to replicate ethically in the laboratory.

In respect to the theories of how social support affects children's recall, the present thesis (and in particular chapter four) supports Davis and Bottom's findings (2002) that the effect is not explained by decreased anxiety, and subsequent lower cognitive busyness. The cognitive busyness theory postulates that anxiety takes up cognitive resources, and that if a person is less anxious, they are able to re-allocate these resources to recall and

thus, theoretically, recall more. However, in chapter four, children's state anxiety was not found to correlate with their informativeness, which suggests that this is not the cause of previous studies' findings that social support improved recall.

### **7.3.3 Multiple Interviews, Social Support and Rapport-Building**

The ABE guidelines (Ministry of Justice, 2011) recommend the use of rapport-building in all child interviews, but this thesis presents the first research to have examined the overlap between multiple interviews and rapport-building. This overlap is crucial as children may feel more reluctant about being involved in a subsequent interview if they felt uncomfortable in a previous one. Furthermore, the criticism that multiple interviews may lead to further trauma (as discussed above, Plotnikoff & Woolfson, 2001) suggests it is particularly important that children are socially supported in multiple interviews. In terms of existing practice, police officers in chapter two reported using rapport-building in most second interviews, but overall it was the phase that was least likely to be used. Although it was not possible to compare how often rapport-building occurred in first and second interviews in the transcripts examined in chapter three, those that were transcribed were conducted similarly, and interviewers' frequency of use of verbal supportive utterances were similar in first and second interviews. Thus, children do appear to be similarly supported in first and subsequent interviews, but this may differ across interviewers. However, interviewers in chapter three's sample did not provide very much social support in the substantive phases in any of their interviews. Thus, the interview training advocated above should not only focus on improving officers' confidence in conducting multiple interviews, but also on how to provide social support in a non-suggestive manner.

When rapport-building was conducted across multiple interviews, it was not associated with improvements in either children's recall or their well-being in any interview in comparison to a no rapport-building *control* condition, unlike the socially supportive behaviours in Goodman, Bottoms, Schwartz-Kenney, and Rudy's study (1991). However, children who experienced *standard* rapport-building sessions in the second and third interviews did provide more confabulated details and more high investigation-relevant details than those who experienced *brief* rapport-building. Thus, ABE rapport-building appears to be ineffective with bystander witnesses to non-traumatic events in first, second, and third interviews. Although if rapport-building is conducted, longer

rapport-building seems to be more effective at obtaining additional information from children than shorter rapport-building (in contrast to Davies, Westcott, and Horan's findings, 2000). Finding an alternative, effective form of rapport-building is, therefore, crucial for ensuring children are as comfortable as possible within the re-interviewing context (see section on social support and rapport-building above).

As mentioned above, children reported feeling less anxious in second than first interviews, irrespective of the rapport-building they experienced. Mock-jurors also perceived the child they viewed as less anxious in her second interview than her first, and this had no interaction with whether they had seen the child's rapport-building session or not. It is difficult to tell whether this is caused by experience with the interviewer, or experience of the interviewing process. We might have expected children in the *separate* rapport-building condition to report feeling less anxious than those in the *normal* or *control* conditions if it was related to experience with the interviewer, which was not the case. Additionally, children's perceived rapport scores were similar across interviews, suggesting that it may be reduced anxiety about the interview, rather than the interviewer. However, the relationship between anxiety and rapport scores is not entirely clear-cut. Thus, second interviews appear to be less anxiety-provoking for children than initial interviews, but further research (possibly using different interviewers across multiple interviews) is needed to determine why this is.

#### **7.4 Limitations and Future Research**

A number of limitations of the present studies are integral to the research paradigms utilised, and so were understood prior to conducting the research. One such limitation is the ecological validity of chapters four and five. Children were interviewed about a video crime event. Watching a video crime event is very different to being involved in a crime, either as a witness or a victim. Studies have shown that children's memories for events they were involved in are different to those that they observed (e.g. Baker-Ward, Hess, & Flanagan, 1990). Additionally, multiple interviews and social support may be particularly vital in cases of child sexual abuse, where the child is often the only source of evidence other than the perpetrator (Malloy, La Rooy, Lamb, & Katz, 2011), and they may be experiencing the most serious social and psychological consequences (Norman et al., 2012; Tyler, 2002). Watching a theft will not produce similar levels of stress when encoding the event or anxiety and reluctance at retrieval compared to being a child victim

of abuse. Studies that have examined stress at encoding have found mixed effects on children's memory (Fivush, et al., 2004; Quas & Lench, 2007; Quas, Rush, Yim, & Nikolayev, 2014). However, as one of the possible explanations for how rapport-building and social support affect children's memory is through anxiety and cognitive busyness, the results in chapter four in the present thesis may have been different if children had taken part in a more anxiety-provoking event. The validity limitations of the use of a crime video also continued into the mock-juror study. Participants saw one child's interviews and were aware that they were watching her recall of a video rather than an event she took part in. This may have affected their perceptions of the child and her recall, but no research has compared mock-juror perceptions of a child recalling a live event vs. a video, nor recalling a positive/non-traumatic event vs. a negative/traumatic one. This may, therefore, affect the ecological validity of the findings, but it was neither desirable nor ethically appropriate to put children through an unnecessary stressful experience – a problem that has confronted a multitude of researchers.

An additional limitation that was expected as a result of the methodological decisions was a lack of generalisability to children of all age groups. This was particularly true again for chapters four and five. Only children between the ages of seven and ten years were included in the experimental study. Thus, the thesis' findings add to the existing literature that has examined multiple interviewing and social support with this age group (a group that has, according to the Study Space Analysis, been less represented in research than under eight year olds), but may not be generalisable to older or younger children. Generalisability is limited even further in chapter five as only one seven year old child's interviews were viewed by mock-jurors. Furthermore, the Study Space Analysis revealed a wider issue in respect to the generalisability of all the multiple interviewing literature to adolescents. Due to the scarcity of experimental literature addressing multiple interviewing with children over the age of 11, it is not clear if this is an effective interviewing technique with this age group. Other studies suggest that adolescents may be a particularly challenging group to interview. For example, police officers who were interviewed about their rapport-building practices reported using techniques differently with adolescents (and sometimes not using them) due to their assumed increased understanding of the interviewing process and their role within it (K. Collins, Doherty-Sneddon, & Doherty, 2014). With such increased knowledge, adolescents may be more reluctant to take part in multiple interviews, and rapport-

building may have different effects on their motivation to disclose new information in further investigative interviews, although Westcott and Davies' (1996a) qualitative interviews suggest adolescents may be more motivated to disclose if they have a chance to get to know the interviewer. Thus, research addressing multiple interviews and rapport-building with this group and with children under seven years old is necessary to determine if the findings presented in this thesis apply to a wider age group.

Other limitations were not initially considered when designing the research. A key issue is the sample sizes of chapters two and three. Recruiting police participants and obtaining transcripts of investigative interviews was more challenging than expected. The first study (chapter two) was originally designed to act as a foundation for the following studies. However, even though agreed involvement had been obtained from a number of police forces, very few responses were received, and the data collection period was extended, resulting in this study being the last for which sufficient data was finally collected. Furthermore, in the planning stages of the study presented in the third chapter, approval was obtained from the Association of Chief Police Officers in England and Wales (ACPO). Despite gaining approval from ACPO and the Metropolitan Police Service, and simplification of the methodology, only two transcripts were finally obtained (but not used in the present research) in the three year period of data collection. However, regardless of the small sample sizes, both these studies have revealed novel (statistically significant) findings that increase our knowledge of interviewing in general as well as, specifically, multiple interviews and social support. Furthermore, regardless of the problems encountered, chapter three has a larger sample size than any of the previously published retrospective analyses of multiple investigative interviews (Cederborg, et al., 2008; Santtila, Korkman, & Sandnabba, 2004).

With hindsight, some additions to the research would have been included. For example, in chapter two, more in-depth exploration of interviewers' commitment to socially supporting child interviewees would have furthered our understanding (as it stands, it was relatively easy for participants to state they approached interviews in a supportive manner by just selecting one of the supportive options, which may have also seemed more socially desirable). Examining how responsible interviewers felt for the child's well-being in investigative interviews and to what extent they would adapt their planned interviews to overcome a (traumatised) child's discomfort would give us a more detailed

understanding of the investigative sacrifices they may make, such as delaying obtaining testimony. Furthermore, asking for more details regarding the pre-interview rapport-building described by police officers who completed the survey may have helped make the *separate* rapport-building condition in chapter four more ecologically valid. For example, it was not made clear what the average real-life delay between the pre-interview rapport-building and the investigative interview was. It may have been more than a day, and varying delays may affect children's well-being in the interview. However, prior to obtaining the results, the author was unaware of how often pre-interview rapport-building occurred and thus the relative importance of the questions on this topic.

A further issue to consider in future research is the focus of rapport building. In the present thesis, the focus has been the effects of rapport-building on children's recall and well-being. On the other hand, in chapter two (and supported by K. Collins et al.'s study, 2014) police officers often described using their rapport-building meeting as an opportunity to assess the child's cognitive abilities. The rapport-building phase may, therefore, be an effective tool for this purpose. However, the subsequent studies in this thesis did not address this possible benefit of rapport-building as described in ABE. Future research comparing officers' ability to assess a child's cognitive and linguistic level using various rapport-building techniques would be useful to determine whether the ABE version of rapport-building is particularly helpful for this assessment and to ensure that this benefit is not lost by the use of alternative techniques.

Furthermore, the studies presented in this thesis did not focus on the possible effects of multiple interviewing and rapport-building on children's suggestibility. This was partly to ensure that interviews corresponded to best practice. However, with leading questions still often being used in many child interviews (e.g., the results presented in chapter three and Lamb, et al., 2009), best practice interviews may not be adequate representations of multiple interviews as they are currently conducted. Furthermore, not focusing on suggestibility in some form somewhat limits the extent to which these studies can add to theories on how social support and multiple interviews might affect children's interview recall. For example, Davis and Bottoms (2002) suggested that children had higher resistance efficacy when they were socially supported, thus reducing their susceptibility to suggestion. The studies presented in this thesis did not measure whether rapport-building or multiple interviews affected this outcome.

Additional worthwhile future research has been indicated at the end of each chapter of this thesis, but the key areas that need to be addressed are summarised here. As mentioned above, alternative rapport-building techniques need to be compared to those described in the ABE guidelines and a control group to determine which are most effective at building rapport, making the interviewee feel more comfortable, and possibly enhancing their recall. Although determining that ABE rapport-building is not necessarily an improvement to no rapport-building for child witnesses to a non-traumatic event is an important finding, a practical alternative which requires a realistic level of resources (in terms of time, skills, and training) needs to be proposed. Studies that examine video recordings of child interviews are also needed in order to determine whether interviewers are using non-verbal social support techniques (such as smiling and eye contact) and that therefore further training on the use of these techniques might not need to be prioritised. Additionally, further mock-juror studies with a wider range of child interviewees are essential to strengthen the findings in chapter five. The gaps in the literature revealed by the Study Space Analysis also need to be addressed. In particular, experimental multiple interviewing studies with adolescent samples, professional interviewers, delays of more than a month between the to-be-remembered event and the initial interview, and repeated to-be-remembered events need to be examined.

## **7.5 Conclusions**

This thesis has sought to make a substantial contribution to the limited literature looking at multiple interviews and social support in child investigative interviews and the overlap between them. The present research corroborates prior research suggesting multiple interviews occur relatively often in the UK, insofar as the majority of investigative interviewers will interview a child interviewee more than once about an alleged crime during their career. Multiple interviewing was found to be effective at obtaining new, high investigation-relevant details from children in real and mock-investigative interviews, without eliciting many contradictions (refuting a concern voiced by officers). Furthermore, mock-jurors perceived children who had experienced multiple interviews more positively than those who had experienced a single interview, opposing the view that inconsistencies across multiple interviews will be perceived less well by jurors than those within interviews. Another concern about multiple interviewing is that children may be re-traumatised by these multiple interviews, and so the provision of social support



to children and examination of their well-being is particularly vital in multiple interviews. However, social support was found to be provided consistently across multiple interviews, although quite infrequently. Additionally, rapport-building as described in the UK interviewing guidelines (Ministry of Justice, 2011) was found to have no positive effects on the present children's recall and well-being across multiple interviews, or mock-jurors' perceptions of a child's interview. In conclusion, this thesis suggests the concerns regarding multiple interviewing may be exaggerated, and that this is a relatively simple and effective way of gaining further investigative leads and details about an alleged offence. However, this research also suggests that it is important that an alternative form of rapport-building replaces that currently recommended in the ABE guidelines for witnesses in order to ensure rapport is actually built. It is critical that children are made to feel as comfortable as possible in both initial and subsequent interviews.

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\* denotes that the study was used in the Study Space Analysis (chapter six)

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## **Appendix A**

### **Study 1 – First Questionnaire**

The following questionnaire is the Word document version of the Qualtrics questionnaire. The only differences were that the random number generation was automatic on the Qualtrics version, and, depending on participants' responses, some questions were automatically excluded rather than participants having to skip questions themselves.

## ABE Interview Questionnaire

You are being invited to take part in a research study. The study involves answering questions about your opinions of the Achieving Best Evidence guidelines and the training that you have experienced alongside it. Thus, if you have not ever interviewed a child formally during an investigation, please do not complete the following questionnaire. Thank you very much for your time.

Research Title: Police Perceptions of Child Interviewing Techniques: Second Interviews and Support Options

Principle Researcher: Genevieve Waterhouse (waterhg2@lsbu.ac.uk)

Supervised by: Dr Rachel Wilcock, Dr Anne Ridley (anne.ridley@lsbu.ac.uk) and Professor Ray Bull

Purpose of Data Collection: PhD Research funded by the Institute of Social Sciences Research at London South Bank University

Details of Involvement:

This research involves completing a questionnaire on interviewing child witnesses and victims. You will be asked questions about your use and your opinions of different interviewing techniques and support options available according to the Achieving Best Evidence guidelines. The questionnaire should take you 20 minutes but you are welcome to complete it in more than one sitting. The study has been reviewed and approved by the London South Bank University Research Ethics Committee.

