An Evaluation of English Crown Courts with and without Special Measures Implemented in Section 28 of the Youth Justice and Criminal Evidence Act

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February 2019

This dissertation is submitted for the degree of Doctor of Philosophy.

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Abstract

This series of studies was the first to evaluate the effects of the Section 28 pilot study on the treatment of vulnerable child witnesses in English Crown Courts. Section 28 of the Youth Justice and Criminal Evidence Act implemented mandatory Ground Rules Hearings, during which the judge, lawyers, and intermediary (if applicable) discussed appropriate accommodations to be made for child witnesses, following which the cross-examination could be pre-recorded. Analyses examined 43 cases that implemented the special measures ('Section 28' cases) and 44 cases that did not implement the special measures ('Non-Section 28' cases) that took place between 2012 and 2016.

Analyses revealed that children in the Section 28 cases experienced less systemic delay than their counterparts. In addition, the trial preparation in the Section 28 cases was more thorough and this was associated with less risky questioning in the cross-examinations. However, younger children experienced longer delays and had fewer accommodations made for them than older children, regardless of condition. Additional analyses demonstrated that the forensic interviews replaced the evidence-in-chief in most cases almost entirely, with prosecutors asking few substantive questions. In the Section 28 cases, defense lawyers used fewer suggestive questions and asked less complex questions than Non-Section 28 defense lawyers. However, both types of lawyers still predominantly asked option-posing questions. Regardless of condition, defense lawyers asked fewer suggestive questions than their counterparts in other common-law countries and they asked younger children less complex questions.

Results indicate that, although the Section 28 pilot study has not fixed all of the existing problems, it has significantly reduced systemic delay and improved the treatment of child witnesses in Crown Courts and thus should be rolled out nationally. As well, regardless of condition, English lawyers and judges seem receptive to recent special measures and appear to be effectively implementing them.

Preface

This dissertation is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the Preface and specified in the text.

It is not substantially the same as any that I have submitted, or, is being concurrently submitted for a degree or diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text. I further state that no substantial part of my dissertation has already been submitted, or, is being concurrently submitted for any such degree, diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text

It does not exceed the prescribed word limit for the relevant Degree Committee.

Statement of Length

In accordance with the Department of Psychology guidelines, this thesis does not exceed 80,000 words. The total number of words is: 35,817. The word limit excludes footnotes and bibliography. The statistical tables in this thesis (n = 20) are, in accordance with the Department of Psychology guidelines, counted as 150 words per table.

Acknowledgement

I would firstly like to thank my supervisor, Michael Lamb, who bravely took on a Texan at the end of his illustrious career and lived to tell the tale! His brilliance, kindness, and curiosity were inspiring over the past 3 years, and I would not be where I am today without him.

I would like to acknowledge the Cambridge International Trust for their generosity in funding my doctorate. As well, I would like to thank Christ's College, not only for the financial support, but also for giving me a home in Cambridge and a community that became my family.

With that said, I'd like to sincerely thank all of the incredible people I met during my time in Cambridge, including Rachel, Josh, Nigel, Ruby, Elly, Bruno, Sean, Grant, Jose, and Henry. Thank you for the pub trips, the dog walks, and for everything else that helps one cope with the stress of a dissertation.

I am also deeply grateful for my family, pets (!!), and friends from home who were incredibly supportive from across the pond.

I would like to acknowledge my gratitude to the Ministry of Justice for all of their work in gathering the required materials, and in particular, Janet Healey and Lola Kasim. I'd also like to thank my psychology colleagues for their emotional support as well as their contributions to the research, in particular: Sam Andrews, Georgia Lundon, Elle Rose Prince, Sheina Lew-Levy, Beth Ahern, Telma Almeida, and Kate Ellis-Davies.

Lastly, I'd like to thank Percy for being such a good boy.

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Chapter 1: Introduction

"We suggest that a fundamental change of attitude towards children in the legal context is now required." – (Pigot, 1989, para.7.9)

A review of English criminal justice reform over the past three decades reveals both significant progress (*Criminal Justice Act*, 1988; *Youth Justice and Criminal Evidence Act*, 1999) as well as stagnation, particularly with regard to the treatment of vulnerable witnesses (Spencer & Lamb, 2012). Commendably, critical impediments to the attainment of justice for young people have been removed due to the combined efforts of legal practitioners, academics, psychiatrists, and social workers, demonstrating that problematic policies and practices can be overcome when there is interdisciplinary cooperation (Spencer & Lamb, 2012). Courts are now allowed to convict offenders based on the uncorroborated evidence of unsworn children (Criminal Justice Act, 1988, s.34), judges no longer have a duty to warn jurors about the 'dangers' of believing complainants in sexual cases (Criminal Justice and Public Order Act, 1994, s.32), and children are no longer assessed on the basis of outdated definitions of competency (Criminal Justice Act, 1991, s.52).

However, children and adults are developmentally different (Lamb, Brown, Hershkowitz, Orbach, & Esplin, 2018), making children uniquely vulnerable in the criminal justice system. Children are subjected to potentially harmful adversarial cross-examinations, which may not only affect their welfare adversely (Plotnikoff & Woolfson, 2009) but may also yield inaccurate and unreliable evidence (Andrews & Lamb, 2016; Ceci & Bruck, 1995; Lamb, Orbach, Hershkowitz, Esplin, & Horowitz, 2007).

Children's Developmental Capabilities and Limitations

Over the last several decades, researchers have extensively investigated how to elicit complete and coherent accounts from children as well as how children's accounts can be contaminated by outside influences (Lamb et al., 2018). As a result, researchers have conclusively determined that children as young as five years of age can be reliable witnesses if they are questioned in a developmentally appropriate manner (Jack, Leov, & Zajac, 2014; Marchant, 2013). With that being said, children's memory development, language capabilities, and susceptibility to suggestion differ from those of adults as a factor of their age, and these differences must thus be taken into account in legal contexts.

Firstly, age is the largest determinant of the quantity and quality of details that are remembered (Lamb, et al., 2018); therefore, older children will have better recall than younger children (Howe, 2011). Memories are also more likely to be encoded and stored when they make sense (Lamb, Malloy, Hershkowitz, & La Rooy, 2015), or when associations exist between past experiences (Walsh & Ungson, 1991). Again, younger children may be particularly disadvantaged because the events may not make sense (e.g., sexual abuse) and/or they have fewer past experiences to form associations with than do adolescents and adults.

Secondly, children's language capabilities differ from those of adults. Both children and adolescents may struggle with conventional adult vocabulary, such as 'always', 'yesterday,' and 'before' (Saywitz, 2002), and they have particular difficulty with legal language used in the criminal justice system (Hanna, Davies, Henderson, Crothers, & Rotherham, 2010). Adults also commonly overestimate children's comprehension, which is problematic especially because children rarely seek clarification when they do not understand (Zajac, Gross, & Hayne, 2003).

Lastly, research demonstrates that both young children (Eisen, Goodman, Quin, Davis, & Crayton, 2007) and adolescents (Otgaar, Howe, Brackman, & Smeets, 2016) are more susceptible than adults to suggestion in certain circumstances. Although there is no consensus about which age group is more vulnerable to suggestion, research has consistently demonstrated that the suggestive questioning styles that are often used in the legal system pose a significant threat to the veracity and credibility of children's accounts (Lamb et al., 2018).

These problems are exacerbated in courtroom settings, where children may be extensively questioned about uncomfortable or traumatizing events that they experienced months or even years prior to court. The delay in the legal system, accompanied by the stress that children endure during their participation, together ensure that young witnesses often provide less complete, coherent, and reliable evidence than adults do (Spencer & Lamb, 2012). Children forget more rapidly than adults do (Brainerd, Reyna, Howe, & Kingma, 1990), meaning they become less informative and more susceptible to suggestion over time (Flin, Boon, Knox, & Bull, 1992). Children commonly experience symptoms of stress while awaiting trial, such as depression, anxiety, self-harm, bedwetting, and panic attacks. The resulting stress may further inhibit children's memory retrieval, communicable abilities, and

attention span and subsequently reduce the accuracy and/or perceived credibility of their testimony (Lamb et al., 2015).

In summary, children differ from adults with respect to their memory abilities, language skills, and susceptibility to suggestion on account of their age. When children become involved in the legal system, the systematic delays and accompanying stress further reduce their memory abilities and language skills, and make them more susceptible to suggestion, underlining the dire need to adapt legal proceedings to accommodate children.

The Pigot Committee

Prompted by growing awareness of children's vulnerabilities, criticisms of the treatment of children in English criminal courts increased during the 1980s, culminating in the Pigot Report (1989) and subsequent legal changes in the Criminal Justice Act (1991; Spencer & Lamb, 2012). Amongst other things, the advisory group often referred to as the 'Pigot Committee' evaluated the possibility that video-recorded evidence might replace both children's live evidence-in-chief and cross-examination. After thorough investigation, the committee concluded that children ought to have the opportunity to be both examined and cross-examined in out-of-court pre-trial hearings with the recordings later shown as their evidence in any resulting trial (Pigot, 1989, para 2.25-6). The Report provided general recommendations for how the pre-recorded interviews should be carried out (Pigot, 1989, para 4.1-4.25). Among other things, they noted that the video-recorded interview 'should be conducted as soon as practicable after an offense has been reported,' that a supplementary interview should only be conducted if absolutely necessary, and if so, it should be conducted by the same person who conducted the first interview (Pigot, 1989, para 4.11). They recommended the interview be conducted by a single interviewer who was professionally briefed beforehand, and only if necessary should a third party be present to reassure the child. While conducting the interview, they recommended that 'the structure and content of interviews with children be carefully considered by all those involved in advance,' that questioning 'graduate from open to the specific,' and that 'crucial leading questions… be avoided wherever possible' (Pigot, 1989, para 4.17-20).

The Pigot Committee cited numerous justifications for their conclusion, including the fact that prosecutions were only planned for 28% of sexual abuse cases (from 1983-1987) because children and/or parents were unwilling to 'endure the traumatic court experience' (para 1.6). They noted that, in other adversarial-styled courts internationally, pre-trial out-of-

court proceedings were exceedingly common (para 1.12). The committee also noted that 'one of the most substantial difficulties faced by children… is the extraordinary and, in our view, quite unacceptable delay which they must often endure before cases come to court' (para 1.20). They believed that video-recorded evidence would 'maximise the number of occasions on which flawed prosecutions do not go proceed and ensure that the preparation of cases which are to go to trial is accelerated,' thereby expediting the child's participation and combatting the systematic delay that detrimentally affects the quality of children's evidence (para 6.12). Most critically, the two cruxes of their argument centred on the child's welfare and the integrity of the evidence (para 2.9). Their report concluded that 1) 'most children are disturbed to a greater or lesser extent by giving evidence in court' (para 2.10) and 2) because stress inhibits accurate memory recall, rather than eliciting truthful and productive accounts, the formality of the courtroom proceedings 'may actually have a deleterious effect on the fullness and accuracy of children's testimony' (para 2.17; A fuller review of the evidence regarding the factors affecting the quality of children's evidence appears below in Chapter 3 and Chapter 5). The Pigot committee noted that 'there are very many other practical, legal, and penal issues bearing upon child abuse cases which require careful re-examination in the light of modern conditions and research,' but 'the guarantee… that children need not appear in the Crown Court against their wishes is an important first step,' (para 7.14).