- All your answers will be kept anonymously. No identifying information will be asked of you. The aim of the study is to gather as truthful a picture of police attitudes and behaviours as possible.
- Your answers will be kept in a password-protected, electronic form on an encrypted USB stick and on a password-protected computer for five years after any publications appear. After this time they will be deleted. The principal researcher and her supervisors will be the only people who have access to your answers.
- Your participation is voluntary and you can end the questionnaire at any time.
- If at any point before the 21<sup>st</sup> March 2016 you wish to withdraw from the study, you may do so without giving any reason. To do this, you must email the number you create at the beginning of the study to waterhg2@lsbu.ac.uk asking for your data to be removed. It will immediately be deleted and a confirmation of this deletion will be emailed to you.
- To obtain general results from the study, please email Genevieve Waterhouse at waterhg2@lsbu.ac.uk. These will be sent by email after the study is completed.
- If you have any issues that you are unable to resolve with the research team, please contact the Chair of the University Research Ethics Committee at ethics@lsbu.ac.uk.

If you have any questions at this stage, please email Genevieve Waterhouse at waterhg2@lsbu.ac.uk and then proceed once you have had your questions answered to your satisfaction.

Have you read the above information?  Yes  No

Do you understand what participation in this study involves?  Yes  No

This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

---

Do you fully and freely consent to participate in the study?  Yes  No

Have you ever *formally* interviewed a child victim or witness?  Yes  No

If you have responded yes to all the above questions, you will be giving your consent for your replies to be used in the study.

*Please do not complete the following questionnaire if you answered no to any of the above questions.*

Please create a number six digits long and insert below. Avoid numbers that are likely to be used by others (e.g. 123456). Please note down this number for your records. Should you decide at a later date to withdraw your responses from the study, you will be asked to quote this number. It will be the only thing identifying your responses from other participants'. Additionally, if you choose to take part in the follow-up study, you will be asked for this number to identify your results in both stages.

Number: \_\_\_\_\_

\*\*\*

### About You

1. How old are you? \_\_\_\_\_

2. Are you male or female?  Male  Female

3. What is your current rank?

Police Constable

Sergeant

Inspector

Chief Inspector

Superintendent

Other \_\_\_\_\_

4. What is your current job title?

\_\_\_\_\_

5. Which police force do you work for?

\_\_\_\_\_

\*\*\*

This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

---

### About Your Experience

6. How many years of interviewing experience do you have? \_\_\_\_\_
7. How many years of experience of formally interviewing children do you have?  
\_\_\_\_\_
8. Which training courses (internally or external to the police) have you completed that you feel are relevant to child interviewing and when did you complete them?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
9. Approximately how many *formal child* interviews have you carried out in your career? \_\_\_\_\_
10. On average, how many *child* interviews do you carry out per month? \_\_\_\_\_
11. On average, how many of these are with children aged:  
Under 7 \_\_\_\_\_  
7 to 11 \_\_\_\_\_  
12 to 17 \_\_\_\_\_
12. On average, how many other interviews do you carry out per month? \_\_\_\_\_

\*\*\*

### First Interviews

In this section you will be asked questions about the first **formal** interview that is carried out with the child. When you see "first interview" it is referring to this first formal interview.

13. How often in cases have you had contact with the child prior to conducting the *first* formal interview?

Never        Always

*If you answer 'never', please go to Q. 16*

14. During the contact with the child prior to the first formal interview, how often does the child voluntarily recall details about the crime under investigation?

Never        Always

This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

---

15. If you have had contact with the child prior to the first formal interview, what kind of contact does this normally entail (select all that apply).

- Rapport building
- Statement taking
- First report of the crime
- Family liaison
- Assessment of child's cognitive ability to undertake ABE
- Other \_\_\_\_\_

16. On average, how many *first* formal child interviews do you carry out per month (e.g. interviews with a child about a case that you have not interviewed them about before)?

\_\_\_\_\_

17. How would you describe your approach to the first formal interview? (select one)

- Authoritative
- Friendly
- Business-like
- Formal
- Informal
- Compassionate
- Other (please specify) \_\_\_\_\_

18. Please rate how effective the Achieving Best Evidence's interview phases are for eliciting probative information from child interviewees in *first* interviews:

	Very Ineffective	Ineffective	Somewhat Ineffective	Neither Effective nor Ineffective	Somewhat Effective	Effective	Very Effective
Preparing the interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rapport building	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Initiating and supporting a free narrative account	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Questioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

19. Please rate how helpful the Achieving Best Evidence guidelines and training are for *first* child interviews for each interview phase:

	Very Unhelpful	Unhelpful	Somewhat Unhelpful	Neither Helpful nor Unhelpful	Somewhat Helpful	Helpful	Very Helpful
Preparing the interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rapport building	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Initiating and supporting a free narrative account	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Questioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. Please rate how comfortable you feel carrying out the following interview phases in *first* child interviews:

	Very Uncomfortable	Uncomfortable	Somewhat Uncomfortable	Neither Comfortable nor Uncomfortable	Somewhat Comfortable	Comfortable	Very Comfortable
Preparing the interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rapport building	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Initiating and supporting a free narrative account	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Questioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

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## Second Interviews

*In some investigations, a child may need to be formally interviewed on more than one occasion. The following questions relate to the situations in which you have had to formally interview a child more than once about the same alleged crime.*

21. Have you ever had a case in which you have conducted a full Achieving Best Evidence interview with a child victim or witness more than once about the same alleged crime?
- Yes       No      { *If you select 'no', please go to question 29.* }
22. In your experience, how often do you formally interview child victims/witnesses more than once?
- Never                                Always
23. How frequently do you carry out *second* interviews with child victims/witnesses?
- More than once a week  
 Once a week  
 Once a fortnight  
 Once a month  
 Once every three months  
 Once every six months  
 Once every year  
 Less frequently than once a year
24. In your experience, if a second child interview is necessary, how often is the *second* interview carried out by the same officer as the *initial* interview?
- Never                                Always
25. What ages of children have you carried out *second* interviews with? Tick all ages that you have conducted second interviews with.
- Under 7  
 7 to 11  
 12 to 17
26. How would you describe your approach to the *second* formal interview? (select one)
- Authoritative  
 Friendly  
 Business-like  
 Formal  
 Informal  
 Compassionate  
 Other (please specify) \_\_\_\_\_

This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

27. How often do you use the following interview phases in *second* child interviews?

	Always						Never
Preparing the interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rapport building	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Initiating and supporting a free narrative account	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Questioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

28. Please rate how effective the Achieving Best Evidence's interview phases are for eliciting probative information from child interviewees in *second* interviews:

	Very Ineffective	Ineffective	Somewhat Ineffective	Neither Effective nor Ineffective	Somewhat Effective	Effective	Very Effective
Preparing the interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rapport building	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Initiating and supporting a free narrative account	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Questioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

This section continues to ask questions regarding investigations in which you have had to formally interview a child more than once about the same alleged crime.

29. Please rate how comfortable you feel / would feel carrying out the following interview phases in *second* child interviews:

	Very Uncomfortable	Uncomfortable	Somewhat Uncomfortable	Neither Comfortable nor Uncomfortable	Somewhat Comfortable	Comfortable	Very Comfortable
Preparing the interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rapport building	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Initiating and supporting a free narrative account	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Questioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

30. In what proportion of cases over the last year have you felt that it would have been helpful to interview a child again but have been unable to? \_\_\_\_\_%

31. Are there particular *crimes* in which child victims/witnesses are more frequently interviewed a second time?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

32. What ages of children would you conduct *second* interviews with? Tick all ages that you would conduct second interviews with.

- Under 7
- 7 to 11
- 12 to 17

33. Please rate how helpful the Achieving Best Evidence guidelines related to *second* child interviews are:

Very Unhelpful                                Very Helpful

Thank you very much for completing the questionnaire so far. Your answers are very helpful. There is only one section left to go!

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This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

## Interviewing Interventions

The next section of the questionnaire relates to interventions that can be used during the interview to support the child. These interventions are:

**Intermediaries** – Independent professionals whose role is to aid communication and understanding between the interviewer and interviewee.

**Interview Supporters** – Support person known to the witness/victim whose role is to provide emotional support to the witness, including social workers.

34. In your experience, how often in *initial* child interviews are these support options made use of:

	Never						Always
Intermediaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interview Supporter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

35. Please rate both support options for how often you feel they *should* be used in *initial* child interviews:

	Never						Always
Intermediaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interview Supporter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*If you have never completed a second interview, please continue on to Q. 38.*

36. In your experience, how often in *second* child interviews are these support options made use of:

	Never						Always
Intermediaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interview Supporter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*If you have selected 'never' for intermediaries and interview supporters, please continue on to Q. 38.*

37. If a support person (either an intermediary or interview supporter) has been used, how often are they present in *all* of the child's interviews?

Never        Always

This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

38. Please rate both support options for how often you feel they *should* be used in *second* child interviews:

	Never						Always
Intermediaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interview Supporter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

39. How helpful do you feel these support options are for eliciting detailed and accurate probative information from a child witness or victim?

	Very Unhelpful	Unhelpful	Somewhat Unhelpful	Neither Helpful nor Unhelpful	Somewhat Helpful	Helpful	Very Helpful
Intermediaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interview Supporter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

40. Have you ever had difficulties using or accessing either of these support options?

Tick **all** support options you have had problems accessing.

- Intermediaries (please go to Q. 40a)
- Interview Supporter (please go to Q. 40b)

*If you have selected both support options, please answer both question 40a. and question 40b. If you have selected neither, then please go to question 41.*

*40a.* Please describe the difficulties you have had using or accessing intermediaries. There is no word limit to your response, so please write as much as you would like (if completing a printed version, please feel free to continue on another piece of paper).

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*40b.* Please describe the difficulties you have had using or accessing interview supporters. There is no word limit to your response, so please write as much as you would like (if completing a printed version, please feel free to continue on another piece of paper).

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This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

41. Please rate how helpful the Achieving Best Evidence guidelines and training are for both support options:

	Very Unhelpful	Unhelpful	Somewhat Unhelpful	Neither Helpful nor Unhelpful	Somewhat Helpful	Helpful	Very Helpful
Intermediaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interview Supporter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

42. Please rate how comfortable you feel using the following support options in child interviews:

	Very Uncomfortable	Uncomfortable	Somewhat Uncomfortable	Neither Comfortable nor Uncomfortable	Somewhat Comfortable	Comfortable	Very Comfortable
Intermediaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interview Supporter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

43. Is there anything else that you think would help children during the interview process? There is no word limit to your response, so please write as much as you would like (if completing a printed version, please feel free to continue on another piece of paper).

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***Thank you very much for completing the questionnaire!***

*We would like to invite you to take part in a follow-up questionnaire. This will ask you more open questions about the subjects covered in this questionnaire and give you the opportunity to share your opinions in more detail. This will have been sent to you (titled 'Follow-up Questionnaire') with this questionnaire. If you are happy to complete the second questionnaire, please do so, and send both questionnaires together. However, if you would prefer not to, please return this completed questionnaire to Genevieve Waterhouse by email (waterhg2@lsbu.ac.uk) or to the postal address below.*

This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

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*Here are some further details about the research:*

Research Title:

Police Perceptions of Child Interviewing Techniques: Second Interviews and Support Options

The Aims of the Study:

The present study aimed to gather information relating to police attitudes towards and opinions of child interviewing techniques. Specifically, it looked to ascertain:

- Police opinions of the guidelines and training available to them for child interviews.
- Police usage and opinions of second interviewing of child victims and witnesses.
- Police usage and opinions of support options available for child interviews (e.g. intermediaries, interview supporters, etc).
- The relationship between officers' training and interviewing experience and their opinions on the aspects of child interviewing mentioned above.

The study is part of the principal researcher's PhD and will act as a baseline study for determining what is currently being practiced in forensic interviews and confirming topics where research could benefit police practices.

Withdrawal:

If, for any reason at all, you wish to withdraw your answers from the study before the 21<sup>st</sup> March 2016, please email Genevieve Waterhouse ([waterhg2@lsbu.ac.uk](mailto:waterhg2@lsbu.ac.uk)) with the number that you created at the beginning of this questionnaire. Your responses will be deleted immediately, no questions asked, and you will be sent an email confirming the deletion of your data.

Results Summary:

If you would like to receive a summary of the results at the end of the study, please email Genevieve Waterhouse ([waterhg2@lsbu.ac.uk](mailto:waterhg2@lsbu.ac.uk)). Your email address will be added to a list and a brief summary will be emailed to you when the analysis has been completed.

This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

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### What to do now?

Please save your answers and return your completed questionnaire to [waterhg2@lsbu.ac.uk](mailto:waterhg2@lsbu.ac.uk) (if you have completed it as a word document). If you have completed a printed copy of the questionnaire or wish to remain completely anonymous, please post your completed questionnaire to:

Genevieve Waterhouse,  
PhD Candidate,  
Department of Psychology,  
Faculty of Arts and Human Sciences,  
London South Bank University,  
103 Borough Road,  
London.  
SE1 0AA



## **Appendix B**

### **Study 1 – Follow-Up Questionnaire**

The following questionnaire is the Word document version of the Qualtrics questionnaire. The only differences were that the random number generation was automatic on the Qualtrics version, and, depending on participants' responses, some questions were automatically excluded rather than participants having to skip questions themselves.

## ABE Interview Questionnaire

You are being invited to take part in a follow-up questionnaire for a research study. The study involves answering questions about your opinions of the Achieving Best Evidence guidelines and the training that you have experienced alongside it. Thus, if you have not ever interviewed a child formally during an investigation, please do not complete the following questionnaire. Additionally, if you have not completed the first questionnaire, please complete that before continuing on to this questionnaire. Thank you very much for your time.

Research Title: Police Perceptions of Child Interviewing Techniques: Second Interviews and Support Options

Principle Researcher: Genevieve Waterhouse (waterhg2@lsbu.ac.uk)

Supervised by: Dr Rachel Wilcock, Dr Anne Ridley (anne.ridley@lsbu.ac.uk) and Professor Ray Bull

Purpose of Data Collection: PhD Research funded by the Institute of Social Sciences Research at London South Bank University

Details of Involvement:

This research involves completing a questionnaire on interviewing child witnesses and victims. You will be asked questions about your use and your opinions of different interviewing techniques and support options available according to the Achieving Best Evidence guidelines. You are welcome to complete this questionnaire in more than one sitting. The study has been reviewed and approved by the London South Bank University Research Ethics Committee.