In 1991, Parliament permitted only the live evidence-in-chief to be replaced by video-recorded evidence in the form of what are known today as 'Achieving Best Evidence' (ABE) forensic interviews, named after the current Home Office guidance (Criminal Justice Act, 1991, s.54; Home Office, 2011). Years later, the Youth Justice and Criminal Evidence Act (1999) introduced several other 'special measures', notably including Section 28, which permitted video-recorded evidence to replace the cross-examination, although Section 28 was not implemented. However, from 2014 to 2016, the Section 28 special measure was piloted in Leeds, Liverpool, and Kingston Crown Courts in England, and this study constitutes the first independent and detailed evaluation of the Section 28 pilot study trials.

The Section 28 Pilot Study

The Section 28 pilot study aimed to address two of the critical—and unresolved—issues noted by Pigot that still plague the criminal justice system, both of which negatively affect the accuracy of children's testimony: systematic delays in the criminal proceedings and the risky nature of adversarial cross-examinations (Spencer & Lamb, 2012). The Pigot

Committee's report was considered in relation to current psychological research and Best Practice guidelines, culminating in the Section 28 pilot study. To begin, a Ground Rules Hearing (GRH) took place, involving the prosecutor, defence lawyer, judge, and if applicable, an intermediary (i.e., a court-appointed specialist responsible for facilitating communication between witnesses and lawyers; Criminal Practice Directions, 2015; Youth Justice and Criminal Evidence Act, 1999, s.29). The implementation of Ground Rules Hearings preceding the pre-recorded cross-examination provided the opportunity to address issues recommended by Pigot in 1989. In the GRHs, constructive discussions were expected to result in agreements about procedures that should reduce children's stress (e.g., familiarising children with the live link technology before questioning). Additionally, practitioners discussed how to adapt lawyers' questioning strategies to accommodate children's developmental capabilities and, thus, ensure that more reliable evidence was elicited. The children's cross-examinations were to be pre-recorded and these recordings later played as part of the children's evidence in any trials that occurred.

For the purposes of this research, Section 28 pilot study cases and comparable 'Non-Section 28' cases were identified and made available by Her Majesty's Courts and Tribunals Service (HMCTS) at the Ministry of Justice in London. Originally, 138 Non-Section 28 cases and 84 Section 28 cases were identified. Of these 222 cases, 44 Non-Section 28 cases and 43 Section 28 cases met all of the necessary criteria, meaning they involved children under the age of 16, testifying as alleged victims of sexual abuse, and whose case records contained complete transcripts of the ABE interview(s), corresponding trial logs, and recordings of the cross-examinations. The 44 NS28 cases came from Bradford (n = 6), Durham (n = 6), Hull (n = 7), Luton (n = 6), Newcastle (n = 12), Norwich (n = 5), and Oxford (n = 2), whilst the 43 S28 cases came from Kingston (n = 1), Leeds (n = 16), and Liverpool (n = 26). Cases took place between 2012 and 2016.

Children were categorised into two age groups for analyses: (1) 6- to 12-year-olds; (2) 13- to 15-year-olds. These categories were chosen for two reasons. Firstly, there were insufficient numbers of young children to create three groups, so the youngest children could not be distinguished from the pre-teens. This may be because, on account of their age, younger children struggled to provide accounts that met the evidentiary requirement for a criminal prosecution. Secondly, the older age group accords with the Sexual Offences Act (2003); 16 years is the age of sexual consent, but a person aged 16 or over can claim to be innocent of the charge of committing sexual offences with a child aged between 13 and 15

years if that person 'reasonably believed' that the child was aged 16 or over. However, this reasonable belief provision does not apply if the offence involved a child aged 12 years or younger.

Notably, the Section 28 and Non-Section 28 samples did not significantly differ with respect to any case facts (e.g., child's age, frequency or severity of offense, verdict). Trial recordings were transcribed and anonymised at the Ministry of Justice, and relevant portions of the trial transcripts, ABE interview transcripts, and trial logs were systematically coded according to the specific research questions investigated in each chapter of this dissertation. Hypotheses were made in relation to the relevant background research. Specifically, it was hypothesized that, overall, the implementation of Section 28 would better accommodate children, and subsequently elicit higher quality evidence.

The findings not only demonstrated the beneficial effects of implementing Section 28, but also suggested that English lawyers may be attempting to question children more appropriately than in some of the other common-law systems that have been studied. In this dissertation, the implications of implementing Section 28 are specifically explored, as well as the potential cultural shift occurring in English courtrooms, where practitioners may finally be addressing concerns expressed three decades ago. As the Pigot Committee stated, "radical changes are now required if the courts are to treat child witnesses in a humane and acceptable way" (Pigot, 1989, 2.14) and the results reported in this dissertation indicate that English lawyers may finally be treating child witnesses more humanely and acceptably in court.

Chapter 2: Pre-Recording Children's Testimony: Effects on Case Progression[1]

A study conducted by the National Society for the Prevention of Cruelty to Children (Plotnikoff & Woolfson, 2009) revealed severe systemic delays in the English criminal justice system that negatively affected young witnesses' health, welfare, and education. On average, children (n = 182) were forced to wait 13 months between forensic interview and cross-examination and 5.8 hours at the courthouse on the day of trial. As well, 51% of English children gave their evidence in the morning, when they had a higher likelihood of completing their testimony in one day, whereas the others began testimony later in the day, and so often needed to return to court the next day. Half of the children in the study reported

[1] Chapter 2 reproduces the text of an article published in the Criminal Law Review

experiencing stress-associated symptoms including depression, anxiety, self-harm, bed-wetting, and panic attacks whilst awaiting trial.

Problematically, research also shows that delay has adverse effects on the quality of children's memories (Brainerd et al., 1990; Lindsay, Johnson, & Kwon, 1991), thereby detrimentally affecting the quality of evidence elicited in court. Children forget more rapidly than adults (Brainerd et al., 1990) and are more likely to confuse events from similar sources (i.e., source monitoring; Lindsay et al., 1991). As a result, children become more susceptible to suggestion and more willing to guess in response to questions when their memories become hazier (Flin et al., 1992). Stress during questioning also inhibits children's abilities to recall details and communicate these details effectively during cross-examination (Hupbach & Dorskind, 2014; Lamb, Malloy, Hershkowitz, & La Rooy, 2015). Taken together, extended delays in combination with children's specific vulnerabilities (as detailed below) may result in legal proceedings likely to discredit truthful witnesses rather than uncover deceptive ones (Ceci & Bruck, 1995; Lamb et al., 2015).

The first study (Chapter 2) examined whether the implementation of Section 28 in the pilot study reduced delays between the forensic interviews and cross-examinations as well as on the day the children testified. We hypothesised that children in the Section 28 condition would experience shorter delays both awaiting trial and during questioning and would give their testimony earlier in the day, thereby making it more likely that they could complete their evidence in one day. This reduction in delay would hopefully elicit more reliable evidence from children, as well as resolve children's participation, and associated stress, in the legal system sooner.

Trial logs detailing the case proceedings from beginning to end were scoured for the relevant dates, times, and durations of all dependent variables. The findings clearly demonstrated that the implementation of Section 28 helped reduce the systematic delay both between the forensic interview and cross-examination, as well as during questioning on the day of cross-examination. Children in the Section 28 condition gave their evidence over 4 months earlier than children not accorded the same opportunity, thus reducing both the period of stress experienced as well as the potentiality for children's evidence to be contaminated or forgotten. Secondly, the implementation of Section 28 reduced both the length of the cross-examination, thereby reducing the number of unnecessary questions put to children, and the duration of breaks during questioning, thereby reducing the amount of time children were

under oath. Lastly, Section 28 children gave their evidence earlier in the morning, thus ensuring a higher likelihood that they completed their evidence on the same day and did not have to return to court.

Despite these positive findings, children would not reap the full benefits of the Section 28 special measures unless suitable precautions were discussed during GRHs and implemented during the cross-examinations, thereby ensuring that the children are questioned in developmentally appropriate ways (Plotnikoff & Woolfson, 2012). The next three chapters examine specific elements of the Section 28 trials and the effect that these special measures had on lawyers' questioning strategies.

Chapter 3: Examining children in English High Courts with and without implementation of reforms authorised in Section 28 of the Youth Justice and Criminal Evidence Act[2]

Many researchers have demonstrated the effects that question types can have on the accuracy and informativeness of children's responses (e.g., Andrews & Lamb, 2016; Ceci & Bruck, 1995; Klemfuss et al., 2014; Lamb et al., 2007). Although experts encourage the use of open-ended prompts (e.g., "Tell me what happened") because they elicit more accurate and informative responses (Lamb et al., 2007), field research demonstrates that lawyers use a preponderance of close-ended prompts (Andrews & Lamb, 2016; Klemfuss et al., 2014; Lamb & Fauchier, 2001), which are more likely to contaminate children's evidence (e.g., Andrews & Lamb, 2016; Lamb & Fauchier, 2001; Zajac, Gross, & Hayne, 2003). Suggestive questions are especially risky because they communicate the expected response, further reducing the credibility of children's testimony, and thus are strongly discouraged by experts (Bruck & Ceci, 1999; Home Office, 2011). Suggestive questions also elicit more self-contradictions than other closed-ended prompts (Andrews & Lamb, 2016; Lamb & Fauchier, 2001). Despite this, field research from other adversarial legal systems (e.g., Scotland, New Zealand, United States) consistently shows that both prosecutors and defence lawyers mostly ask option-posing questions (Andrews et al., 2016; Hanna et al., 2012; Klemfuss et al., 2014) and that defence lawyers ask fewer open-ended questions and more suggestive questions than prosecutors (Andrews & Lamb, 2016; Klemfuss et al., 2014; Stolzenberg & Lyon, 2014; Zajac & Cannan, 2009).

[2] Chapter 3 reproduces the text of an article in press at Applied Cognitive Psychology

Research demonstrates that children as young as 5 can be responsive (Marchant, 2013) and accurate (Jack, Leov, & Zajac, 2014), provided lawyers question them in developmentally appropriate ways. Children are highly responsive when questioned in court (Andrews & Lamb, 2016; Klemfuss et al., 2014; Zajac & Cannan, 2009), although younger children may be less productive in response to free-recall questions than older children (Goodman, Jones, & McLeod, 2017). Children are particularly vulnerable to risky types of questions because they forget more rapidly than adults (Brainerd et al., 1990), degrading the quality of their memories and making them more susceptible to suggestion (Bruck & Ceci, 1999; Flin et al., 1992) while older children may also have unique developmental vulnerabilities (i.e., a developmental reversal; Otgaar, Howe, Peters, Sauerland, & Raymaekers, 2013). Thus, suggestive questions should be avoided with children of all ages. It is unclear whether lawyers accommodate children's developmental capabilities when questioning them in court (Andrews & Lamb, 2016; Stolzenberg & Lyon, 2014; Zajac et al., 2003); therefore, research is still needed to identify the effect of children's age on lawyers' questioning strategies and, subsequently, on children's responses.

To help lawyers avoid problematic questioning strategies in court, as noted above, GRHs are held to encourage developmentally appropriate questioning and restrict the use of questions that hinder children's comprehension and communication (Plotnikoff & Woolfson, 2012). Discussions in GRHs may address the length and content of questioning, and the relevant Criminal Practice Directions specifically state that lawyers can be prevented from 'putting their case' (*Criminal Practice Directions*, 2015). Judges may request a written draft of proposed questions to approve before the subsequent courtroom questioning (*Criminal Practice Directions*, 2015). GRHs are considered good practice for all cases involving vulnerable witnesses (*Criminal Practice Directions*, 2013) and were made mandatory in the Section 28 pilot study.

The study described in Chapter 3 was the first to quantitatively examine the effects of Section 28 on lawyers' questioning strategies. Research demonstrates that close-ended questions, and in particular suggestive questions, elicit less accurate responses and increase the likelihood of contaminated evidence, so it was hypothesised that (1) lawyers in the Section 28 condition would ask more open-ended and fewer closed-ended questions than lawyers in the Non-Section 28 condition. Research also shows that younger children have less memory and communicable capabilities than older children, and may be more susceptible to suggestion, so it was further hypothesized that (2) Section 28 lawyers would

make more accommodations for children's ages by asking younger children fewer suggestive questions; and (3) older children would be more responsive than younger children, regardless of trial condition.

The results revealed that Section 28, and in particular the GRHs, positively affected the way children were questioned. Defence lawyers asked fewer suggestive questions in the Section 28 condition and asked more directive questions and fewer suggestive questions when a GRH occurred. However, the majority of questions posed by both prosecutors and defence lawyers were still option-posing, thereby restricting children's informativeness. As well, although younger children appeared to be more vulnerable, lawyers failed to accommodate for children's ages when questioning them.

Chapter 4: The Discussion of Ground Rules Issues in Pre-trial Preparation for Vulnerable Witnesses in English Crown Courts[3]

As noted earlier, Ground Rules Hearings were identified as good practice in all cases involving vulnerable witnesses in 2010 (*Criminal Procedure Rules*, 2010), and they were also made mandatory for cases involving intermediaries and cases implementing Section 28 (*Criminal Practice Directions*, 2015). The purpose of the GRHs was to anticipate potential problems and take steps to improve the quality of the testimony obtained from young and vulnerable witnesses.

To facilitate the conduct of GRHs, practical 'issues' were identified and compiled into the 'Ground Rules Hearing Checklist' to facilitate effective discussions during GRHs (Cooper, Backen, & Marchant, 2015). The list addresses a number of issues, and in particular, ways to reduce children's stress (e.g., judges and lawyers removing wigs and gowns, or meeting the child before questioning) and encourage developmentally appropriate questioning (e.g., the judge may request a draft of proposed questions; Cooper et al., 2015). The accommodations made during GRHs were expected to improve the quantity and quality of details elicited whilst also protecting children's welfare.

As mentioned earlier, the Youth Justice and Criminal Evidence Act introduced a number of special measures intended to improve the treatment of vulnerable witnesses in English courts. One such special measure, Section 29, introduced intermediaries — i.e., court-appointed specialists responsible for facilitating communication between witnesses and

[3] Chapter 4 reproduces the text of an article under review at Criminal Law Review

lawyers (Youth Justice and Criminal Evidence Act, 1999, s.29). Intermediaries have been found to facilitate communication prior to and at trial, increase access to justice by ensuring that cases with vulnerable witnesses reach trial, and perhaps save time and money by identifying prosecutable cases (Plotnikoff & Woolfson, 2007). Because one of their main roles is to foster better communication, intermediaries were taught to recommend 'ground rules' regarding how to appropriately question vulnerable witnesses, which would be discussed in 'GRHs' prior to trial (Cooper & Wurtzel, 2014).

The study described in Chapter 4 was the first to quantitatively investigate the contributions made by GRHs and intermediaries in both the Section 28 and Non-Section 28 pre-trial preparations. Both an increase in the use of issues noted in the 'GRH Checklist' and a decrease in the risky questions asked in court would elicit better quality testimony from child witnesses. It was hypothesised that more issues from the 'GRH Checklist' (Cooper et al., 2015) would be mentioned in cases involving GRHs. It was further hypothesised that the discussion of more Ground Rules issues would be associated with fewer risky questions being asked during the cross-examinations.

Trial logs containing court reporters' notes throughout the entirety of the proceedings were scoured for references to 22 issues on the Checklist (Cooper et al., 2015). Coders also characterised the types of questions (i.e., directive, option-posing, and suggestive prompts) asked during the trials. Analyses revealed that more Ground Rules issues were discussed and that questioning strategies were discussed for longer in Section 28 cases than in Non-Section 28 cases; the same differences were evident when cases involving intermediaries were compared with cases without intermediaries. Section 28 cases were also associated with fewer suggestive questions and more option-posing questions; however, intermediary presence and the number of Ground Rules issues were not significantly associated with the proportion of questions that were risky. The age of the child was positively associated with the number of Ground Rules issues mentioned in pre-trial preparation.

These results suggested that the Section 28 special measures and the use of intermediaries improved pre-trial preparation, although further improvement is needed to make certain that children are indeed questioned appropriately. Even in these cases, fewer than a half and sometimes fewer than a quarter of the defined Ground Rules issues were discussed in pre-trial preparation, demonstrating the need for more thorough pre-trial preparation to ensure that vulnerable witnesses are sufficiently accommodated.

Chapter 5: Does Implementation of Reforms Authorised in Section 28 of the Youth Justice and Criminal Evidence Act Affect the Complexity of the Questions Asked of Young Alleged Victims in Court?[4]

As mentioned earlier, children are frequently asked close-ended and suggestive questions (Andrews & Lamb, 2016; Zajac, Westera, & Kaladelfos, 2017) even though they elicit less accurate and informative responses and are more likely to elicit self-contradictions (Andrews & Lamb, 2016). In addition, children are often asked questions that exceed their developmental capabilities (Andrews & Lamb, 2017; Hanna et al., 2012; Zajac et al., 2003), further reducing their ability to provide accurate and complete witness accounts. Particularly difficult concepts for children to grasp include grammatically and linguistically complex sentences (Hanna, Davies, Henderson, Crothers, & Rotherham, 2010), the terms 'before' and 'after' (Lamb et al., 2015; Olds, 1968), references to temporal (e.g., duration, frequency) and numeric (e.g., height, distance) attributes (Lyon & Saywitz, 2006; Olds, 1968; Orbach & Lamb, 2007; Walker, 1999), complex negation (Olds, 1968; Walker, 1999), 'why' questions inviting speculation about other's internal processes (Perry et al., 1995; Walker, 1999), and passive voice (Slobin, 1966; Walker, 1999). Concerningly, children may not realise that they don't understand a question (Perry et al., 1995; Walker, 1999), and if they do realise, they are often reluctant to seek clarification (Walker, 1999; Zajac et al., 2003).

Despite this, only a handful of studies have examined the complexity of lawyers' questions. Hanna et al. (2012) found that defence lawyers used more double negatives and questions with 2 or more subordinate clauses than prosecutors, while prosecutors used more questions containing passive voice. Other studies found that defence lawyers asked more complex questions than prosecutors (Andrews & Lamb, 2017; Zajac et al., 2003). And while several studies found that defence lawyers did not make accommodations for children's age (Andrews & Lamb, 2017; Hanna et al., 2012; Zajac et al., 2003), Zajac et al. (2017) found that younger children were asked less complex questions by defence lawyers. Thus, additional research is needed not only to clarify what specific complex elements make lawyers' questions difficult for children, but also to further determine whether lawyers do adapt questioning to match children's capabilities.

The study reported in Chapter 5 was the first to examine the complexity of the questions asked by lawyers in the Section 28 cases. Because children have fewer linguistic

[4] Chapter 5 reproduces the text of an article in press at Applied Cognitive Psychology

and grammatical capabilities than adults, developmentally appropriate questions would elicit the most reliable testimony. Research also demonstrates that children seldom seek clarification, and oftentimes fail to recognise incomprehension, further emphasizing the necessity to adapt questioning to children's developmental ability. It was hypothesised that prosecutors would ask less complex questions than defence lawyers, Section 28 lawyers would ask less complex questions than Non-Section 28 lawyers, particularly to younger children, and that suggestive questions would be more complex than directive or option-posing prompts.

Complexity was measured using 8 variables: word count, clause count, false starts, multiple negatives, 'why' questions, temporal and numeric attributes, 'before/after', and passive voice. The study showed that prosecutors asked questions containing more words, clauses, and passive voice than defence lawyers, while defence lawyers asked more 'why' questions. Section 28 defence lawyers asked questions containing fewer words, clauses, false starts, multiple negatives, and temporal and numeric attributes than Non-Section 28 defence lawyers. Regardless of condition, lawyers asked younger children questions with fewer words, clauses, uses of 'before/after', and passive voice.

The implementation of Section 28 thus reduced the complexity of the lawyers' questions and showed that that English lawyers may be altering question complexity to match children's capabilities. The results also shed a much-needed light on what makes specific types of questions complex. It is particularly promising that lawyers in both Section 28 and Non-Section 28 conditions asked younger children less complex questions, again highlighting the significant and effective training and educational outreach for English legal practitioners ("The Advocate's Gateway, 2016). Judges, intermediaries, and lawyers alike appear to be making significant strides in adapting question complexity to match children's cognitive abilities, and if these efforts continue, children may finally be enabled to give their best evidence in trial.