- All your answers will be kept anonymously. No identifying information will be asked of you. The aim of the study is to gather as truthful a picture of police attitudes and behaviours as possible.
- Your answers will be kept in a password-protected, electronic form on an encrypted USB stick and on a password-protected computer for five years after any publications appear. After this time they will be deleted. The principal researcher and her supervisors will be the only people who have access to your answers.
- Your participation is voluntary and you can end the questionnaire at any time.
- If at any point before the 21<sup>st</sup> March 2016 you wish to withdraw from the study, you may do so without giving any reason. To do this, you must email the number you mention at the beginning of the study to waterhg2@lsbu.ac.uk asking for your data to be removed. It will immediately be deleted and a confirmation of this deletion will be emailed to you.
- To obtain general results from the study, please email Genevieve Waterhouse at waterhg2@lsbu.ac.uk. These will be sent by email after the study is completed.
- If you have any issues that you are unable to resolve with the research team, please contact the Chair of the University Research Ethics Committee at ethics@lsbu.ac.uk.

If you have any questions at this stage, please email Genevieve Waterhouse at waterhg2@lsbu.ac.uk and then proceed once you have had your questions answered to your satisfaction.

Have you read the above information?  Yes  No

This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

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Do you understand what participation in this follow-up study involves?  Yes  No

Do you fully and freely consent to participate in the study?  Yes  No

Have you completed the first ABE questionnaire?  Yes  No

If you have responded yes to all the above questions, you will be giving your consent for your replies to be used in the study.

*Please do not complete the following questionnaire if you answered no to any of the above questions.*

Please enter the six digit number that you created for the first ABE questionnaire below. If you have forgotten this, please create a new number, and note down the number for your records. Should you decide at a later date to withdraw your responses from the study, you will be asked to quote this number. It will be the only thing identifying your responses from other participants'.

Number: \_\_\_\_\_

*If you have entered the original number you created in the first ABE questionnaire, please go to question 6.*

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### About You

1. How old are you? \_\_\_\_\_

2. Are you male or female?  Male  Female

3. What is your current rank?

Police Constable

Sergeant

Inspector

Chief Inspector

Superintendent

Other (please specify) [Click here to enter text.](#)

4. What is your current job title?

\_\_\_\_\_

5. Which police force do you work for?

\_\_\_\_\_

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This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

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## *First Interviews*

In this section you will be asked questions about the first **formal** interview that is carried out with the child. When you see “first interview” it is referring to this first formal interview.

6. How often in cases have you had contact with the child prior to conducting the *first* formal interview?

Never                                Always

*If you answer ‘never’, please go to question 8.*

7. If you have had contact with the child prior to the first formal interview, what kind of contact does this normally entail (select all that apply)?

- Rapport building (please go to Q. 7a)
- Statement taking (please go to Q. 7b)
- First report of the crime (please go to Q. 7c)
- Family liaison (please go to Q. 7d)
- Assessment of child’s cognitive ability to undertake ABE (please go to Q. 7e)
- Other (please specify)\_\_\_\_\_ (please go to Q. 7f)

*If you select more than one option for question 7, please go to all relevant questions (e.g. if you select ‘rapport building’ and ‘first report of the crime’, please complete questions 7a and 7c) and then continue to question. 8.*

- 7a. Please describe in detail an average rapport building interaction with a child prior to ABE interviewing (e.g. what the aims of the interaction are, where it takes place, the types of questions that are asked/what is discussed, how long they tend to take, whether there are specific crimes these interactions occur for, whether they are carried out with witnesses/victims/suspects, how it is recorded).

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This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

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7b. Please describe in detail an average statement taking interaction with a child prior to ABE interviewing (e.g. what the aims of the interaction are, where it takes place, the types of questions that are asked/what is discussed, how long they tend to take, whether there are specific crimes these interactions occur for, whether they are carried out with witnesses/victims/suspects, how it is recorded).

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7c. Please describe in detail an average first report of the crime interaction with a child prior to ABE interviewing (e.g. what the aims of the interaction are, where it takes place, the types of questions that are asked/what is discussed, how long they tend to take, whether there are specific crimes these interactions occur for, whether they are carried out with witnesses/victims/suspects, how it is recorded).

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7d. Please describe in detail an average family liaison interaction with a child prior to ABE interviewing (e.g. what the aims of the interaction are, where it takes place, the types of questions that are asked/what is discussed, how long they tend to take, whether there are specific crimes these interactions occur for, whether they are carried out with witnesses/victims/suspects, how it is recorded).

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This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

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7e. Please describe in detail an average assessment of child's cognitive ability to undertake ABE interaction with a child prior to ABE interviewing (e.g. what the aims of the interaction are, where it takes place, the types of questions that are asked/what is discussed, how long they tend to take, whether there are specific crimes these interactions occur for, whether they are carried out with witnesses/victims/suspects, how it is recorded).

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7f. Please describe in detail an average 'other' interaction with a child prior to ABE interviewing (e.g. what the aims of the interaction are, where it takes place, the types of questions that are asked/what is discussed, how long they tend to take, whether there are specific crimes these interactions occur for, whether they are carried out with witnesses/victims/suspects, how it is recorded).

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Second Interviews

*In some investigations, a child may need to be formally interviewed on more than one occasion. The following questions relate to the situations in which you have had to formally interview a child more than once about the same alleged crime.*

8. Under what circumstances would you conduct a *second* interview? There is no word limit to your response, so please write all relevant circumstances (if completing a printed version, please feel free to continue on another piece of paper).

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This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

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9. Under what circumstances, if any, would you have liked to carry out a *second* interview but have been unable to? There is no word limit to your response, so please write as much as you would like (if completing a printed version, please feel free to continue on another piece of paper).

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10. Have you experienced any training specifically relating to the *second* interviewing of children? If so, what?

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11. How would you improve the Achieving Best Evidence guidelines and training on *second* interviews with children? There is no word limit to your response, so please write as much as you would like (if completing a printed version, please feel free to continue on another piece of paper).

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12. What are your views on interviewing children a *second* time? There is no word limit to your response, so please write as much as you would like (if completing a printed version, please feel free to continue on another piece of paper).

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13. Do you think that asking children to write down their memories of the alleged crime as soon as the crime comes to police attention would be helpful for the investigation/interview? If so, in what way? There is no word limit to your response, so please write as much as you would like (if completing a printed version, please feel free to continue on another piece of paper).

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This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

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### *Interviewing Interventions*

This section of the questionnaire relates to interventions that can be used during the interview to support the child. These interventions are:

**Intermediaries** – Independent professionals whose role is to aid communication and understanding between the interviewer and interviewee.

**Interview Supporters** – Support person known to the witness/victim whose role is to provide emotional support to the witness, including social workers.

14. How would you improve the Achieving Best Evidence guidelines and training on these interventions? There is no word limit to your response, so please write as much as you would like (if completing a printed version, please feel free to continue on another piece of paper).

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*Thank you very much for completing the questionnaire so far. Your answers have been very helpful. Please continue on to the next section. There is only one section left to go!*

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This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

The next section of the questionnaire relates to interventions that can be used during the interview to support the child. These interventions are:

**Sketches/Drawings** - These are produced by the child before or during the interview process.

**Photos/Pictures/Symbols** – Pre-prepared by the interviewer, these are aids for the interview. These can include pictures and symbols that the child uses to communicate.

**Dolls or Figures** – These can be anatomically accurate dolls and drawn figures or toys.

**Props** – Objects used to help the child describe the environment in which the offence took place.

**Cognitive Interview** – An interview protocol that includes techniques such as Mental Reinstatement of Context and asking the interviewee to recall the event from another person’s perspective.

**Other Interviewing Protocols** – These are alternate guidelines that provide structure for the entire interview (e.g. the National Institute of Child Health and Human Development interview protocol).

15. In your experience, how often in *initial* child interviews are the following support options made use of:

	Never						Always
Sketches/Drawings produced by child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Photos/Pictures/Symbols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dolls or Figures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Props	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cognitive Interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Interviewing Protocols (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*If you have never used sketches or drawings in a child interview, please continue on to question 17.*

16. At which point would you ask the child to provide sketches/drawings?

- Before the interview begins
- During rapport building
- Prior to free recall
- During free recall
- During directed questioning
- During closure
- Other (please specify) \_\_\_\_\_

This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

17. Please rate each support option for how often you feel they *should* be used in *initial* child interviews:

	Never						Always
Sketches/Drawings produced by child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Photos/Pictures/Symbols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dolls or Figures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Props	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cognitive Interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Interviewing Protocols (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*If you have never completed a second interview, please continue on to question 19.*

18. In your experience, how often in *second* child interviews are the following support options made use of:

	Never						Always
Sketches/Drawings produced by child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Photos/Pictures/Symbols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dolls or Figures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Props	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cognitive Interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Interviewing Protocols (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. Please rate each support option for how often you feel they *should* be used in *second* child interviews:

	Never						Always
Sketches/Drawings produced by child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Photos/Pictures/Symbols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dolls or Figures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Props	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cognitive Interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Interviewing Protocols (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

20. How helpful do you feel these support options are for eliciting detailed and accurate probative information from a child witness or victim?

	Very Unhelpful	Unhelpful	Somewhat Unhelpful	Neither Helpful nor Unhelpful	Somewhat Helpful	Helpful	Very Helpful
Sketches/Drawings produced by child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Photos/Pictures/Symbols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dolls or Figures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Props	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cognitive Interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Interviewing Protocols (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. Please rate how helpful the Achieving Best Evidence guidelines and training are for each support option:

	Very Unhelpful	Unhelpful	Somewhat Unhelpful	Neither Helpful nor Unhelpful	Somewhat Helpful	Helpful	Very Helpful
Sketches/Drawings produced by child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Photos/Pictures/Symbols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dolls or Figures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Props	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cognitive Interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Interviewing Protocols (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

22. Please rate how comfortable you feel using the following support options in child interviews:

	Very Uncomfortable	Uncomfortable	Somewhat Uncomfortable	Neither Comfortable nor Uncomfortable	Somewhat Comfortable	Comfortable	Very Comfortable
Sketches/ Drawings produced by child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Photos/ Pictures/ Symbols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dolls or Figures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Props	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cognitive Interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Interviewing Protocols (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. How would you improve the Achieving Best Evidence guidelines and training on these interventions? There is no word limit to your response, so please write as much as you would like (if completing a printed version, please feel free to continue on another piece of paper).

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24. Is there anything else that you think would improve the Achieving Best Evidence guidelines and training? There is no word limit to your response, so please write as much as you would like (if completing a printed version, please feel free to continue on another piece of paper).

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This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

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*Thank you very much for completing the questionnaire!  
Here are some further details about the research:*

Research Title:

Police Perceptions of Child Interviewing Techniques: Second Interviews and Support Options

The Aims of the Study:

The present study aimed to gather information relating to police attitudes towards and opinions of child interviewing techniques. Specifically, it looked to ascertain:

- Police opinions of the guidelines and training available to them for child interviews.
- Police usage and opinions of second interviewing of child victims and witnesses.
- Police usage and opinions of support options available for child interviews (e.g. intermediaries, interview supporters, etc).
- The relationship between officers' training and interviewing experience and their opinions on the aspects of child interviewing mentioned above.

The study is part of the principal researcher's PhD and will act as a baseline study for determining what is currently being practiced in forensic interviews and confirming topics where research could benefit police practices.

Withdrawal:

If, for any reason at all, you wish to withdraw your answers from the study before the 21<sup>st</sup> March 2016, please email Genevieve Waterhouse ([waterhg2@lsbu.ac.uk](mailto:waterhg2@lsbu.ac.uk)) with the number you gave at the beginning of the questionnaire. Your responses will be deleted immediately, no questions asked, and you will be sent an email confirming the deletion of your data.

Results Summary:

If you would like to receive a summary of the results at the end of the study, please email Genevieve Waterhouse ([waterhg2@lsbu.ac.uk](mailto:waterhg2@lsbu.ac.uk)). Your email address will be added to a list and a brief summary will be emailed to you when the analysis has been completed.

This questionnaire relates to interviews of victims and witnesses of under 18 years of age (unless otherwise stated). If there are any questions that you would prefer not to answer, please move on to the next one.

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### What to do now?

Please save your answers and return your completed questionnaire to [waterhg2@lsbu.ac.uk](mailto:waterhg2@lsbu.ac.uk) (if you have completed it as a word document). If you have completed a printed copy of the questionnaire or wish to remain completely anonymous, please post your completed questionnaire to:

Genevieve Waterhouse,  
PhD Candidate,  
Department of Psychology,  
Faculty of Arts and Human Sciences,  
London South Bank University,  
103 Borough Road,  
London.  
SE1 0AA

## Appendix C

### Study 3 - Briefing Letter and Consent Form for Parents

Dear Parent/Guardian,

I am writing to invite your child to be involved in a research study looking at children's memory. I am looking at children's memory and different interview techniques that can improve children's memory of an event, specifically how well they know the interviewer and repeated interviews. Information on how best to interview children is very useful for those who need to get accurate information from children, such as police officers, doctors and social workers. My name is Genevieve Waterhouse, and I am currently carrying out a PhD at London South Bank University. I have previously conducted research with children during both my undergraduate and Masters dissertations.

<Name of School> have kindly agreed to take part in the study (titled 'The effects of rapport on children's recall) and I am writing to you to ask if you would be happy for your child to take part. The study will involve your child watching a short video in which a woman's bag is snatched and she runs after the thief but he gets away. They will then be interviewed three times about the film (to see if their memories change over time), and they will have their visual memory skills and ability to tell a story measured. The whole study will involve five sessions with your child (although for some children it will be less). These sessions are explained in more detail at the end of this letter.

Your child will be told at the beginning of each session what they will be asked to do and asked if they are happy to do this. If they are not, the session will be ended immediately and your child will not have to take part in any of the rest of the sessions. Additionally, if your child appears to be distressed by the interview, the interview will be ended immediately. Each session will take no more than approximately 20 minutes (and some significantly less time) and they will take place in your child's school at a time when their teacher feels it is convenient. All the interviews will be audio-recorded and later transcribed. The transcripts will be anonymous (e.g. your child's name, age, and any other personal information that your child mentions during the interviews will be removed) and stored securely, in a locked cabinet or on a password-protected computer within a room which is locked when unoccupied. All of the interviews and the data that comes from them will be deleted five years after any reporting of the study.

It is also hoped that some children's interviews with the lead researcher will be video-recorded. This is in order to complete a follow-up study. Your child's interviews will only be video-recorded if you agree to it on the consent form. The follow-up study would involve these videos being used in a study looking at whether mock jurors' perceptions of testimony are influenced by the way the child is interviewed (e.g., how comfortable the child appears, and how many interviews the jurors are shown with the child). The interviews would be entirely anonymised (e.g., any references to your child's name, school, or any other personal details would be removed from the film), and we would contact you again to confirm that you are happy for them to be used before the study began. Additionally, if you agree to your child's interviews being filmed, the interviewer will confirm with your child that they are happy to be filmed at the beginning of each interview.

London South Bank University's Research Ethics Committee has approved the study (reference: UREC 1410), and you are welcome to contact them at [ethics@lsbu.ac.uk](mailto:ethics@lsbu.ac.uk) if you would like to discuss the project with someone who is not personally involved in the work. If you are happy for your child to take part, please complete the form below and return to your child's teacher or the school office before <date>. If you change your mind about allowing your child to take part for any reason, you can contact the school, me or my supervisor, Dr Anne Ridley, before <date> and their responses will be deleted immediately.

If you could refrain from discussing the details of the study with your child, that would be preferable. It is hoped that they will only discuss the film during the interviews and not know about the interviews in advance as they may pay extra attention due to knowing their memory will later be tested.

If you have any further questions, please do not hesitate to email me or my supervisor.

Yours sincerely,

Genevieve Waterhouse  
waterhg2@lsbu.ac.uk

Dr Anne Ridley  
anne.ridley@lsbu.ac.uk

Study Details:

Title: The effects of rapport on children's recall

Ethics Reference: UREC 1410

Ethics contact: [ethics@lsbu.ac.uk](mailto:ethics@lsbu.ac.uk)



Session	What happens?	Details	Who is present?
<b>1 (Day 1)</b>	Visual Memory Task Narrative Ability Task 'How I feel' questionnaire Film	Children are shown patterns they then draw from memory. Children create story from wordless picture book. Children will complete a short questionnaire about their general moods. Children watch four minute film in which a teenage girl's bag is stolen and she runs after the thief.	Child and Research Assistant
<b>2 (Day 8)</b>	Rapport-building	Less than half (40%) of children take part in this session. They will discuss neutral school events to build rapport with lead researcher.	Child and Lead Researcher
<b>3 (Day 9)</b>	Interview 'How I feel' and rapport questionnaires	Children will be asked questions about what they remember from the film in session one. Less than half of the children (40%) will take part in rapport-building (as described in session two) before the interview begins. Children will complete two short written questionnaires. One asks questions about their mood during the interview and the other about how they felt about the interviewer and the interview itself.	Child and Lead Researcher Child and Research Assistant
<b>4 (Day 16)</b>	Interview 'How I feel' and rapport questionnaires	These will be conducted as in session three, but most children (80%) will take part in rapport-building before the interview. For half of these children the rapport-building will be as in session two, for the other half it will take less time. These will be completed as in session three.	Child and Lead Researcher Child and Research Assistant
<b>5 (Day 23)</b>	Interview 'How I feel' and rapport questionnaires	Each child will experience the same interview they had in session four. These will be completed as in session three (and four).	Child and Lead Researcher Child and Research Assistant

Table showing details of 'The effects of rapport on children's recall' (UREC 1410)

For further details, please contact the lead researcher, Genevieve Waterhouse ([waterhg2@lsbu.ac.uk](mailto:waterhg2@lsbu.ac.uk)), her supervisor, Dr Ridley ([anneridley@lsbu.ac.uk](mailto:anneridley@lsbu.ac.uk)) or London South Bank University's Research Ethics Committee ([ethics@lsbu.ac.uk](mailto:ethics@lsbu.ac.uk)).

Consent Form

—————  
*Your copy*  
—————

Study Details:

Title: The effects of rapport on children's recall

Ethics Reference: UREC 1410

Contacts-

Lead Researcher: Genevieve Waterhouse [waterhg2@lsbu.ac.uk](mailto:waterhg2@lsbu.ac.uk)

Supervisor: Dr Anne Ridley [anne.ridley@lsbu.ac.uk](mailto:anne.ridley@lsbu.ac.uk)

Ethics (to speak to someone not involved in research): [ethics@lsbu.ac.uk](mailto:ethics@lsbu.ac.uk)

Your child is being invited to be involved in a study relating to children's memory. Your child does not have to take part, but if you would like them to, they will be involved in four or five sessions. They will be asked whether they want to take part at the beginning of every session. The first will involve your child completing a short memory test with a research assistant, a short questionnaire on their moods, and creating a story from a wordless picture book. They will also watch a short film of a bag theft. A week later, your child may have a friendly chat with the lead researcher so that they can get to know each other. The third, fourth and fifth sessions will involve your child being interviewed individually by the lead researcher about what they remember about the film (these will take place weekly, beginning a day after the second session). Each session will take no more than approximately 20 minutes. The interviews and your child's story will be audio-recorded or video-recorded (if you give permission) and transcribed. All identifying information will be removed. These transcriptions will be kept securely for five years after any reporting of the study.

---

Child's name \_\_\_\_\_

Parent/Guardian name \_\_\_\_\_

I give consent for my child (named above) to take part in the memory study and their interviews to be **audio-recorded**. I understand what my child is being asked to do, and I understand that if I change my mind, I can contact the researchers to have his/her responses deleted and removed from the study.

I give/do not give (*please delete as appropriate*) my consent for my child's interviews to be **video-recorded**. I understand that the anonymised video may be used for future studies and shown to other participants. However, I understand that I will be contacted before this occurs for my consent. I would like to be contacted by:

Phone. Please print your contact phone number here: \_\_\_\_\_

Email. Please print your email address here: \_\_\_\_\_

Parent/Guardian Signature \_\_\_\_\_ Date \_\_\_\_\_

Consent Form

Study Details:

Title: The effects of rapport on children's recall

Ethics Reference: UREC 1410

Contacts-

Lead Researcher: Genevieve Waterhouse [waterhg2@lsbu.ac.uk](mailto:waterhg2@lsbu.ac.uk)

Supervisor: Dr Anne Ridley [anneridley@lsbu.ac.uk](mailto:anneridley@lsbu.ac.uk)

Ethics (to speak to someone not involved in research): [ethics@lsbu.ac.uk](mailto:ethics@lsbu.ac.uk)

*To be returned to  
the school.*

Your child is being invited to be involved in a study relating to children's memory. Your child does not have to take part, but if you would like them to, they will be involved in four or five sessions. They will be asked whether they want to take part at the beginning of every session. The first will involve your child completing a short memory test with a research assistant, a short questionnaire on their moods, and creating a story from a wordless picture book. They will also watch a short film of a bag theft. A week later, your child may have a friendly chat with the lead researcher so that they can get to know each other. The third, fourth and fifth sessions will involve your child being interviewed individually by the lead researcher about what they remember about the film (these will take place weekly, beginning a day after the second session). Each session will take no more than approximately 20 minutes. The interviews and your child's story will be audio-recorded or video-recorded (if you give permission) and transcribed. All identifying information will be removed. These transcriptions will be kept securely for five years after any reporting of the study.

---

Child's name \_\_\_\_\_

Parent/Guardian name \_\_\_\_\_

I give consent for my child (named above) to take part in the memory study and their interviews to be **audio-recorded**. I understand what my child is being asked to do, and I understand that if I change my mind, I can contact the researchers to have his/her responses deleted and removed from the study.

I give/do not give (*please delete as appropriate*) my consent for my child's interviews to be **video-recorded**. I understand that the anonymised video may be used for future studies and shown to other participants. However, I understand that I will be contacted before this occurs for my consent. I would like to be contacted by:

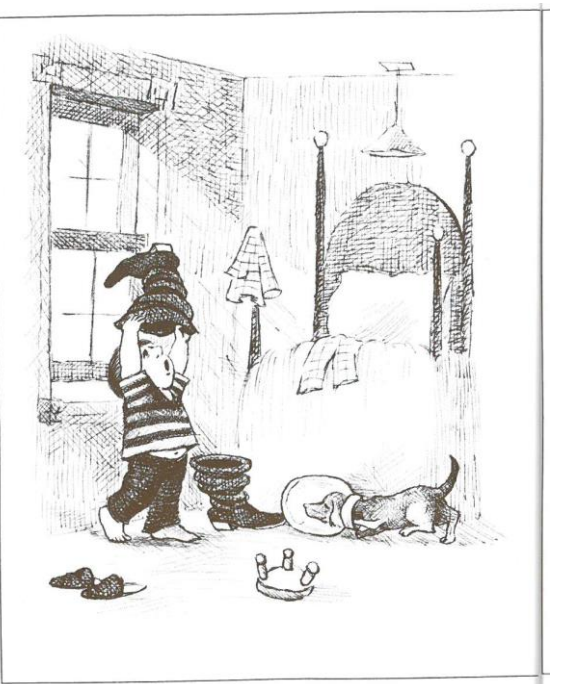
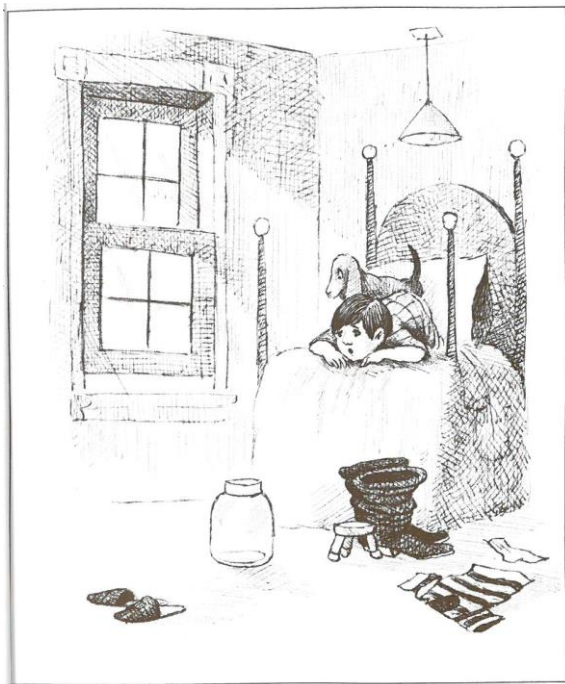
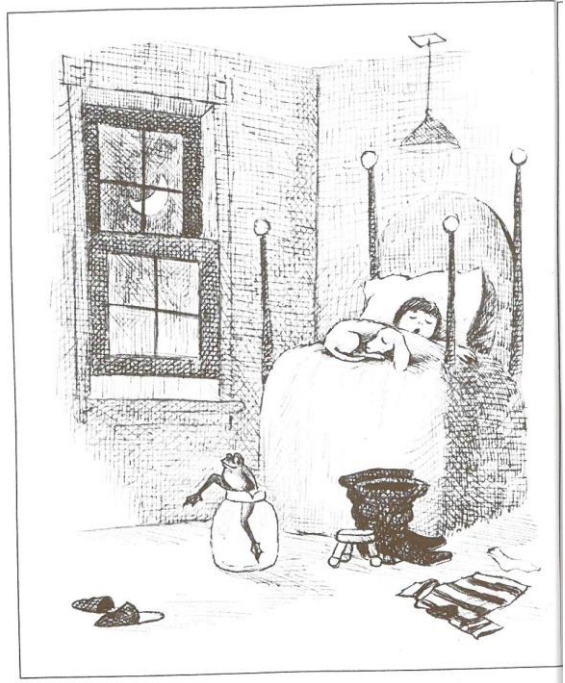
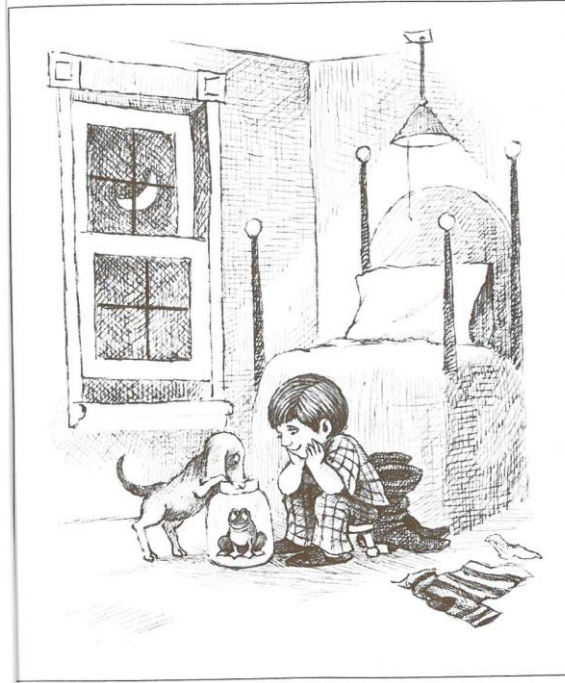
Phone. Please print your contact phone number here: \_\_\_\_\_

Email. Please print your email address here: \_\_\_\_\_

Parent/Guardian Signature \_\_\_\_\_ Date \_\_\_\_\_

Appendix D

Study 3 - Example Pictures from "Frog, Where are you?"



## Appendix E

### Study 3 – Rapport Questionnaire

Participant Number:

Interview Number:

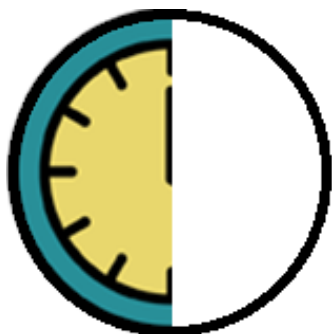
You have just finished talking to Gennie. We want to know how good she is at talking to children, and so I'm going to ask you some questions about this. She will not know that these are your answers, so please answer truthfully.