Chapter 2: Pre-Recording Children's Testimony: Effects on Case Progression[1]

> *"The waiting is so hard because you don't feel secure—I think because the courts have made you feel like it is never going to be over and done with…they just don't understand the pain that you go through. It's really hard…"*
>
> *- (Child witness, 14 years)*[2]

Currently, over 90,000 children in the United Kingdom have been removed from homes in which they were at risk of suffering from physical, emotional, or sexual abuse and neglect.[3] Many of those children have been or will be forensically interviewed by police officers in "Achieving Best Evidence" interviews,[4] recordings of which routinely function as the evidence-in-chief if criminal charges result and the alleged victim is called as a witness.[5] However, vulnerable witnesses are still required to return to court months or years after their initial reports to be cross-examined, even when recordings of their interviews are admitted as evidence.[6] There is considerable evidence that child witnesses are adversely affected mentally, physically, and psychologically by these delays[7] and as a result, many efforts have been made to implement reforms that would reduce the length of delay. One set of reforms, suggested by the Pigot Committee in 1989, involved pre-recording children's direct testimony (hence the admissibility of ABE interviews) and cross-examination, so that their involvement could be completed before the actual trial.[8] Although the first suggested reform

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[1] Because this paper was published in the Criminal Law Review, the footnotes are in accordance with the journal's formatting requirements. Footnote references are included in the final reference list.
[2] C. Eastwood and W. Patton, *The experiences of child complainants of sexual abuse in the criminal justice system* (Unpublished manuscript, 2002), p. 3.
[3] "Statistics" (National Society for Prevention of Cruelty to Children, 2015). *NSPCC, https://www.nspcc.org.uk/preventing-abuse/child-protection-system/* [Accessed March 31, 2015]
[4] Home Office, *Achieving the best evidence in criminal proceedings: Guidance on interviewing victims and witnesses, and guidance on using special measures* (Home Office, 2011)
[5] Youth Justice and Criminal Evidence Act 1999 (YJCEA 1999) s.27
[6] J. Spencer, "Evidence and Cross-Examination", In *Children's Testimony*, 2nd edn, edited by D. La Rooy, L. C. Malloy, C. Katz and M. E. Lamb (Chichester: Wiley, 2011), pp. 285-307); *Children and cross-examination: Time to change the rules?* edited by J. R. Spencer and M.E. Lamb (Oxford and Portland, Oregon: Hart Publishing, 2012).
[7] C. Eastwood and W. Patton, *The experiences of child complainants of sexual abuse in the criminal justice system* (2002); G. S. Goodman, E. P. Taub, D. P. Jones, P. England, L. K. Port, L. Rudy, ... and G. B. Melton, "Testifying in criminal court: Emotional effects on child sexual assault victims" (Monographs of the Society for Research in Child Development, 1992); J. Plotnikoff and R. Woolfson, "Measuring up?" In *Evaluating Implementation of*. (2009); *Children and cross-examination: Time to change the rules* (2012)
[8] T. Pigot, *Report of the advisory group on video-recorded evidence* (London: Home Office, 1989)

was successfully implemented in 1992,[9] the second was only embraced recently.[10] This article describes a study designed to evaluate whether or not this reform has had the desired effects on young witnesses.

Section 28 of the Youth Justice and Criminal Evidence Act

In 1989, an advisory group often referred to as "the Pigot Committee" was asked to assess the desirability of 'special measures' for child witnesses, such as allowing video-recorded evidence to be admitted as evidence in criminal trials. The committee recommended that "radical changes are now required if the courts are to treat children in a humane and acceptable way"[11] and thus proposed that child witnesses be offered the right "to be examined and cross-examined at an out-of-court hearing which would be itself video-recorded and later shown to the trial jury".[12]

However, in 1990, the government adopted the "half-Pigot" scheme, which permitted the pre-recording of the evidence-in-chief but not the cross-examination. Forensic interviews were to be conducted in accordance with detailed guidance laid out in the Memorandum of Good Practice for Video-recorded Interviews,[13] which was later replaced by the Achieving Best Evidence (ABE) Guidance.[14] These video-recordings were to be played as the evidence-in-chief if trials ensued, but children were still required to appear at trial to be cross-examined. Parliament later authorised pre-trial cross-examination as a special measure in Section 28 of the Youth Justice and Criminal Evidence Act in 1999, but implementation was suspended due to concerns regarding the required procedural changes, the available technology, the cost, the rights of the defendant, and the possible need to recall child witnesses when further information became available.[15] After a consultation in 2007 revealed widespread support for the implementation of Section 28, the special measure was finally pilot-tested in Crown Courts in Liverpool, Leeds, and Kingston in 2015-2016.[16]

[9] Home Office and Department of Health, *Memorandum of Good Practice on Video Recorded Interviews for Child Witnesses for Criminal Proceedings* (The Stationery Office, 1992); (YJCEA 1999) s.27
[10] Ministry of Justice, *Transforming the CJS: A strategy and action plan to reform the criminal justice system* (Ministry of Justice, 2013)
[11] T. Pigot, *Report of the advisory group on video-recorded evidence*, 2.14
[12] T. Pigot, *Report of the advisory group on video-recorded evidence*, 2.25
[13] Home Office and Department of Health, *Memorandum of Good Practice on Video Recorded Interviews for Child Witnesses for Criminal Proceedings*
[14] Home Office, *Achieving the best evidence in criminal proceedings: Guidance on interviewing victims and witnesses, and guidance on using special measures*
[15] J. Spencer, "Evidence and Cross-Examination" (2011); *Children and cross-examination: Time to change the rules* (2012).
[16] Ministry of Justice, *Transforming the CJS: A strategy and action plan to reform the criminal justice system*

The Section 28 pilot study focused on two changes that might help combat these adverse effects. Firstly, Ground Rules Hearings (GRHs) were held prior to the pre-recorded cross-examination to establish rules for how vulnerable witnesses in the case would be questioned.[17] At GRHs, judges admonish advocates to ask straightforward, developmentally appropriate questions not intended to bully or intimidate witnesses. Specifically, "The ground rules hearings should cover, amongst other matters, the general care of the witness, if, when and where the witness is to be shown their video interview, when, where and how the parties (and the judge if identified) intend to introduce themselves to the witness, the length of questioning and frequency of breaks and the nature of the questions to be asked".[18] Secondly, after all parties have had sufficient time to prepare in accordance with the Ground Rules, the pre-recorded cross-examination takes place at the courthouse under the supervision of the same judge who presided at the Ground Rules Hearing.[19] Together, these changes are designed not only to improve the quality of evidence, but also to minimise the psychological burden on child witnesses.[20]

Existing Delays in the System[21]

A study conducted for the National Society for the Prevention of Cruelty to Children in 2009 interviewed 182 child witnesses (138 victims) about the impact of involvement as witnesses on their health, welfare, and education. The child informants were recruited from 30 Crown Courts, 26 magistrates' courts, and 23 youth courts from 67 locations in England, Wales, and Northern Ireland. The results highlighted problematic delays in 3 crucial areas: (1) between reporting the offense (forensic interview) and trial, (2) while the child was testifying at court, and (3) with respect to the time of day they were called to give evidence. For Crown Court cases, the average delay between reporting offenses (i.e., forensic interview) and trial was 13 months, with delays ranging from 6 to 67 months. A third of the trials (59 children) were rescheduled one or more times. The average waiting time at court was 5.8 hours, with delays ranging from 20 minutes to 31 hours. The waiting time at court for vulnerable victims, in particular, was no shorter than for non-victim witnesses despite

[17] Ministry of Justice, *Transforming the CJS: A strategy and action plan to reform the criminal justice system*; Criminal Practice Directions 2013 (CPD 2013)
[18] *R v Cokesix Lubemba, R v JP* [2014] EWCA CRIM 2064
[19] Ministry of Justice, *Transforming the CJS: A strategy and action plan to reform the criminal justice system*; CPD 2013
[20] J. Plotnikoff and R. Woolfson, "Worth waiting for: The benefits of section 28 pre-trial cross-examination," (Archbold Review, 2016)
[21] J. Plotnikoff and R. Woolfson, "Measuring up?"

court instructions to the contrary. Lastly, only 51 per cent of children in England and Wales and 8 per cent of children in Northern Ireland gave their evidence in the morning, "while [children] are fresh."[22]

Effects of Delay

Delays may have adverse effects on children and their testimony in a number of ways. Firstly, like adults, children do not encode and store all details about experienced events in long term memory.[23] In addition, children forget more rapidly than adults do[24] and are more likely to confuse memories from similar sources (i.e., source monitoring).[25] This means that child witnesses become less informative sources of information over time, with the process of forgetting ensuring that they not only remember less but are also more susceptible to suggestion and source monitoring confusion due to hazier memories.[26] Children are also more willing to guess when memory has deteriorated.[27] Together, these factors make it easier for questioners (e.g., in cross-examination) to discredit witnesses by making them appear inconsistent or suggestible as events recede in memory.[28]

Secondly, the stress resulting from delay is also problematic because it negatively affects the child's welfare while awaiting trial[29]. Half of the children in Plotnikoff and Woolfson's (2009) study exhibited symptoms of stress, such as depression, anxiety, self-

[22] ibid, p. 163
[23] D. Berntsen, *Involuntary autobiographical memories: An introduction to the unbidden past* (Cambridge, England: Cambridge University Press, 2009); M. Erdelyi, "The ups and downs of memory" (American Psychologist, 2010); M. L. Howe, *The nature of early memory: An adaptive theory of the genesis and development of memory* (Oxford, England, Oxford University Press, 2011); M. E. Lamb, L. C. Malloy, I. Hershkowitz, and D. La Rooy, "Children and the law", In *Handbook of child psychology and developmental science* (7th ed.), Volume 3, *Social, emotional and personality development.* edited by R. M. Lerner and M. E. Lamb (Hoboken, NJ: Wiley, 2015).
[24] C. J. Brainerd, V. F. Reyna, M. L. Howe, and J. Kingma, "The development of forgetting and reminiscence" (Monographs of the Society for Research in Child Development, 1990); R. Flin, J. Boon, A. Knox, and R. Bull, "The effect of a five-month delay on children's and adults' eyewitness memory" (British Journal of Psychology, 1992)
[25] S. Lindsay, M. K. Johnson, and P. Kwon, "Developmental changes in memory source monitoring" (Journal of Experimental Child Psychology, 1991).
[26] R. Flin, J. Boon, A. Knox, and R. Bull, "The effect of a five-month delay on children's and adults' eyewitness memory"; M. E. Lamb, L. C. Malloy, I. Hershkowitz, and D. La Rooy, "Children and the law", 2015.
[27] A.H. Waterman and M. Blades, "The effect of delay and individual differences on children's tendency to guess" (Developmental Psychology, 2013).
[28] M. Bruck and S. J. Ceci, "The suggestibility of children's memory" (Annual Review of Psychology, 1999); R. Flin, J. Boon, A. Knox, and R. Bull, "The effect of a five-month delay on children's and adults' eyewitness memory; M. E. Lamb, L. C. Malloy, I. Hershkowitz, and D. La Rooy, "Children and the law,"; *Children and cross-examination: Time to change the rules* (2012)
[29] M. L. Howe, *The nature of early memory,* 2011; A. Hupbach and J. M. Dorskind, "Stress selectively affects the reactivated components of a declarative memory" (Behavioral Neuroscience, 2014); J. Plotnikoff and R. Woolfson, "Measuring up?"; H. Selye, *Stress in health and disease.* (Boston: Butterworth-Heinemann, 2013); *Children and cross-examination: Time to change the rules* (2012)

harm, bedwetting, and panic attacks, while awaiting trial. As Henderson observed, "There is an irony to the fact that the longest delays are suffered by those least able to withstand them".[30]

Thirdly, stressful delays adversely affect children's cognitive capabilities, inhibiting their ability to recall details and to communicate these details while they are testifying.[31] Because children devote some of their cognitive resources to coping with their emotions, stress interferes with attention and memory retrieval.[32]

Additional Problems with Court Procedure

Once children are called to court for cross-examination, the process can still be problematic. Further delays commonly result from technical difficulties, attorney interruptions, and poor scheduling (e.g., the child arrives at court before lunch and must wait until after lunch to give evidence). For example, in one study, 40% of child witnesses reported problems with either the video-playing procedure or the 'live links.'[33]

Further, giving evidence at non-optimal times of day may diminish children's alertness, therefore affecting the quality of evidence elicited.[34] Thus, if pre-recording hearings were scheduled for mornings, children should be more alert, and thus able to provide their best evidence. Additionally, scheduling a child's evidence in the morning increases the likelihood that the child's involvement will be completed in one day, without him/her having to return to court.

The Present Study

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[30] *Children and cross-examination: Time to change the rules* (2012) p. 45

[31] A. Hupbach and J. M. Dorskind, "Stress selectively affects the reactivated components of a declarative memory; M. E. Lamb, L. C. Malloy, I. Hershkowitz, and D. La Rooy, "Children and the law,"; R. Nathanson and K. J. Saywitz, "The effects of the courtroom context on children's memory and anxiety" (The Journal of Psychiatry and Law, 2003); J. A. Quas and H. C. Lench, "Arousal at encoding, arousal at retrieval, interviewer support, and children's memory for a mild stressor" (Applied Cognitive Psychology, 2007); T. Smeets, H. Otgaar, I. Candel, and O. T. Wolf, "True or false? Memory is differentially affected by stress-induced cortisol elevations and sympathetic activity at consolidation and retrieval" (Psychoneuroendocrinology, 2008).

[32] E. F. Maldonado, F. J. Fernandez, M. V. Trianes, K. Wesnes, O. Petrini, A. Zangara, ... and L. Ambrosetti, "Cognitive performance and morning levels of salivary cortisol and [alpha]-amylase in children reporting high vs. low daily stress perception" (The Spanish journal of psychology, 2008); J. A. Quas, A. Bauer, and W. T. Boyce, "Physiological reactivity, social support, and memory in early childhood" (Child Development, 2004).

[33] J. Plotnikoff and R. Woolfson, "Measuring up?"

[34] H. Bearpark and P. Michie, "Changes in morningness-eveningness scores during adolescence and their relationship to sleep/wake disturbances" (Chronobiologia, 1987); M. A. Carskadon, C. Vieira, and C. Acebo, "Association between puberty and delayed phase preference" (Sleep, 1993); S. Kim, G. L. Dueker, L. Hasher, and D. Goldstein, "Children's time of day preference: age, gender and ethnic differences" (Personality and Individual Differences, 2002).

Accordingly, we sought to examine whether implementation of the Section 28 procedures reduced unnecessary delays, both between first report and cross-examination, as well as on the day that they testified. It was hypothesised that children in the Section 28 pilot cases would be cross-examined (and thus end their involvement in the court process) after shorter delays and be examined in court for shorter periods of time than children who were not able to benefit from the Section 28 special measure. We also expected that they would give evidence significantly earlier in the day.

Methods

Sample

The Ministry of Justice HM Courts and Tribunals Service identified 138 Non-Section 28 (hereinafter NS28) cases and 84 Section 28 (hereinafter S28) cases that took place between 2012 and 2016. Attempts were made to obtain records for all S28 cases that had taken place by the time of the study in the three courts that were participating in the pilot study (Leeds, Liverpool, and Kingston). Cases for the NS28 group came from Bradford, Durham, Hull, Luton, Newcastle, Norwich, and Oxford. Of the 222 cases, 52 NS28 cases and 46 S28 cases involved children aged 15 and under testifying as alleged victims of sexual assault. Recordings of the relevant court proceedings were transcribed and anonymised. Transcripts of the Achieving Best Evidence (ABE) interviews, which served as evidence-in-chief, and supplementary trial logs, which provided detailed information regarding the entire trial process, were collected and were scoured for relevant details as well. The S28 and NS28 cases were matched with respect to gender of child, age at ABE, age at trial, frequency of abuse, severity of abuse, child-suspect relationship, and verdict.

Coding

A rater extracted and recorded details about 1) the alleged victim's age at the time of the ABE interview, 2) age at trial or S28 hearing, 3) gender, 4) relationship to the defendant, 5) verdict, 6) frequency of alleged abuse and 7) severity of alleged abuse from the ABE interviews and trial logs. The length of delay was calculated using trial logs in terms of the number of days between the ABE interview and cross-examination dates. If there were multiple ABE interviews, the date of the first ABE interview was used to calculate delay. If there was a retrial, the date of the cross-examination in the second trial was used. The time of day at which the child began testifying was coded in a 24-hour format and the number of days on which the child gave evidence was determined.

The duration of total courtroom participation was calculated in minutes. In addition to measuring the total amount of time involved, which included time spent watching the ABE interview, the coder calculated the amounts of time involved in each of the direct, cross, redirect, and recross-examination phases of the trial, as well as the length of all breaks and interruptions. Time spent viewing the ABE interview was not included in the direct examination time. In-court direct examination occurred in 27 cases (the other 71 children watched the ABE interview without further substantive questioning). Cross-examinations took place in all of the cases (n = 98), redirect examinations occurred in 49 cases, and re-cross-examinations took place in only 3 cases. The total amount of time associated with breaks was included when calculating the duration of courtroom participation. Nearly half (n = 43) of the cases involved breaks that affected the children.

Results

Preliminary Analyses

Only 4 children returned to court for a second day (all in the NS28 condition) so this variable was not considered further. Similarly, because all 3 recross-examinations took place in NS28 cases, no further analysis of these data was attempted. The average length of the ABE interviews in the two conditions (NS28 = 49 mins, *SD* = 23; S28 = 47 mins, *SD* = 18) did not differ significantly.[35]

Delay between ABE interview and Cross Examination

There were no significant effects of gender, age at trial, frequency of abuse, severity of abuse, or relationship to defendant on the delay between ABE interview and cross-examination. However, preliminary analyses found that longer delays were significantly more likely to result in not guilty verdicts.[36] It was also found that there were significantly longer delays for younger children.[37] As a result, verdict and age at ABE interview were included in some of the analyses reported below.

Total Length of Court Involvement

The child's gender, age at ABE, age at trial, verdict, severity of abuse, and relationship to defendant were not related to any of the trial testimony duration measures.

[35] $F(1, 92) = .235$, $p = .629$
[36] $c^2(1, N = 95) = 4.264$, $p = .039$.
[37] $F(10, 93) = 3.821$, $p < .001$

However, the frequency of abuse was significantly correlated with the total duration of court involvement[38] and the duration of cross examination.[39] Therefore, frequency of abuse was included in analyses regarding the durations of court involvement and cross-examination.

Time of Day Children Testified

The child's gender, age at ABE, age at trial, verdict, frequency of abuse, severity of abuse, and relationship to defendant were not associated with the time of day children testified.

Delay between ABE Interview and Cross-Examination

Children in the NS28 condition waited significantly longer (M = 423 days, SD = 297) than children in the S28 condition (M = 291 days, SD = 189) (See Table 1).[40] The same effect was evident when four outliers were excluded (2 NS28 with delays of 1045 days or greater, and 2 S28 cases with delays of 958 days or greater).[41]

Length of Court Participation[42]

The duration of total court participation,[43] cross-examination time,[44] and break time[45] were significantly shorter for S28 cases, while direct examination time,[46] and redirect examination time[47] were non-significantly shorter for S28 cases (See Table 1).

When outliers were excluded from the analyses, the duration of total court participation,[48] the length of cross-examination,[49] the length of breaks,[50] and the duration of

[38] $F(1, 90) = 4.201$, $p = .043$
[39] $F(1, 90) = 3.999$, $p = .049$.
[40] A one-way univariate analysis of variance assessing the effects of trial condition (S28, NS28) on delay (in days) yielded a significant effect, $F(1, 93) = 8.55$, $p = .005$.
[41] $F(1, 89) = 11.584$, $p = .001$
[42] Because the sample size was insufficient (i.e., only 14 cases involved a direct examination, cross-examination, redirect examination, and a break), a one-way multivariate analysis of variance (MANOVA) could not be performed. Instead, one-way (group: S28, NS28) univariate analyses of variance (ANOVAs) examined the (1) duration of total court participation, (2) length of direct examination, (3) length of cross-examination, (4) length of redirect examination, and (5) length of breaks.
[43] $F(1, 97) = 28.915$, $p < .001$
[44] $F(1, 97) = 19.206$, $p < .001$
[45] $F(1, 42) = 6.935$, $p = .012$
[46] $F(1, 26) = .756$, $p = .393$
[47] $F(1, 48) = .478$, $p = .493$
[48] $F(1, 93) = 41.662$, $p < .001$
[49] $F(1, 96) = 25.206$, $p < .001$
[50] $F(1, 41) = 6.438$, $p = .015$

redirect examination[51] were significantly shorter for S28 cases. However, there was no significant difference between the length of the S28 and NS28 direct examinations.[52]

Table 1

Delay Durations

Duration Type	Non-Section 28			Section 28		
	M	*SD*	*N*	*M*	*SD*	*N*
ABE to Trial **	423 days	297 days	50	291 days	189 days	45
Total Court participation ***	79 min	72 min	52	21 min	14 min	46
Direct Examination	8.5 min	13 min	24	2 min	1.3 min	3
Cross Examination ***	30 min	17 min	52	17 min	12 min	46
Redirect Examination	4 min	3 min	35	3.5 min	5 min	14
Breaks ***	56 min	44 min	37	6 min	7 min	6
Time of Day***	12.31 pm	97 min	52	10.52 am	98 min	46

*$p < .05$, **$p < .01$, ***$p < .001$

Time of Day[53]

On average, children in the NS28 condition began testifying at 12.31 (*SD* = 97 minutes) whereas children in the S28 condition began testifying at 10.52 (*SD* = 98 minutes)[54] (See Table 1). When outliers were excluded (6 children in the S28 condition who began testifying at or after 12.57 pm), the difference was still significant.[55]

Miscellaneous Analyses

Effects of Age at ABE Interview on Duration between ABE interview and Cross-Examination[56]

[51] $F(1, 45) = 6.956$, p = .012
[52] $F(1, 22) = .931$, $p = .346$
[53] A one-way univariate ANOVA was run to assess the effect of trial condition on the time of day (24 hour scale) children's testimony.
[54] $F(1, 97) = 24.972$, $p < .001$
[55] $F(1, 91) = 67.743$, $p < .001$
[56] A one-way univariate analysis of variance was run to compare the effect of age at the time of ABE interview (4-15 years old) on the length of delay from ABE interview to cross-examination (in days).