Here are a list of things that you might feel about the interview, please tell us if you felt it about the interviewer all of the time during the interview, only some of the time, or not at all during the interview. There are 10 questions, please answer all of them. Put a tick ✓ on the picture that best describes what you think.

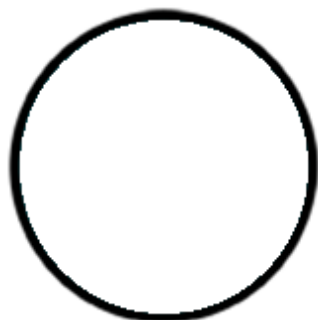
Here are the pictures:



This means that something happened **all** of the time.



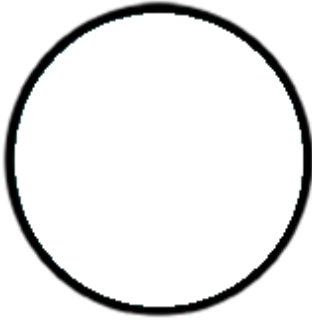
This means that something happened **some** of the time (sometimes it did happen, sometimes it did not happen).



This means that something happened **none** of the time.

1. I wear my school uniform at school

None of the time



Some of the time



All of the time



2. Gennie listened to me during the interview

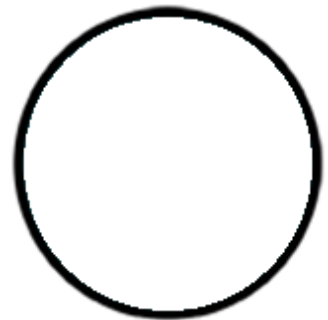
All of the time



Some of the time



None of the time

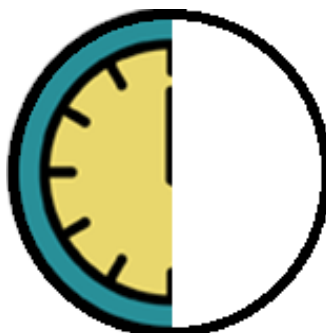


3. Gennie tells the truth

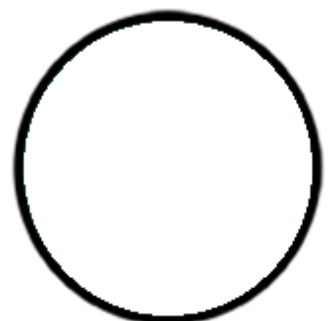
All of the time



Some of the time

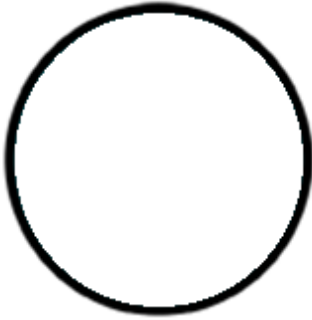


None of the time



4. I listened to Gennie's questions

None of the time



Some of the time

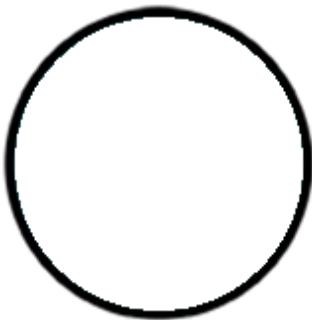


All of the time



5. Gennie believed what I said

None of the time



Some of the time

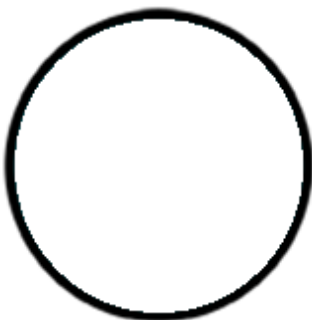


All of the time



6. I understood Gennie's questions

None of the time



Some of the time

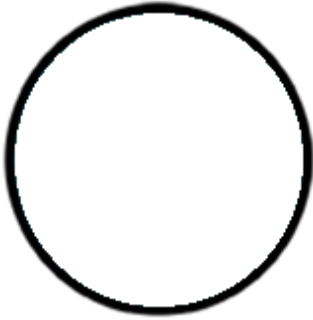


All of the time

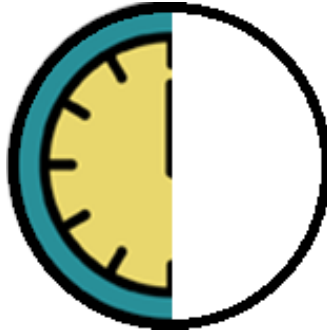


7. I liked talking to Gennie

None of the time



Some of the time

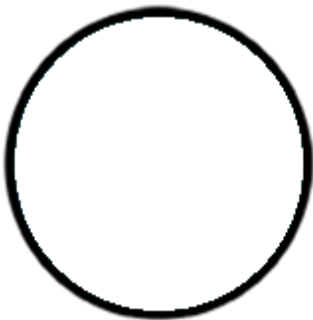


All of the time



8. Gennie understood me

None of the time



Some of the time

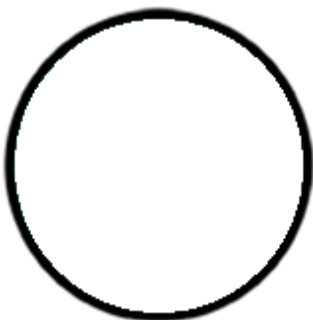


All of the time

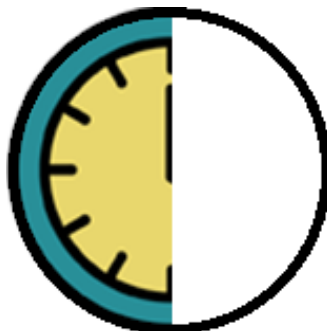


9. Gennie was friendly

None of the time



Some of the time



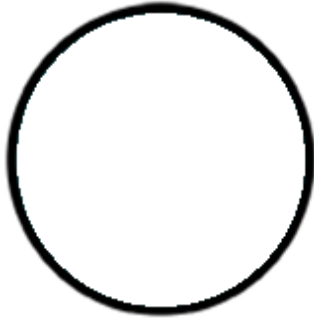
All of the time





10. I wanted to tell Gennie as much as I could

None of the time



Some of the time



All of the time



Thank you very much for your help!!



## **Appendix F**

### **Study 4 – Questionnaire**

The questionnaire is provided word-for-word, other than those in italics which describe the conditions under which certain instructions were provided and others not.

#### **Juror Study (UREC 1455)**

Lead Researcher: Genevieve Waterhouse (PhD Student)

Supervised by: Dr Anne Ridley, Dr Rachel Wilcock, and Professor Ray Bull

You are being invited to take part in the above research study. To make sure that you fully understand the research, why it is being conducted and what you are agreeing to be involved in, please read the following information. If you have any questions, please do not hesitate to email the researcher (Genevieve Waterhouse) at [waterhg2@lsbu.ac.uk](mailto:waterhg2@lsbu.ac.uk).

In the United Kingdom, we have an adversarial court system. This means that criminal cases often involve a prosecuting team and a defence team arguing their points in front of a jury and a judge. The jury will involve twelve members of the public and it is their job to decide whether the defendant is guilty or not guilty. It is an offence to discuss a trial that you have been part of as a jury member with anyone other than other jury members in the deliberation room (the room in which the jury makes their final verdict). Therefore, because it is illegal to discuss with jury members how they came to their decision, and it is also illegal to record real jury deliberations, it is impossible to know what factors about a court case help a jury make their decision. In order to see how jurors come to their decisions, researchers ask ‘mock- jurors’ to make judgements on testimony. These are individuals who could be part of a jury in the UK (i.e., are ‘jury-eligible’) who read or watch a trial and then answer questions about what they think about the testimony. If you consent to being part of the current research, **you will be a mock-juror.**

In the current research, you will be asked to read information about a trial and watch some testimony. You will then be asked to complete a questionnaire about your opinions regarding the evidence. The entire survey will take approximately 30 minutes.

Your completed survey answers will be anonymous and protected by Qualtrics – an online surveying software that uses secure connections - and any aggregate data (e.g. spreadsheets) will be kept in a password-protected, electronic form on an encrypted USB stick and on a password-protected computer. All the data will be deleted five years after any reporting of the findings.

If you do take part in the study, you may withdraw your consent and your data at any time up to the 31<sup>st</sup> October 2015 and your data will be removed from the analysis and deleted permanently. You do not need to give any explanation as to why you are withdrawing your data. To withdraw your data, you should email the lead researcher (Genevieve Waterhouse) at [waterhg2@lsbu.ac.uk](mailto:waterhg2@lsbu.ac.uk) and quote the number given to you at the beginning of the research.

This study is being completed as part of a PhD in Investigative Forensic Psychology at London South Bank University. The research has received full ethical approval from the University's Research Ethics Committee.

If you have any questions or concerns about the study, please email the researcher now at [waterhg2@lsbu.ac.uk](mailto:waterhg2@lsbu.ac.uk). If you have any complaints about the way the study is conducted or concerns about how you have been dealt with, please contact the researcher's supervisor, Dr Anne Ridley at [anne.ridley@lsbu.ac.uk](mailto:anne.ridley@lsbu.ac.uk). Finally, if you wish to formally complain or speak to someone not personally involved in the research, please contact the Chair of LSBU's Research Ethics Committee at [ethics@lsbu.ac.uk](mailto:ethics@lsbu.ac.uk).

Please click on all the statements below to agree that you:

- Have read the above information sheet fully.
- Have had an opportunity to ask your questions/express your concerns and had your questions/concerns dealt with satisfactorily.
- Understand what taking part in the research will involve and why it is being conducted.
- Understand that your data will be stored securely and kept confidential.
- Understand that you can withdraw your data from the study at any time before the 31st October 2015.

- Fully and freely consented to participate in the study.

To take part in this research study, you must be eligible for jury service in the UK. To be eligible for jury service, you must meet the criteria listed below.

You could be selected to serve on a jury in the UK if you:

- Are aged between 18 and 69 years old;
- Are registered on your local government's electoral register;
- Have lived in the UK, the Channel Isles or the Isle of Man for the last five years since you were 13 years old.

You are disqualified from jury service if:

- You lack the mental capacity to do so. Mental capacity is the ability to make a decision for yourself. People who cannot do this are said to 'lack capacity' under the Mental Capacity Act 2005. This must be due to an impairment of or disturbance in the functioning of the mind or brain which may be due to illness, injury, learning disability, or mental health problems.
- To have capacity a person must be able to:
  - Understand the information that is relevant to the decision they want to make.
  - Retain the information long enough to be able to make the decision.
  - Weigh up the information available to make the decision.
  - Communicate the decision by any means.

You are disqualified from jury service if you are currently on bail in criminal proceedings. You are also disqualified if:

- you have ever been sentenced to imprisonment for five years or more
- If you have been imprisoned at all in the last 10 years

Do you meet the criteria for serving on a jury?     Yes     No

Please complete the following demographic questions. Please give your age and gender, but if you would prefer not to answer any of the other questions, please just move on to the next one. Please do not press the 'back' button on your browser at any point during the survey.

What is your age?

What is your gender?  Male  Female

Have you ever been on a real jury?  Yes  No

What is your profession?

You will shortly view some videos of a child being interviewed. The child is being asked about a film they have seen of an incident. However, for the purpose of this study, we would like you to consider their testimony as if they were speaking about something they had witnessed live, as part of the following trial.

This testimony is part of a criminal trial for the alleged theft of the victim, Jade Richards', handbag by the defendant, Jon Ellis. It is alleged that Jon Ellis stole Jade Richards' handbag in Kingston, London, in the afternoon of the 15th November, 2014. The state is charging Jon Ellis with theft. The trial started after the defendant entered a plea of "not guilty."

The videos you are about to watch consist of the investigative interview of Mary Lakes, a seven year old witness for the prosecution.

*For those in the conditions which were shown the rapport-building videos, this was followed by:* This includes a rapport-building session prior to the discussion of the alleged theft, which you will be shown.

*For those in the conditions which were not shown the rapport-building videos, this was followed by:* You will be shown the interview from the point at which Mary and the interviewer began discussing the theft. Just prior to this, the interviewer discussed Mary's recent trip to the aquarium with her in order for Mary to feel more relaxed and for her to get to know the interviewer and build a relationship. The interviewer also checked Mary's understanding of truth and lies, which she understood, and explained to Mary a number of ground rules about the interview. In total, this took five minutes. The interview then continued with the interviewer asking her to tell everything she remembered about the event.

*All conditions then read:* Please make sure the volume is turned up on your computer and pay attention to the videos throughout, as you would on a real jury. You may make notes if you wish. Only watch each video once and then click next.

*At the top of each page on which the video was shown, the following instructions were given:* Please click NEXT at the bottom of the page when you have watched the video clip once. If you can see two NEXT buttons, please click either.

*For the conditions that viewed the rapport-building, the following instructions were given before they viewed the substantive section:* At this point, the interviewer checked Mary's understanding of truths and lies, which she understood, and explained to Mary a number of ground rules about the interview.

The interview then continued with the interviewer asking her to tell everything she remembered about the event (please click next). *They then viewed the video clip of the substantive section.*

*After participants had viewed all the necessary video clips for the first interview, participants in the one interview conditions read:* The interview was then paused for a 10 minute refreshment break. The interview then continued with the interviewer asking Mary to tell everything she remembered again (please click next). *They then viewed the second substantive video clip.*

*Participants in the two interview conditions read:* The following interview was conducted one week later. *In the condition in which they viewed the rapport-building, the participant was then instructed to click next. In the condition in which they did not view the rapport-building, they were instructed:* After a discussion of Mary's recent walk in the park, to make her feel at ease with the interviewer, the interviewer asked Mary to tell everything she remembered again (please click next).

*All participants then watched the necessary video clips for the second interview.*

*Participants in the two interview condition who viewed the rapport-building received the following information before watching the substantive section of the interview:* Mary

Lakes was then reminded of the ground rules, including the importance of telling the truth.

The interview then continued, with the interviewer asking Mary to tell everything she remembered again (please click next).

*All participants then completed the perceptions questionnaire, as follows.*

Questions Related to the Child Witness

How believable was the child witness?