There was a significant association between age at ABE interview and the length of time between the ABE interview and cross-examination,[57] indicating that younger children experienced longer delays, regardless of trial condition (S28 or NS28).[58] When outliers were excluded, the association between age at ABE interview and the length of delay was still significant.[59]

Association between Delay and Verdict[60]

On average, trials in which defendants were found not guilty began 423 (*SD* = 321) days after the forensic interview, whereas trials that led to convictions began 315 (*SD* = 192) days after the forensic interview. When the cases with excessively long durations were excluded, the effect of delay was no longer significant, although not guilty verdicts came after longer delays (*M* = 353 days, *SD* = 167) than guilty verdicts (*M* = 302 days, *SD* = 166).

Associations Between Frequency of Abuse and Duration of Children's Court Participation[61]

Children in the NS28 condition had significantly longer periods of court involvement when they alleged multiple (*M* = 98 min, *SD* = 80) as opposed to single (*M* = 49 min, *SD* = 46) incidents of abuse,[62] but there were not such differences for children in the S28 condition[63] (See Table 2). In addition, children in the NS28 condition had significantly longer periods of cross examination when they alleged multiple (*M* = 35 min, *SD* = 18) as opposed to single (*M* = 22 min, *SD* = 9) incidents of abuse[64] but again there were not such differences for children in the S28 condition[65] (See Table 2).

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[57] $F(10, 93) = 3.706$, $p < .001$
[58] $F(8, 93) = .456$, $p = .883$
[59] $F(1, 9) = 2.752$, $p = .008$
[60] A binary logistic regression showed that the length of delay between the ABE interview and completion of the children's testimony significantly predicted verdict (guilty, not guilty), $c^2(1, N = 95) = 4.264$, $p = .039$.
[61] A two-way [frequency of abuse (single, multiple) and trial condition (S28, NS28)] between-subjects MANOVA revealed a significant multivariate main effect for condition, Wilks' $\lambda = .788$, $F(2, 86) = 11.599$, $p < .001$, and a significant interaction between condition and frequency, Wilks' $\lambda = .928$, $F(2, 86) = 3.36$, $p = .040$, on the total duration of children's participation in court and the duration of children's cross-examination. Two-way ANOVAs explored effects on each of the dependent variables with outliers excluded. There was a main effect of frequency of abuse, $F(1, 90) = 4.201$, $p = .030$, and an interaction between frequency and trial condition, $F(1, 90) = 4.895$, $p = .030$, on the total duration of children's participation in court. The effect of frequency on the length of cross-examination was not significant, $F(1, 89) = 2.906$, $p = .092$, but the interaction between frequency and trial condition remained significant, $F(1, 89) = 8.466$, $p = .005$.
[62] $t(50) = -2.474$, $p = .017$
[63] $t(37) = .398$, $p = .693$
[64] $t(50) = -2.973$, $p = .005$
[65] $t(37) = .247$, $p = .807$

Table 2

Total and Cross-Examination Durations Associated with Frequency of Alleged Abuse

Frequency	Condition	Total Testimony Duration			Cross Examination Duration		
		M	*SD*	*N*	*M*	*SD*	*N*
Single	Non-S.28	49 min	46 min	20	22 min	9 min	20
	Section 28	22 min	15 min	18	18 min	11 min	18
	Total	36 min	37 min	38	20 min	12 min	38
Multiple	Non-S.28	98 min*	80 min	32	35 min**	18 min	32
	Section 28	20 min	14 min	21	17 min	13 min	21
	Total	67 min*	73 min	53	24 min*	16 min	53

*$p < .05$, **$p < .01$, ***$p < .001$

Discussion

These results clearly demonstrate that the implementation of the Section 28 special measure significantly improved legal proceedings for trials involving vulnerable witnesses in three important ways. Firstly, children in the S28 condition gave their evidence over 4 months earlier than those not accorded the opportunity to provide a recorded cross-examination, demonstrating that pre-recording reduced the length of time that children waited to conclude their involvement in legal proceedings. Secondly, children in the S28 condition spent nearly an hour less time in the courthouse, indicating that the Section 28 procedures and Ground Rules Hearings significantly reduced both the length of questioning and the number of unnecessary delays during the proceedings. Thirdly, children in the S28 condition began giving evidence an hour and 13 minutes earlier in the day than children in the NS28 condition.

Children in the S28 condition gave their evidence 132 days earlier than similarly placed children in the NS28 condition. The reduced delays may be beneficial not only for the children but for the legal system as a whole. Children's involvement –and the accompanying stress associated with waiting—was resolved an average of 4 months earlier, allowing their memories to be more detailed and more reliable at the time that they completed their testimony.[66] Because age is a major determinant of the accuracy and richness of

[66] M. L. Howe, *The nature of early memory*, 2011; W. Schneider and M. Pressley, *Memory development between two and twenty*, 2013.

autobiographical episodic memories,[67] allowing children to give their evidence as early as possible reduces the risk of forgetting or contamination. Even worse, longer delays between the first formal (ABE) interview and trial increase the risk of further forgetting and contamination, resulting in uncertain and inconsistent performance during cross examinations which may adversely affect the child's credibility.[68] Thus, as the Pigot Commission reasoned when they recommended pre-recording the cross-examinations of children,[69] reducing delay should improve the quality of evidence obtained, thereby increasing the likelihood that just verdicts will be reached.

Unexpectedly, younger children were significantly more likely to experience longer delays than older children, regardless of condition. Because younger children forget their experiences more quickly than older children,[70] extended delays are especially problematic for them. Research should further investigate the cause of these delays and identify ways in which lengthy delays could be reduced. It may be that younger children are accorded more special measures (e.g., intermediary assistance) and that coordinating and scheduling these additional provisions inadvertently extends pre-trial delays.[71]

Length of delay was also significantly associated with verdict, with not guilty verdicts being more common when delays were longer. This could reflect the predicted declines in the quality of children's evidence as their memories fade, but the finding underlines the need to reduce delays wherever possible, so that courts can consider evidence of the highest quality. In this context, the reductions in delay evident in the S28 cases suggests that extension of the pilot program nationwide could have positive effects on the still excessive delays we identified.

Children in the S28 condition also spent less time in the courthouses than children in the comparison group. On average, children in the S28 condition spent 57 minutes less in total, 13 minutes less being cross examined, and 50 minutes less on breaks. Unfortunately, it is not possible to determine whether these reductions were attributable to the fact that the

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[67] R. Flin, J. Boon, A. Knox, and R. Bull, "The effect of a five-month delay on children's and adults' eyewitness memory; W. Schneider and M. Pressley, *Memory development between two and twenty*, 2013.
[68] M. Bruck and S. J. Ceci, "The suggestibility of children's memory"; M. E. Lamb, L. C. Malloy, I. Hershkowitz, and D. La Rooy, "Children and the law"
[69] T. Pigot, *Report of the advisory group on video-recorded evidence*; Spencer, "Evidence and Cross-Examination" (2011); *Children and cross-examination: Time to change the rules* (2012).
[70] R. Flin, J. Boon, A. Knox, and R. Bull, "The effect of a five-month delay on children's and adults' eyewitness memory; M. L. Howe, *The nature of early memory*, 2011; W. Schneider and M. Pressley, *Memory development between two and twenty*, 2013.
[71] J. Plotnikoff and R. Woolfson, "Measuring up?"

children were being interviewed after shorter delays, and were thus better able to remember their experiences, or to the fact that they benefitted from the Ground Rules Hearings conducted in advance of the testimonial hearings. Trials involving children in the comparison group may not have involved Ground Rules Hearings, at which the judges, sometimes informed by professional intermediaries, had the opportunity to specify which sorts of questions could be asked and which challenges to the children's credibility were permissible. Changes in the lengths of children's participation, and reductions in the amount of time they spent waiting to be questioned, are likely to have made the experience less stressful for them. Reductions in stress may allow them to concentrate better on the task at hand and provide more complete and coherent testimonial accounts.[72]

Children in the S28 condition completed their courthouse participation more quickly than children in the comparison group, but the number of reported incidents of abuse was not associated with differences in the length of court participation, whereas this was the case for children in the comparison group. Although it seems reasonable to interview children longer about multiple than about unique incidents, this can have adverse effects on the accuracy and reliability of children's testimony because there are developmental differences in the ability to distinguish between components of discrete incidents, and these difficulties are likely to be further enhanced when there are extended delays,[73] as was the case for many of the children in this study. This raises the possibility that children in the NS28 group were questioned longer in an effort to elicit inconsistent or confused responses.

Children were also called to testify significantly earlier in the day in the S28 condition (10:52) than in the N28 condition (12:31). Practitioners have long argued that children should testify or be interviewed in the morning, both because they are likely to be freshest and most attentive at that time, and because it increases the likelihood that their involvement will be completed on one day, without the need for further trips to court.[74] In

[72] A. Hupbach and J. M. Dorskind, "Stress selectively affects the reactivated components of a declarative memory"; M. E. Lamb, L. C. Malloy, I. Hershkowitz, and D. La Rooy, "Children and the law"; E. F. Maldonado, F. J. Fernandez, M. V. Trianes, K. Wesnes, O. Petrini, A. Zangara, ... and L. Ambrosetti, "Cognitive performance and morning levels of salivary cortisol and [alpha]-amylase in children reporting high vs. low daily stress perception"; R. Nathanson and K. J. Saywitz, "The effects of the courtroom context on children's memory and anxiety"; J. A. Quas, A. Bauer, and W. T. Boyce, "Physiological reactivity, social support, and memory in early childhood"; J. A. Quas and H. C. Lench, "Arousal at encoding, arousal at retrieval, interviewer support, and children's memory for a mild stressor"; T. Smeets, H. Otgaar, I. Candel, and O. T. Wolf, "True or false? Memory is differentially affected by stress-induced cortisol elevations and sympathetic activity at consolidation and retrieval"

[73] D. S. Lindsay, M. K. Johnson, and P. Kwon, "Developmental changes in memory source monitoring"

[74] H. Bearpark and P. Michie, "Changes in morningness-eveningness scores during adolescence and their relationship to sleep/wake disturbances"; M. A. Carskadon, C. Vieira, and C. Acebo, "Association between

this respect, the significant change in the times at which children began their courtroom participation represents another desirable consequence of the implementation of Section 28, as greater alertness should enhance the quality of the children's testimony. Additional research might more thoroughly investigate individual differences in children's preferences, so accommodations can be made, especially perhaps for adolescents who would prefer later start times.