Very believable            Unbelievable

How credible do you think the child witness was?

Very credible            Very Uncredible

How accurate do you think the child was?

Very accurate            Very inaccurate

How truthful do you think the child was?

Very truthful            Very untruthful

How clear was the child's testimony?

Very clear            Very unclear

How anxious do you think the child was when they were interviewed first?

Very calm            Very anxious

How anxious do you think the child was when they were interviewed after the break?

Very calm            Very anxious

How well do you think the child understood the questions asked to them?

Understood completely            Did not understand at all

Questions Related to the Interview

How fair do you think the interviewer was being to the child?

Very fair            Very unfair

How friendly do you think the child's interviewer was?

Very friendly            Very unfriendly

How clear do you think the questions the child was asked were?

Very clear            Very unclear

Questions Related to Interview Content

Do you remember Mary saying that the victim's friend said "Oh no!" when she got the bag back?  Yes  No



*This question was only shown if the answer to the previous question was 'yes.'* How likely do you think it is that the victim's friend did in fact say "Oh no!" when she got the bag back?

Very likely            Very unlikely

Do you remember Mary saying that the bag stolen was beige?  Yes  No

*This question was only shown if the answer to the previous question was 'yes.'* How likely do you think it is that the bag stolen was beige?

Very likely            Very unlikely

Do you remember Mary saying that the "nice" man who gave the bag back had short hair?  Yes  No

*This question was only shown if the answer to the previous question was 'yes.'* How likely do you think it is that the "nice" man who gave the bag back had short hair?

Very likely            Very unlikely

Do you remember Mary saying that the victim (whose bag was stolen) went to get the police?  Yes  No

*This question was only shown if the answer to the previous question was 'yes.'* How likely do you think it is that the victim (whose bag was stolen) went to get the police?

Very likely            Very unlikely

Do you remember Mary saying that the thief and the "nice" man were by a factory?

Yes  No

*This question was only shown if the answer to the previous question was 'yes.'* How likely do you think it is that the thief and the “nice” man were by a factory?

Very likely            Very unlikely

Do you remember Mary saying that the thief took credit cards out of the victim’s bag?

Yes  No

*This question was only shown if the answer to the previous question was 'yes.'* How likely do you think it is that the thief took credit cards out of the victim’s bag?

Very likely            Very unlikely

Do you remember Mary saying that the victim was wearing leggings and a skirt?

Yes  No

*This question was only shown if the answer to the previous question was 'yes.'* How likely do you think it is that the victim was wearing leggings and a skirt?

Very likely            Very unlikely

If you were in charge of the prosecution’s case (e.g., the side trying to persuade the jury that the defendant is guilty), how likely would you be to show these interview clips in court?

Very likely            Very unlikely

If other evidence in the case was equally balanced, what would your verdict be based on the child’s evidence?  Guilty  Not guilty

You were shown two clips of video during which Mary discussed the theft. Please state during which clip(s) Mary mentioned the following information:

	Video Clip 1	Video Clip 2	Both Clips
The victim's friend said "Oh no!" when she got the bag back.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The bag stolen was beige.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The "nice" man who gave the bag back had short hair.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The victim (whose bag was stolen) went to get the police.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The thief and the "nice" man were by a factory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The thief took credit cards out of the victim's bag.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The victim was wearing leggings and a skirt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Did Mary contradict herself about any of these statements?  Yes  No

Which statement(s) did she contradict herself about? Please click on the statement(s) that Mary contradicted herself about and give details of the contradictory information.

The victim's friend said "Oh no!" when she got the bag back.

---

The bag stolen was beige.

---

The "nice" man who gave the bag back had short hair.

---

The victim (whose bag was stolen) went to get the police.

---

The thief and the “nice” man were by a factory.

---

The thief took credit cards out of the victim’s bag.

---

The victim was wearing leggings and a skirt.

---

Did you write notes while watching the video clips?  Yes  No

Are you, or have you ever been, a parent or guardian to any children?  Yes  No

How much experience of children do you have?

No  
experience           A lot of  
at all experience

Are you currently providing childcare for a child between the ages of six and eleven more than once a month?  Yes  No

What is your ethnic group? Please choose one option that best describes your ethnic group or background:

Irish

English / Welsh / Scottish / Northern Irish / British

Gypsy or Irish Traveller

Any other White background

White and Black Caribbean

White and Black African

White and Asian

Any other Mixed / Multiple ethnic background

Indian

Pakistani

Bangladeshi

Chinese

Any other Asian background

African

Caribbean

Any other Black / African / Caribbean background

Arab

Any other ethnic group (please describe your ethnic group \_\_\_\_\_)

**Thank you very much for completing the study! Your time and effort are much appreciated.**

We would very much appreciate if you shared this study with your friends and family. To do so, please send them the following link:

[https://qeurope.eu.qualtrics.com/SE/?SID=SV\\_0e0gKIRVgDVBsfX](https://qeurope.eu.qualtrics.com/SE/?SID=SV_0e0gKIRVgDVBsfX). The more participants complete the survey, the more confident we can be in its findings and so the more likely it is we will be able to get changes made in practice and more accurate outcomes for child witnesses and victims in court. However, please do not discuss what the study is about with them before they have completed it.

### **Withdrawal**

If you would like to withdraw your data at any time, please quote the number given to you at the beginning of the survey in an email to the lead researcher (Genevieve Waterhouse) at [waterhg2@lsbu.ac.uk](mailto:waterhg2@lsbu.ac.uk). You do not need to give a reason for withdrawing your data, and this will be done immediately. You can only withdraw until the 31st October 2015.

### **Study Aims**

This study examines the effects that presentation of rapport-building sections and multiple interviews have on mock-jurors' perceptions of a child witness. Some participants will have been shown single interviews and some two interviews, and some participants will have seen the rapport-building sessions and some not. Multiple interviews are generally discouraged by the Police. Despite this, children are interviewed more than once by the Police quite frequently and these further interviews have been found to be a good source

of new, accurate information for an investigation. However, mock-jurors have previously been found to think inconsistencies in witnesses' recall (such as providing new information in a second interview that was not mentioned in a first interview) are a sign of an unreliable witness and so perceive changes in recall negatively. The present study aims to determine whether new information provided in second interviews is perceived differently to repeated information or information just provided in the first interview. It also aims to determine whether showing different parts of the interview to mock-jurors has any effect on their perceptions of the child witness's reliability, and accuracy.

If you would like further information about the study, please do not hesitate to contact Genevieve Waterhouse at [waterhg2@lsbu.ac.uk](mailto:waterhg2@lsbu.ac.uk).

## Appendix G

Waterhouse, G. F., Ridley, A. M., Bull, R., La Rooy, D., & Wilcock, R. (Early View). Dynamics of repeated interviews with children. *Applied Cognitive Psychology*. doi: 10.1002/acp.3246 (Reports some of the findings from study two).

## Dynamics of Repeated Interviews with Children

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*Summary: Concerns regarding repeat interviews with child witnesses include greater use of suggestive questions in later interviews due to bias, and that children may appear inconsistent and, therefore, be judged as less reliable in court. UK transcripts of first and second interviews with 21 child victims/witnesses (conducted by qualified interviewers) were coded for question types and child responses. Interviewers were consistent in their proportional use of question types across interviews. Furthermore, children were as informative in second interviews as in first, mostly providing new details consistent with their prior recall. Despite the apparent lack of training in conducting repeated interviews, no negative effects were found; second interviews appeared to be conducted as well as initial interviews, and children provided new details without many contradictions. It is suggested that when a child's testimony is paramount for an investigation, a well-conducted supplementary interview may be an effective way of gaining further investigative leads. Copyright © 2016 John Wiley & Sons, Ltd.*

Repeat interviewing refers to the practice of interviewing a single victim or witness (henceforth referred to as witness) more than once about the same event. Re-interviewing children has heretofore been discouraged (Leichtman & Ceci, 1995; Ministry of Justice, 2011; The Scottish Executive, 2011), despite the evident opportunity to possibly obtain further valid information from a witness. There are a number of reasons why repeat interviews are discouraged, including the risk that they could increase confirmation bias in interviewers' questioning techniques (The Scottish Executive, 2011) and afford interviewees further opportunities to provide inconsistent information; both of which can have negative effects on the accuracy of the testimony provided and the perception of said testimony in court (Lamb, Orbach, Hershkowitz, Horowitz, & Abbott, 2007; Leippe, Manion, & Romanczyk, 1992; Quas, Thompson, & Clarke-Stewart, 2005; Sternberg et al., 1996). It has been argued, however, that the negative outcomes of repeat interviews are largely caused by the use of inappropriate techniques (such as suggestive questions; Faller, Cordisco-Steele, & Nelson-Gardell, 2010) and that, if carried out correctly, repeat interviews could be a rich source of further accurate information of interest to the investigation (for a review, see La Rooy, Lamb, & Pipe, 2009).

Despite the discouragement of repeat interviews, they do occur in the UK and many other countries. Indeed, UK interviewing guidelines (Ministry of Justice, 2011; The Scottish Executive, 2011) outline certain circumstances in which second interviews could be recommended, which are when

- Further time is needed to discuss allegations disclosed in the first interview.
- New information is uncovered during the investigation that needs to be discussed with the child.

- The accused mentions events that were not discussed in the first interview.
- The child becomes extremely distressed when first interviewed.
- Multiple meetings are necessary to build sufficient rapport with the child, or for the interviewer to be trusted by the child.
- The child did not provide information in the first interview and subsequently becomes willing to talk.
- During the first interview it becomes clear the child needs additional support from a specialist source in order to give her or his account.

In Plotnikoff and Woolfson's (2001) study including a pilot group of 11 Scottish cases, 14 of the 25 child witnesses were interviewed more than once by the police, although it was not always clear why. However, interviewers are given very little specific guidance on how to conduct second interviews; merely informed to conduct them using the guidance given for first interviews (Ministry of Justice, 2011; The Scottish Executive, 2011). The present study, therefore, uses a sample of UK interviews to evaluate the quality of repeat interviews, the apparent reasons for conducting them, and the benefits and disadvantages of repeat interviews in terms of the quality and investigative value of the resulting testimony.

One advantage of conducting a second or subsequent interview with a child witness is the possibility of obtaining new, investigation-relevant information. Studies using adult samples have found effective ways of gaining extra information from a witness during an initial interview (for example, by asking the witness to recall the event again but from another perspective, Anderson & Pichert, 1978). However, developmental issues, such as children being more easily tired or not being able to understand more complicated instructions, can make these less practical. A repeat interview, using standard interviewing techniques, however, has been found to be effective in obtaining further information from children; children regularly reveal further information about

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an event in a second interview that they did not reveal in their first interview. This aspect of memory is called reminiscence and has been found to occur in both experimental (Fivush, McDermott Sales, Goldberg, Bahrick, & Parker, 2004; La Rooy, Pipe, & Murray, 2005, 2007) and field studies (Cederborg, La Rooy, & Lamb, 2008; Hershkowitz & Terner, 2007; Katz & Hershkowitz, 2013). Reminiscence can involve completely new information, such as recalling a further incident of abuse, or elaborations on previous ones, such as adding that the perpetrator's hair was long, having only previously mentioned it was brown. The available literature also shows that the majority of this new information is accurate. La Rooy *et al.* (2007) found that new information in second and third interviews was 58% accurate, and the total information provided in second and third interviews was at least 76% accurate on average, in comparison with 94% accuracy in initial interviews. Reminiscence accuracy has been found to be even higher in other studies (for example, 87% accurate in Gilbert & Fisher, 2006). This new, mainly accurate, information may include crucial investigation-relevant information.

However, such benefits of repeat interviewing are not without drawbacks. Perceived inconsistencies can negatively affect mock-jurors' perceptions of children's believability (Leippe *et al.*, 1992; Quas *et al.*, 2005), but inconsistency can take several different forms (Krix, Sauerland, Lorei, & Rispens, 2015). Contradictions are a form of inconsistency that indicates that some of the child's testimony is inaccurate. When a child directly contradicts herself or himself, one of the pieces of information provided must be inaccurate; for example, if a child states that the perpetrator had long hair in one interview, and that they were bald in another. This does not, on the other hand, necessarily mean the entire account is inaccurate (Fisher, Brewer, & Mitchell, 2009).

Another form of perceived inconsistency can be reminiscence (La Rooy, Katz, Malloy, & Lamb, 2010). Despite the literature that has found children's reminiscence to be largely accurate (Gilbert & Fisher, 2006; La Rooy *et al.*, 2007), children's reminiscence may still negatively affect jurors' opinions of the child's testimony. Fisher *et al.* (2009) found that this form of inconsistency was not a good indicator of unreliable testimony, and that instead, the quality of the interview (e.g. types of questions asked) gave a better indication of the accuracy of the child's responses.

In the present sample, it is unknown whether the children's accounts are accurate or not. Therefore, instead of accuracy, the quality of the interviews, as indicated by the types of questions asked, will be analysed, along with the proportion of contradictory responses made in the children's second interviews. Very few previous studies using real forensic interviews of children have measured the proportion of contradictions provided in repeat interviews (Cederborg *et al.*'s [2008] study being the only one to the authors' knowledge), but when analysed, the proportion of contradictions have been low (2%). The present study adds to the very limited literature on this topic.

A second concern about repeat interviewing is that interviewers may be at a higher risk of various biases in later interviews. If interviewers hold strong beliefs about how an

event occurred, they may ask questions that mould the testimony to fit these beliefs (White, Leichtman, & Ceci, 1997). For example, interviewers may use more suggestive questions (questions that imply a correct answer or introduce new information into the interview that the interviewee has not previously mentioned) in second and subsequent interviews as their knowledge of the event or time pressures upon them increase. Children's responses to suggestive questions are often inaccurate (Lamb, Malloy & La Rooy, 2011). Although an increased reliance on suggestive questions is not the only form of confirmation bias that can affect an investigation (for example, perception of evidence quality can vary; Ask, Rebelius, & Granhag, 2008), it could be argued that suggestive questioning is the worst form due to its possible effects on the accuracy of children's testimony.