In all, the trial implementation of Section 28 showed that this special measure had several beneficial effects: it reduced the delay in processing cases involving young alleged victims, it streamlined the presentation of their evidence, and it was conducted in circumstances that might be expected to enhance the quality of their testimony. Of course, it will be critically important to ensure that these benefits are achieved when a larger number of courts, judges, and barristers are involved, so further evaluation after the national rollout will be essential. Nevertheless, there is reason to believe that the implementation of Section 28 will yield benefits for alleged victims, for defendants (who are tried sooner), and for the pursuit of just outcomes when criminal misbehaviour has been alleged.

puberty and delayed phase preference"; S. Kim, G. L. Dueker, L. Hasher, and D. Goldstein, "Children's time of day preference: age, gender and ethnic differences"

Chapter 3: Examining children in English High Courts with and without implementation of reforms authorised in Section 28 of the Youth Justice and Criminal Evidence Act (1999)

In 2014, several special measures linked to Section 28 of the Youth Justice and Criminal Evidence Act (1999) were pilot-tested by the government in three courthouses in England (Ministry of Justice, 2013). In an effort to improve the quality of evidence elicited from vulnerable child witnesses, the reforms involved mandatory pre-trial Ground Rules Hearings (GRHs) followed by pre-recorded cross-examinations. In the GRHs, restrictions could be imposed on traditional cross-examination practices in an effort to reduce the use of risky questions (Criminal Practice Directions, 2015; Ministry of Justice, 2013). Meanwhile, pre-recorded cross-examinations were introduced to expedite children's evidence, thereby swiftly resolving children's involvement and reducing the detrimental delays between forensic interviews and cross-examination (Criminal Practice Directions, 2015; Henderson & Lamb, 2017). The intention was to implement Section 28 nationally following this pilot study (Criminal Practice Directions, Amendment 5, 2017).

The current study was the first to examine whether implementation of these special measures improved lawyers' questioning strategies. Children's participation in the legal system continues to increase (National Society for the Prevention of Cruelty to Children, 2017), and there is substantial and growing evidence that children's vulnerabilities are often exploited during courtroom questioning (Andrews & Lamb, 2016, 2018; Marchant, 2013; Plotnikoff & Woolfson, 2009). Therefore, it is crucially important to identify, adopt, and embrace changes that may result in a fairer system for all involved.

Pitfalls of Courtroom Examinations

International legal systems vary drastically in terms of basic legal philosophies and cultures (Bussey, 2009). Common law countries (e.g., England, Scotland, New Zealand, Australia, and the United States) employ an adversarial approach, whilst civil law countries (e.g., France, Germany, Austria, and Norway) employ an inquisitorial approach (Spencer & Lamb, 2012). While inquisitorial and adversarial systems both seek reliable evidence and must assess veracity, children in inquisitorial jurisdictions rarely testify in court or confront the defendants (Bussey, 2009). As the current study focused on the courtroom examinations of child witnesses in England, the adversarial system is considered below in greater detail.

In common law countries, the adversarial system involves prosecutors and defence lawyers who present evidence to impartial judges or jurors in several ways. Firstly, the direct-

examination gives lawyers the opportunity to elicit evidence favourable to their case (Martin, 2009). This typically involves witnesses recounting details on the stand, in court, before the judge and jury. In response to a number of concerns, including the potential trauma of recounting distressing experiences on the stand (Quas et al., 2005), and threats to the witness's reliability due to deteriorated memory (Malloy & Quas, 2009), special measures have been adopted in some jurisdictions to modify the direct-examination of vulnerable witnesses. In particular, Section 27 of the Youth Justice and Criminal Evidence Act (1999) has permitted video-recorded Achieving Best Evidence (ABE) investigative interviews to be used as the direct-examination should trials occur (Home Office, 2011). As a result of Section 27, the ABE interview constitutes almost all of the relevant direct-examination in many contemporary English cases (Henderson & Lamb, 2017). Similarly, Australia (Office of the Director of Public Prosecutions and Australian Federal Police, 2005) and New Zealand (Evidence Act, 2005) allow recorded forensic interviews to be shown in place of the direct examination. However, all witnesses, including vulnerable witnesses, have to return to court months or even years after the initial reports to be cross-examined, which can be via a live TV link in England (Henderson & Lamb, 2017; Home Office, 2011).

The cross-examination, the opportunity to confront an opposing party is fundamental to the adversarial approach (Spencer & Lamb, 2012) and is often deemed an inherent human right (Browne v Dunn, 1894; European Convention on Human Rights, Article 6 [3d]). However, interpretations of *what* the 'right to confront' entails are often debated. The US Supreme Court has "never doubted that the Confrontation Clause guarantees the defendant a face to face meeting with the witnesses" (Coy v Iowa, 1988). In contrast, English law and Article 6 of the European Convention of Human Rights do not guarantee face-to-face confrontation (Dennis, 2010). The United States places significant emphasis on the rights of the defendant, as protected by the 6th Amendment of the US Constitution, whereas the United Nations Convention of the Rights of Children (1990, Article 3) states that "the best interests of the child shall be a primary consideration" in all matters, including courts of law. Therefore, while common-law countries share a basic philosophical approach, they may differ significantly in their legal cultures (Bussey, 2009) and willingness to adapt legal proceedings (Spencer & Lamb, 2012).

The cross-examination differs from the direct-examination in that, while the law of evidence generally forbids leading questions in direct-examination, lawyers are permitted, and in some cultures, encouraged, to use leading questions in cross-examinations (Criminal

Procedure Rules, 2015; US Federal Rules of Evidence, 2015; see E. Henderson, 2002, 2015; Westcott & Page, 2002; Younger, 1988). Furthermore, whilst the right to cross-examination is regarded as fundamental, jurisdictions and professions differ regarding the restrictions and limitations that should be placed on cross-examination (Criminal Procedure Rules, 2015; Dennis, 2010). For example, one third of English lawyers believe it is 'legitimate to use some suggestive questions to obtain or obstruct information' (Henderson, 2015, p. 5). On the other hand, English academics write, "Although there is a right to cross-examination, there is no, and has never been, a right to lead" (Wheatcroft, Caruso, & Krumrey-Quinn, 2015, p. 8).

Internationally, legal reforms have begun to grant accommodations for vulnerable witnesses during questioning in both the direct and cross-examination (Office of the Director of Public Prosecutions and Australian Federal Police, 2005; Spencer & Lamb, 2012; Youth Justice and Criminal Evidence Act, 1999) but the granting of these accommodations does not guarantee that the relevant special measures have been effectively implemented. Training initiatives, educational outreach, and developments in legal culture may drastically affect the treatment of child witnesses and the effectiveness of legal reforms (Bussey, 2009).

Ground Rules Hearings to Combat Risky Questioning

To improve the treatment of vulnerable witnesses in England, Ground Rules Hearings (GRHs) were introduced to 1) restrict questioning that hinders children's comprehension and communication and instead 2) encourage questioning that increases the quality of children's testimony (Criminal Practice Directions, 2015; Plotnikoff & Woolfson, 2012). GRHs are attended before trial by the judge, prosecutor(s), defence lawyer(s), and if necessary, an intermediary (i.e., a court-appointed specialist responsible for facilitating communication between witnesses and lawyers).

During the GRHs, many pre-trial matters are discussed, particularly the length of the questioning and the content of questions to be asked (R v Cokesix Lubemba, R v JP, 2014; Criminal Practice Directions, 2015). The relevant Criminal Practice Directions specifically state that "over-rigorous or repetitive cross-examination of a child or vulnerable witness should be stopped…" and that "… when the witness is young or otherwise vulnerable, the court may dispense with the normal practice and impose restrictions on the advocate 'putting his case' where there is risk of a young or otherwise vulnerable witness failing to understand, becoming distressed, or acquiescing to leading questions" (see Criminal Practice Directions, 2015 I General Matters, 3E.1- 6). Judges may go so far as to review lawyers' drafts of

proposed questions and their specification of topics that they may wish to explore when putting their case to witnesses.

In the Section 28 pilot study, GRHs were made mandatory and took place before the pre-recorded cross-examinations. Henderson and Lamb (2017) found that, in the Section 28 pilot study, children spent nearly an hour less giving evidence under oath than child witnesses in comparable cases. They also found that, whether or not the Section 28 reforms were implemented, the bulk of children's evidence came from the ABE forensic interviews and the cross-examinations, with little to no time spent directly examining the children (see Table 1; Henderson & Lamb, 2017). These findings suggest that GRHs and the implementation of video-recorded evidence may spare children from unnecessary involvement in the legal system and protect them from risky questioning by identifying key issues prior to trial, streamlining questioning, and scheduling the children's examinations more effectively.

Table 1[c]

Breakdown of Courtroom Hearings and Examinations by Trial Condition

	Non-Section 28			Section 28		
	N	*M* (min)	*SD* (min)	*N*	*M* (min)	*SD* (min)
ABE Video-interview	41	46.68	22.35	43	46.58	18.41
Ground Rules Hearing	6	23.67	22.67	43	29.12	39.90
Additional Direct-examination [a]	19	9.75	14.40	3	1.80	1.30
Cross-examination	44	27.76	15.47	43	16.30	12.03
Redirect-examination	29	4.51	3.40	14	3.51	4.85
Recross-examination	2	1.23	0.78	0	-	-
Total Evidence [b]	44	89.93	56.40	43	68.19	36.59

[a] "Additional Direct-examination" determined from case trial logs (see Henderson & Lamb, 2017).

[b] "Total Evidence" includes all variables except the Ground Rules Hearing.

[c] This table differs from Table 1 in Chapter 2 because several cases were excluded when forensic interview transcripts were missing or incomplete, making those cases ineligible for this study (see 'N').

As of 2015 (Criminal Practice Directions, 2015, 3E.2), GRHs are now recommended in all cases involving vulnerable witnesses and are *mandatory* in cases using pre-recorded

cross-examinations and/or cases that involve the assistance of intermediaries. Thus, whether or not the cross-examination is pre-recorded, GRHs can be used to facilitate children's (or other vulnerable witness's) best evidence. Ultimately, by imposing restrictions on the length and nature of questioning, it is hoped that harmful techniques can be reduced, if not eliminated entirely, from cross-examinations.