The few studies that have examined interviewers' question styles across repeat interviews found inconsistent results (Cederborg *et al.*, 2008; Hershkowitz & Terner, 2007; Katz & Hershkowitz, 2013; Patterson & Pipe, 2009; Santtila, Korkman, & Sandnabba, 2004). Second interviews conducted using the National Institute of Child Health and Human Development's interviewing protocol (henceforth NICHD, for further information, see Lamb, La Rooy, Malloy, & Katz, 2011), are more likely to avoid increased reliance on suggestive questions in second interviews (Hershkowitz & Terner, 2007; Katz & Hershkowitz, 2013). However, less structured interviewing guidelines (similar to the UK guidelines, Ministry of Justice, 2011; The Scottish Executive, 2011) may have a greater risk of poorer interviewing styles (i.e. using fewer open questions and more suggestive ones) in second interviews (Cederborg *et al.*, 2008; Patterson & Pipe, 2009; Santtila *et al.*, 2004). Studies that have examined the consistency of interviewers' question-type usage and interviewing behaviours within interviews, and across different interviewing contexts (i.e. mock-child, mock-adult and field interviews) have found some consistency in the use of open-ended and leading questions, but also some variation related to context and the event the child is recalling (Gilstrap, 2004; Powell, Cavezza, Hughes-Scoles, & Stooze, 2010). Thus, the present study aims to determine whether UK interviewers are consistent in their interviewing or follow this same pattern of incremental suggestive questioning in repeat interviews, and therefore elicit less reliable testimony from children.

### The present study

The aims of the present study are to determine (i) the reasons second interviews are conducted with child victims/witnesses in the UK, (ii) whether second interviews differ from first interviews in regard to interviewer question types (and consequently interview quality) and interviewee informativeness (both number of details and type of details) and (iii) how consistent or contradictory children are in their recall in second interviews.

It is particularly challenging to make predictions regarding interviewer and interviewee behaviours across repeat interviews as there are so very few studies that have previously examined this. However, it is expected that with the progression of the investigation and the interviewers' increased

knowledge (and possibly biases) about the event(s), that when re-interviewing children, interviewers may use fewer open questions and introduce more new information into the interview by asking more closed, forced choice or leading questions (as found in Santtila et al., 2004). Additionally, based on the experimental literature, it is predicted that children will provide new information in second interviews.

## METHOD

### Sample

A convenience sample was used. Transcripts from cases that had gone to trial were provided by lawyers to one of the authors for quality assessment through that author's work as an expert witness. These were examined to identify cases in which a child victim or witness had been interviewed more than once by the police or trained social workers. This revealed 14 cases that involved repeated interviewing of 21 children, who were interviewed an average of 2.52 times (range 2 to 5). In many of the interviews, a police officer asked all of the questions (in 11 first interviews [52.4%] and 14 second interviews [66.7%]), with the rest being jointly conducted with a social worker (9.5% of all first and second interviews) or an additional police officer (4.8%), or by a social worker alone (26.2%). These interviews were conducted between 2003 and 2013.

Video recording of interviews only became mandatory in the jurisdictions from which the interviews come in 2011 (Nicol, La Rooy, & Houston, 2015), thus, the quality of the transcripts varied from verbatim transcriptions of video recordings to scribed transcripts (notes written during the interview by a second interviewer who attempted to include word-for-word interviewer and interviewee utterances). In order for scribed transcripts to be as accurate as possible, interviewers prior to 2011 were trained to conduct their interviews at a slow pace. Of the present sample, 57.1% were conducted prior to 2011. To explore whether the scribed interviews conducted prior to 2011 documented fewer details provided by the child than interviews transcribed from videos (2011 and later), independent samples *t*-tests were conducted. These indicated that there was no significant difference between the number of child-provided details included in first interviews conducted before ( $M=148.33$ ,  $SE=27.41$ ) and after 2011 ( $M=159.67$ ,  $SE=45.75$ ,  $t(19)=-.224$ ,  $p=.825$ ). This was also true for second interviews conducted before ( $M=108.25$ ,  $SE=66.91$ ) and after 2011 ( $M=145.22$ ,  $SE=89.53$ ,  $t(19)=-1.085$ ,  $p=.291$ ).

The children interviewed were (alleged) victims from 3 to 14 years old ( $M=7.5$ ,  $SD=3.0$ ), 52.4% of whom were male. The majority were interviewed regarding allegations of child sexual abuse (61.9%), with some interviewed regarding physical abuse (19%), some both (4.8%) and some about sexual abuse plus domestic violence (14.3%). The 'victim-

perpetrator' relationship was in the majority parental (61.9%) or other familial (28.6%), with 9.5% extrafamilial.

This study will focus on the first and second interviews of these children.<sup>1</sup>

### Coding

Prior to coding, the interview transcripts were anonymised by the lead researcher, removing references to names, places, dates and any particularly distinguishing aspects of the crime. All utterances in the interview transcript were coded. Each change in speaker (interviewee to interviewer and vice versa) signified a new utterance. Interviewer utterances were coded for question type.

### Interviewer question types

Every utterance that asked the child for information was coded for its question type. The coding for question types was based on the Lamb et al. (2007) study, with the addition of 'unknown' and 'multiple' categories as such utterances were frequently found in the transcripts. The question types were as follows:

- 1 *Invitations*: This category consisted of open questions and prompters; both of which encourage free recall. An example of an open question is 'Tell me everything that happened' whereas a prompter involved a minimal encourager, such as 'Uhh' or echoing the child's words.
- 2 *Directives*: The interviewer encouraged free recall on a cued topic around a subject that the child had previously mentioned. For example, wh-questions such as 'Where did that happen?' fall into this category.
- 3 *Option-posing*: This category included both yes/no questions (which demanded a 'yes' or 'no' answer) and forced choice questions, which encourage children to give one of a number of pre-specified answers. It also included questions starting with 'Can you tell me...' as these sorts of questions can appear to include two questions in one (i.e. 'Can you' and 'Tell me') and as such are ambiguous and thought to be difficult for younger children to understand (Hardy & Van Leeuwen, 2004).
- 4 *Multiple*: The interviewer asked more than one question in one utterance. This category also included occasions when the interviewer summarised what the child had said previously, thus expecting clarification of multiple details in response to one question (e.g. 'The man was wearing a red hat and walked down the street. Is that right?').
- 5 *Suggestive*: The question introduces information the child has not mentioned previously in any interview or implies a desired response. The question may also include other suggestive techniques, such as mentioning what the interviewer has heard from other sources. For example, 'Your mom told me your brother hurt you, what do you remember about that?'
- 6 *Unknown*: The question was not clearly transcribed, and parts of the question were missing, or the question was not finished, either because the child interrupted or the adult changed the question.

If an utterance fell under more than one coding category (for example, some utterances could be coded as both

<sup>1</sup> Seven children were interviewed more than twice. Their third interviews were analysed but the sample size was too small for strong conclusions (see Results section). Fourth and fifth interviews were not analysed because of low sample sizes. Only three children experienced a fourth interview and one a fifth.

multiple and suggestive when the interviewer asked more than one question and one or more of these questions were suggestive), the higher numbered category was used (e.g. 5 is greater than 4, and so the example would be coded as suggestive). This is because the higher-numbered question types could cause greater inaccuracies in a child's recall (Lamb *et al.*, 2007) and so cause more damage to the quality of the information given during the child's interview (apart from the 'unknown' category in which it was impossible to tell what the interviewer was going to ask).

### Interviewee utterances

Child utterances were coded for the number of details provided, the type of the information and its likely investigation-relevance. When the child repeated information within the same interview (i.e. the second time he or she stated a detail) or provided information that was not related to the event(s) being discussed, these details were coded as 'non-substantive', and no further coding of such utterances occurred. In second (and third) interviews, each child utterance was also coded for the novelty and consistency (i.e. consistent with or contradicting prior interview recall) of the information provided.

### Number of details

The number of details that the children provided was determined partly by the number of clauses in each utterance. A clause (as in Gross & Hayne, 1999) was a simple statement, such as 'My bedroom is upstairs', with every additional detail scored separately. If the interviewer had asked the child, 'Where is your bedroom?', and the child had responded, 'Upstairs', this would also count as one detail. If the interviewer asked an option-posing question, such as 'Is your bedroom upstairs or downstairs?' The child's answer of 'Upstairs' would still count as one detail. Additionally, if the child added information, such as 'My bedroom is upstairs with Mummy's', this would count as two details. Further details within the clause were also coded (for example, 'he was wearing a blue shirt' would count as two details, with one for the clause, and one for blue). When children listed people or objects each additional item in the list counted as an extra detail.

### Type of details

The types of details provided by the child were coded for each utterance. If the child spoke about multiple types within one utterance, they were coded separately. The types, as in Phillips, Oxburgh, Gavin, and Myklebust (2012), were (i) *people*: details relating to persons involved in the event/s, (ii) *actions*: details explaining what happened during the event/s and any other relevant time points, (iii) *locations*: details of places involved in the event/s, as well as descriptions of the places, (iv) *items*: any details of objects or items involved in the event/s, such as descriptions of clothing and (v) *temporal*: details given regarding the timing of the event/s.

### Investigation-relevance

Each child utterance was also coded for likely investigation-relevance. Defining high- and low-investigation-relevance can be particularly subjective and because both coders were not professional investigators, the definition of high investigation-relevance was made relatively narrow and precise. Details were coded as of high investigation-relevance if the child was directly discussing something illegal. For example, all discussion of an adult sexually touching her or him would have been coded as of high investigation-relevance. Denials of illegal events were also included in this category. Alternatively, details were coded as of low investigation-relevance if the child was discussing the alleged crime or surrounding events, but not specifically an illegal act. For example, discussion of what happened after the illegal act would be coded as of low investigation-relevance. If children referred to some details of high investigation-relevance and some of low investigation-relevance within one utterance, the details were coded separately.

### Consistency and novelty in second interviews

All child utterances in second interviews were coded for whether the child had mentioned the details in the initial interview. They were also coded for whether the new details fitted with their previous testimony, or whether he or she directly contradicted something said in the first interview. The codes were as follows:

- *Repeated*: the child had mentioned the detail in the initial interview.
- *New consistent*: the detail had not been mentioned in the first interview, and it did not directly contradict the information previously given by the child. Traditionally, any new information would be categorised as inconsistent as it involves different information from that given in the first interview (i.e. none). However, in the present study, consistency relates to whether the information fits with the child's previous story or contradicts it.
- *New contradictory*: the detail had not been mentioned in interview 1, and it directly contradicted some of the testimony given in that first interview. For example, if in interview 1, the child had denied ever going to the suspect's house, but described going to the suspect's house in interview 2, this and any further details regarding their visit to the suspect's house would be coded as new and contradictory.

### Inter-rater reliability

A second rater coded 19% of the children's interviews (i.e. the interviews of four children). This subsample was randomly determined. Agreement for coding of all five aspects of the interviewer and interviewee utterances ranged from 97.2% to 100%, with an average of 99.1% agreement.

### Additional Information

Additional information was gathered about each child and their interview. The child's age and gender were determined.

Regarding the interview, information was obtained about the number of people present and their professions, whether the interviewers were the same or different people in subsequent interviews, the delay in days between interviews 1 and 2, and the reason for the second interviews being conducted. The majority of this information was found on a non-anonymised cover page of the interview transcripts.

Details regarding the reasons for the second interviews were gleaned from the interview transcript itself. The reasons were coded as follows:

- *Additional evidence*: the interviewer mentioned in the second interview further evidence from another source that she/he wanted to discuss with the child.
- *Child asked to stop first interview*: in some interviews, the child was clearly distressed and agreed to come back another day to continue the conversation.
- *Conflicting evidence*: the interviewer mentioned in the second interview evidence from another source that differed from what the child had said in the first interview.
- *Further child disclosure*: the interviewee disclosed further information, after her or his first interview, to someone who then informed the investigators, and this was mentioned by the interviewer or interviewee in the subsequent interview.
- *No disclosure in first interview*: the child had not disclosed any crime in the first interview, and no other reason was given for the follow-up one.
- *Not obvious*: it was not clear from either the interviewer or the interviewee's comments why another interview was being carried out, and the interviewee had disclosed information in the prior interview (i.e. it could not be categorised as 'no disclosure in first interview').

## RESULTS

### Interview details

Twenty-one children from the sample were interviewed twice. The total number of child plus interviewer utterances combined was compared. According to paired samples *t*-tests, the apparent increase in number of utterances in the substantive phases across interviews was not significant, with the first interview averaging 210.0 utterances ( $SE=34.09$ ), and the second interview 246.0 utterances ( $SE=35.58$ ,  $t(20)=-.687$ ,  $p=.396$ ). On average, the second interviews occurred 45 days after the first (with a range of 0 to 368 days later).

First disclosure or partial disclosure (e.g. the child discussed the event but did not clarify what happened) occurred in 66.7% of first interviews and 19.0% of second interviews. Three children never disclosed any offence being committed against them. The majority of second interviews were conducted by the same lead interviewer (60.0%).

### Reasons for second interviews

The most frequent reason for second interviews to be conducted was because the child disclosed no relevant information or a very limited amount of information in the first interview (eight interviews; 38.1%). In four other second interviews, the child appeared to have made further

disclosures about the event(s) to someone who informed the investigators (19.0%). In three interviews, the child had asked to stop the first interview but had agreed to come back for a second interview (14.3%). In a further three interviews, there was no obvious reason for the second interview (14.3%). The other three interviews were conducted because of additional evidence, for one of which the evidence opposed the child's prior interview account (4.8%).

### Interviewers' behaviours in repeat interviews

#### Question types

On average, the majority of questions asked in first and second interviews were option-posing, followed by directive (Table 1). None of the interviewers asked the child to remember the event from another person's perspective or in reverse time order. Percentages of each question type were compared for interviews 1 and 2 using paired samples *t*-tests. No significant differences were found ( $p > .085$ ).

### Children's responses in repeat interviews

#### Number of details

The number of investigation-relevant details provided by children in interviews 1 ( $M=131.5$ ,  $SE=25.2$ ) and 2 ( $M=100.5$ ,  $SE=14.5$ ) did not significantly differ,  $t(20)=1.32$ ,  $p=.202$ .

#### Type of details

The majority of details recalled in both interviews were about actions (Table 1). The percentages of details recalled regarding people, locations, temporal information and items were, on average, relatively low. Paired samples *t*-tests showed only one statistically significant change in the percentages of details provided of each type in interviews 1 and 2. Namely, children provided a significantly greater percentage of details for 'items' in interview 2 ( $M=2.9\%$ ,  $SE=0.75$ ) than in interview 1 ( $M=1.1\%$ ,  $SE=0.43$ ,  $t(20)=-2.19$ ,  $p=.040$ ,  $r=.44$ ), although the percentages were very small.

#### Investigation-relevance

Children provided somewhat similar percentages of high investigation-relevance details (of all the investigation-

Table 1. Mean percentages of interviewer question types used and child details recalled by type in first and second interviews

		First interview	Second interview
Question types	Invitation	12.6%	10.1%
	Directive	33.5%	30.1%
	Option-posing	35.1%	37.8%
	Multiple	6.1%	5.7%
	Suggestive	11.0%	14.2%
	Unknown	1.7%	2.1%
Response types	People	16.5%	12.8%
	Actions	72.2%	73.3%
	Locations	6.1%	6.3%
	Items	1.1%	2.9%*
	Temporal	4.1%	4.7%

\*The difference in percentage between interviews 1 and 2 is significant at  $p < .05$ .

relevant information provided) in interview 1 ( $M=16.8\%$ ,  $SE=3.51$ ) and two ( $M=20.8\%$ ,  $SE=4.12$ ). The apparent increase was not significant according to a paired samples  $t$ -tests,  $t(20)=-.672$ ,  $p=.510$ . The average number of high investigation-relevant details given in interviews 1 ( $M=24.9$  details,  $SE=7.61$ ) and 2 ( $M=24.1$  details,  $SE=6.80$ ) also did not differ significantly,  $t(20)=.083$ ,  $p=.935$ .

### Novelty and consistency in interview 2

#### Consistent

In the second interviews, the majority of details recalled were new and consistent with prior recall in interview 1 ( $M=82.7\%$ , or 80.9 details). Of the new and consistent information provided in interview 2, 19.3% of it was of high investigation-relevance (or, on average, 18.2 details, see Figure 1).

#### Contradictory

Very few 'new and contradictory' details were recalled in interview 2 ( $M=11.3\%$  or 14.6 details). When the relatively few 'new and contradictory' details were provided in second interviews ( $n=14$ ), 25.6% was of high investigation-relevance (or, on average, 8.0 details, see Figure 1).

#### Repeated

In their second interviews, children did not very often repeat details mentioned in interview 1 ( $M=5.9\%$  or 5.1 details). Very few high investigation-relevant details were repeated (Figure 1).

#### Nature of contradictory details

'New and contradictory' information was provided in 14 of the 21 second interviews. For six of these interviews, the information was of low investigation-relevance. For the majority of these, the information consisted of a slight change in story, such as contradictory temporal information, or information about who lives where. In the remaining eight interviews, some new contradictory information was of high investigation-relevance. In five of these interviews, the child had denied something happened in the first interview but in interview 2 had gone on to explain in detail the action that was originally denied. In two further cases, the contradictions seemed to relate to the child's understanding of the

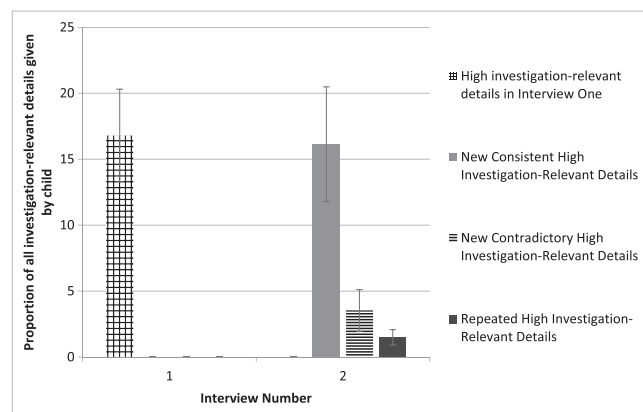


Figure 1. Average percentages of consistent, contradictory and repeated high investigation-relevant details recalled in interview 2

word 'touch' (a word that has been found to be difficult for children to understand; Quas & Schaaf, 2002, but see Teoh, Pipe, Johnson, & Lamb, 2014). In the remaining interview, the child had given details in interview 1 that she or he subsequently changed.

Contradictory details were given in two interviews in response to leading questions from the interviewer that included inaccurate information about what the child had said in the previous interview.

### Third interviews

Although the sample size ( $n=7$ ) of third interviews was too small for any findings to be reliable, when paired samples  $t$ -tests were conducted between interview 3 and interviews 1 and 2, no statistically significant differences were found for any of the above measures.<sup>2</sup>

## DISCUSSION

In summary, the results of this study demonstrate that the reasons for second interviews being conducted appear to be in line with UK guidance (Ministry of Justice, 2011; The Scottish Executive, 2011). For the most part this was due to children not having disclosed any or enough relevant information in their prior interviews. Additionally, contrary to our predictions, interviewers were found to be highly consistent in their behaviours in first and second interviews. Instead of becoming more reliant on closed question types (e.g. suggestive and yes/no questions), interviewers asked statistically similar percentages of question types in second interviews as in the first. However, although interviewers were consistent, the quality of their interviews was not high; relying mostly on option-posing and suggestive questions in interviews, against the best practice guidelines (Ministry of Justice, 2011; The Scottish Executive, 2011) but in line with other studies of interviewer questioning (see in the succeeding section). Children were highly consistent in their responses; providing similar percentages of details (both in terms of topics and investigation-relevance) and numbers of details across interviews. The majority of the information the children provided in second interviews was new and consistent with their prior testimony.

### Reasons for repeat interviews

The two most frequent reasons for conducting second interviews were (i) because the child had not disclosed key information in their first interview and (ii) because the child had made further disclosures to others, which the investigators were then alerted to. The UK guidelines (Ministry of Justice, 2011; The Scottish Executive, 2011) state this first reason is appropriate for conducting another interview if the child subsequently becomes willing to disclose. However, three children never disclosed, suggesting they had not become willing to. The second reason could be interpreted as new information uncovered during the investigation that needs

<sup>2</sup> For further details on the analysis of the third interviews, please contact the first author.

discussion with the child; another appropriate reason for conducting a subsequent interview according to UK guidelines (Ministry of Justice, 2011; The Scottish Executive, 2011). The current study also suggests that reminiscence (discussed later) occurred with some frequency and that interviewers may be aware of the possible benefits of conducting second interviews to obtain additional information. UK interviewers, therefore, do generally seem to follow the guidelines regarding reasons for conducting second interviews with child witnesses/victims.

### Interviewers' utterances

Interviewer question types were found to be consistent across first and second interviews. The finding of interviewer consistency in the percentages of question types they use across interviews is encouraging in terms of interviewing practice. As the investigation develops, the risk of the interviewer introducing their own biases (confirmation bias) and information they have obtained from sources other than the interviewee can become higher (Smith & Milne, 2011; The Scottish Executive, 2011). This has been found in previous studies where interviewers' use of suggestive or leading questions has increased with the number of interviews the child has experienced (Cederborg et al., 2008; Patterson & Pipe, 2009; Santtila et al., 2004). Such an effect may have been masked, however, because some of the subsequent interviews were conducted by new interviewers.

Although interviewing styles were consistent, the interviews were not ideal. In comparison with previous research that has examined investigative interviewers' use of each question type in England, Wales and Scotland, the present study's interviews were rather poor (Lamb et al., 2009; La Rooy, Earhart, & Nicol, 2013; Table 2). As found elsewhere (for example in Australia; Powell et al., 2010), interviewers used only a small percentage of invitations (or open questions) and had a very high reliance on option-posing and suggestive questions. Thus, in the current sample, despite there being no decrease in quality from first to second interviews, there was significant room for improvement in interviewing practices.

The quality of the interviews is important for determining the likely accuracy of the child's responses in these interviews. The style of interviewing found in the current sample

Table 2. Mean percentages of question types used in the present study's interviews 1 and 2 and those of Lamb et al. (2009) and La Rooy et al. (2013)

Question type	Present study	Lamb et al. (2009)		La Rooy et al. (2013)	
		Standard	Protocol	Pre-2011 <sup>a</sup>	Post-2011 <sup>a</sup>
Invitations	11.3%	6.8%	34.1%	7%	15%
Directives	31.8%	43.1%	27.5%	39%	49%
Option-Posing	36.5%	27.2%	17.9%	37%	34%
Suggestive	12.6%	8.29%	5.6%	17%	2%

Table includes only directly comparable categories of question type. Lamb et al.'s (2009) additional, omitted category was 'summary', in comparison with the present study's 'multiple' and 'unknown' question types. La Rooy et al. (2013) used only four categories.

<sup>a</sup>Some of the transcripts from these samples were included in the current sample.

(i.e. relying on suggestive and option-posing questions and using few open questions) encourages the use of 'recognition memory', rather than 'free recall'. Recalling information via 'recognition memory' elicits less accurate information (Orbach & Pipe, 2011), and less information in total (Lamb et al., 2007; Sternberg et al., 1996) than that recalled via 'free recall'. Thus, the information obtained in the current sample of first and second interviews could be less reliable/complete than information obtained via best practice interviews.

In regard to poor practice in the current sample, it is important to note a particularly troublesome finding regarding suggestive questions. More than once in the transcripts, suggestive questions were found that included inaccurate information regarding what the child had said in prior interviews. For example, the interviewer in the second interview would ask 'You said you went to the park with him last time we spoke, tell me all about that' when the child, according to the prior transcript, had not said they had gone to the park, but that they had gone to the library. This form of questioning has also been noted by prosecutors as a source of inconsistencies in child testimony (Burrows & Powell, 2014) and it can lead to children not correcting the interviewer (Hunt & Borgida, 2001). Thus, interviewers can continue to believe an inaccurate detail and include this in their investigative decision-making. In the present study, for example, children in two interviews provided 'new and contradictory' information in response to this type of question as their testimony changed in response to the inaccurate detail provided by the interviewer. Thus, interviewers should be at their most diligent in not introducing contradictions into the interviewing process themselves. With more thorough planning, the contradictions created by the interviewer misremembering could be avoided.

### Interviewee responses

Interviewees provided on average the same number of pieces of information in their first and second interviews. They also provided the same percentage of each type of information in these interviews, except that there were slightly more 'item' details recalled in interview 2 than interview 1. This could reflect children recalling more detailed specific events in the second interview, having relied on a more general description in the first. This is consistent with the Santtila et al. (2004) study in which they found children gave more descriptions in second and subsequent interviews than in first interviews. However, in the present study, this was quite a small effect.

Importantly, the information provided by children in the second interviews was, in the majority, new. This supports the prediction that children would reminisce. The reason for this may have been genuine reminiscence (i.e. the information was not remembered in the first interview, but recalled at a later attempt), or the children's willingness to disclose may have increased (possibly due to a greater understanding of the interview process or rapport with the interviewer). Irrespective of the cause, these children appear by no means to have exhausted their recall in a single interview; a finding supported by the experimental literature (for a review, see La Rooy et al., 2009).

Although relatively little contradictory information was provided overall, the majority of contradictory information that was of high investigation-relevance was caused by children retracting earlier denials about aspects of the event(s) being discussed. Again, there are many possible reasons for this, and it is difficult with this type of data to establish the accuracy of any of the details given by the children. Thus, whether these contradictions reflect a positive or negative impact of repeat interviewing is hard to determine. On the other hand, it is plausible that these contradictions could merely reflect delayed, accurate, disclosure rather than inaccurate testimony, thus supporting the use of second interviews to encourage further recall.

Children's reminiscence of both high investigation-relevant and consistent information in second interviews presents a persuasive argument for the usefulness of repeat interviews with child victims. Children provided very similar numbers of new, high investigation-relevant details in second interviews as they did in their first interviews. In fact, for four children, the second interview provided the disclosure that the child did not give in the first interview. Consequently, there is a high likelihood that these investigations may not have progressed to court without these second interviews.

### Limitations and further research

The main limitation of the present study is related to the nature of the transcripts. All had progressed to court and so may be unrepresentative of the majority of child sexual abuse cases, which do not ever progress to court (National Society for the Prevention of Cruelty to Children, 2014). Additionally, these were all cases where an expert opinion on the interview quality was thought appropriate. These two aspects could reflect the quality of the interviews generally: the interviews may be conducted sufficiently well for the authorities to determine the evidence as strong enough to go to court, but not conducted so well that their quality is unarguable. Additionally, as with most research using field interviews, it is not known how accurate the information provided by the children is. Thus, although the second interviews could be helpful in terms of children providing further information about the event(s), it is not possible to be certain whether this additional information is accurate, or even as accurate as the information given in the child's first interview. The generalisability of the results regarding third interviews are affected by the very small sample size ( $n=7$ ). However, they suggest that a third interview may prove useful in some cases, as no significant differences were found between the second and third interviews. However, a larger sample size is essential for less tentative conclusions. Another limitation relates to the varying interviewers involved. In some cases, all the interviews with a child were conducted by the same interviewer, but in other cases they were conducted by different interviewers and from different professional groups. The limited research suggests that children are more accurate in second interviews if they are interviewed by the same person as in the first interview (Bjorklund *et al.*, 2000). However, a comparison was not possible in the present study due to the small sample size.

### CONCLUSIONS

This study provides the first analysis of interviewer and interviewee behaviours during unforeseen repeat interviews conducted with typically developing child victims/witnesses in the UK. The analysis provides compelling arguments for encouraging where appropriate the use of second interviews in cases in which child testimony is key. No negative effects of repeat interviewing were found. Interviewers conducted second interviews in similar ways to first interviews. Child responses were also similar across first and second interviews in terms of amount and types of details provided. The repeat interviews seemed effective in gaining extra, high investigation-relevant information. Finally, not only did second interviews reveal new information, but this information was largely consistent with the children's prior accounts, while the majority of contradictions emerged from children disclosing details regarding events they had denied in their first interview. Unfortunately, the interviews generally involved over-reliance on less desirable types of questioning (option-posing and suggestive). However, the present study indicates that if general standards of interviewing improve, there is no reason to believe that repeat interviews should not also do so and continue to be of investigative value.

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