Research on Question Types

Researchers have demonstrated that the questioning strategies commonly employed in court, particularly during cross-examinations, reduce the productivity (Lamb, Orbach, Hershkowitz, Esplin, & Horowitz, 2007) and accuracy (Andrews & Lamb, 2016; Lamb & Fauchier, 2001) of children's testimonies. Two detrimental forms of prompts are closed-ended option-posing questions (e.g., "Did it hurt when he touched you?" when the child has previously disclosed being touched) and suggestive questions (e.g., "It hurt when he touched you, right?") (see Lamb, Malloy, Hershkowitz, & La Rooy, 2015; Melton, Ben-Arieh, Cashmore, Goodman, & Worley, 2014 for reviews; see Table 2). Closed-ended prompts have the potential to contaminate children's evidence (Lamb et al., 2007; Melton et al., 2014) because they involve the introduction of information by the questioner. Children provide less information in response to option-posing questions (Andrews & Lamb, 2016; Lamb et al., 2007), and children more commonly contradict themselves when prompted using option-posing questions (Andrews & Lamb, 2016; Lamb & Fauchier, 2001). Suggestive prompts communicate the expected response and elicit more self-contradictions than any other prompt (Andrews & Lamb, 2016); thus, they are particularly discouraged by experts, as they further reduce the credibility of children's testimony (Bruck & Ceci, 1999; Home Office, 2011; Lamb & Fauchier, 2001).

Researchers instead encourage the use of open-ended prompts such as free recall invitations (e.g., "Tell me what happened") and directive prompts (e.g., "What did he do after your mum left?" when the child has previously disclosed that he did something after the mother left; see Lamb et al., 2015; Melton et al., 2014 for reviews; see Table 2), which tend to elicit more accurate (Dent, 1982, 1986; Jack, Leov, & Zajac, 2014; Lamb et al., 2007) and more detailed (e.g., Andrews & Lamb, 2016; Lamb et al., 2007; Sternberg, Lamb, Davies, & Westcott, 2001) responses. Furthermore, field studies have shown that few, if any, self-contradictions are elicited using open-ended invitations and directives (Andrews & Lamb, 2016; Fogliati & Bussey, 2014; Lamb & Fauchier, 2001). Despite these findings, lawyers

predominantly use 'risky' option-posing and suggestive prompts when questioning children in court (e.g., Andrews & Lamb, 2016; Klemfuss, Quas, & Lyon, 2014; Zajac et al., 2017).

Research from Scotland, the United States, and New Zealand has consistently shown that defence lawyers ask fewer invitations and directives and more suggestive questions than prosecutors (Andrews & Lamb, 2016; Klemfuss et al., 2014; Stolzenberg & Lyon, 2014; Zajac & Cannan, 2009; but see Flin, Bull, Boon, & Knox, 1993). Prosecutors' questioning strategies also appear to be problematic. Both types of lawyers use option-posing 'yes/no' prompts most often (Hanna, Davies, Crothers, & Henderson et al., 2012; Klemfuss et al., 2014; Zajac & Cannan, 2009). One study found that nearly all prosecutors (86%) elicited at least one self-contradiction from child witnesses (Andrews, Lamb, & Lyon, 2015). This underscores the need for significant improvements in the ways that children are questioned by *both* prosecutors and defence lawyers.

Although Andrews and Lamb (2016) and Flin et al. (1993) investigated cross-examinations of child witnesses in UK courts (Scotland), there has been no prior systematic research looking specifically at cross-examinations in England. However, there is evidence that – like their Scottish (Andrews & Lamb, 2016), American (e.g., Klemfuss et al., 2014), and New Zealander (e.g., Zajac & Cannan, 2009) counterparts - English lawyers question child witnesses inappropriately. Plotnikoff and Woolfson (2009) conducted a survey of mostly English child witnesses (89%, n = 162) which found that most children (91%) described the prosecutors as 'polite' whereas only 49% of the children described the defence lawyers as 'polite.' In addition, over half (58%) of the children said that the defence lawyers tried to make them say something they did not mean. It may therefore be that lawyers in England, and in particular defence lawyers, appear 'impolite' to children because they are using close-ended prompts that restrict children's productivity and/or imply expected responses.

Table 2

Question Types, Definitions, and Examples

	Definition	Example
Invitation	An open-ended request that the child recall information about the incident. Can be formulated as a statement, question, or imperative.	"Tell me everything that happened"
Directive	A cued-recall prompt that focuses the child's attention on information already mentioned and requests additional specific information, typically using wh-questions (who, what, when, where, how).	"What colour was the shirt?" (When the shirt had been mentioned)
Option- posing	Closed-ended questions that refocus the child's attention on details of the allegation that they have not previously mentioned, without implying an expected response.	"Did it hurt?" "Were your clothes on or off when it happened?"
Suggestive	An utterance that assumes information not disclosed by the child or implies that a particular response is expected.	"Did it hurt when he put his finger in you?" (When the child has not mentioned digital penetration). "He wanted you to kiss him, didn't he?"
Responsive	Verbal and action responses related to the lawyer's previous utterance, even if the response did not contain new informative details, or when its meaning was unclear.	Lawyer: "Did he take your trousers off?" Child: "Yes" [responsive] Lawyer: "What did he do next?" Child: "I don't know" [responsive]
Unresponsive	Responses that do not relate to the question asked in the previous utterance but provide incident-related information. These include instances when children misunderstood the lawyers' questions.	Lawyer: "What did he say?" Child: "I said stop!" [unresponsive]
Compliance	Children's responses that acquiesce to the suggested confrontation, supposition, or input.	Lawyer: "It hurt when he touched you, didn't it?" (when the child has not mentioned being hurt by the touch) Child: "Yeah"
Resistance	Children's responses that resist the suggested confrontation, supposition, or input.	Lawyer: "You're lying, aren't you?" Child: "No I'm not."

Note. Adapted from Andrews & Lamb, 2016; Lamb, et al., 2007.

Children's Responsiveness and Compliance with Suggestive Questions

Although cross-examination is an intimidating and confusing process, even for experts (Flin, 1993), children are particularly disadvantaged in the legal system. Age significantly affects the quantity and quality of details encoded into memory (Flin, Boon, Knox, & Bull, 1992; Lamb, Hershkowitz, Orbach, & Esplin, 2011), children's resistance to suggestion (Melnyk, Crossman, & Scullin, 2007), and children's communicative capabilities (Saywitz, 2002). Consequently, children may struggle to understand what information is being requested, access their memory for specific events, and then respond appropriately (Jack et al., 2014; Lamb, Orbach, Warren, Esplin, & Hershkowitz, 2007b).

Field research in Scotland and the United States has found that children are highly responsive in court (i.e., their responses relate to the lawyers' previous utterances, see Table 2; Andrews & Lamb, 2016; Klemfuss et al., 2014). Younger children provide less information in response to free-recall questions, but they also answer specific questions less accurately than older children do (Andrews & Lamb, 2016; Goodman, Jones, & McLeod, 2017). Thus, best-practice guidelines encourage maximum reliance on free-recall prompts, advise against the use of close-ended 'yes/no' prompts, and strongly discourage the use of suggestive prompts (Home Office, 2011; Lamb et al., 2015).

In spite of these guidelines, lawyers are permitted to ask children suggestive questions in cross-examinations (Criminal Procedure Rules, 2015). Research has consistently shown that children acquiesce more often to suggestions and are more malleable than adults (Jack et al., 2014; Paz-Alonso & Goodman, 2016; Sutherland & Hayne, 2001; Volpini, Melis, Petralia, & Roseberg, 2016). Younger children make more errors in response to suggestive questions than older children do but even very young children are able to maintain considerable accuracy (Goodman et al., 2017). Younger children may need more 'memory cues' than older children so interviewers may ask them leading questions, and, as a result, may elicit more erroneous information (Goodman, Ogle, McWilliams, Narr, & Paz-Alonso, 2014). Thus, experts recommend that even young children should be asked open-ended questions because they increase accuracy and informativeness and also enhance perceived credibility in legal contexts (Goodman et al., 2017).

Although previous research had generally focused on young children's vulnerabilities (Melnyk et al., 2007), research has also shown that adolescents are susceptible to suggestion (Bruck & Ceci, 1999; Owen-Kostelnik, Reppucci, & Meyer, 2006) and that adolescents are

more likely than adults to comply with authority figures (Gudjonsson, 2003; Monahan, Steinberg, & Piquero, 2015). A study by Redlich and Goodman (2003) showed that 78% of 12- and 13-year-olds, 72% of 15- and 16-year olds, and 59% of young adults all complied with interviewers by signing false confessions, likely due to the tendency to obey authority. In some instances, however, older children may provide less reliable accounts than young children due to the developmental reversal effect (i.e., because age is positively associated with greater reliance on 'gist traces,' older children may be at increased risks of experiencing spontaneous false memories; see Otgaar, Howe, Peters, Sauerland, & Raymaekers, 2013). Regardless of age, individuals may differ in regard to their suggestibility (i.e., 'the tendency for an individual's account to be altered by misleading information and interpersonal pressure'; Singh & Gudjonsson, 1992, p. 155). Thus, children of all ages may be vulnerable to suggestive questioning, and hence, such questioning should be avoided in legal contexts.

Despite the evidence regarding children's susceptibility to suggestion (Gudjonsson, 2003; Lamb et al., 2007b; Melnyk et al., 2007), it is not clear from previous field research whether or not lawyers adapt their questioning styles for children of different ages, and if so, whether this affects children's responses. Klemfuss et al. (2014) found that American prosecutors and defence lawyers asked older children significantly fewer option-posing questions and significantly more suggestive questions, while Stolzenberg and Lyon (2014) found that American lawyers were slightly more likely to ask younger children option-posing questions. Andrews and Lamb (2016) found that Scottish defence lawyers were most likely and Scottish prosecutors least likely to ask the youngest children option-posing questions. However, in New Zealand, Zajac, Gross, and Hayne (2003) found no significant associations between children's ages and the types of questions asked by prosecutors or defence lawyers. Regardless, children consistently respond to almost all the questions they are asked in court and are more responsive to prosecutors than defence lawyers (Andrews & Lamb, 2016; Klemfuss et al., 2014; Zajac et al., 2003). Although Melynk et al. (2007) found that younger children complied more often with suggestive utterances, Andrews and Lamb (2016) found no such age differences. Thus, it is not clear whether lawyers generally adjust their questioning in relation to the age of the children or whether children of different ages are differentially responsive and compliant.

Current Study

No previous study has systematically investigated the questioning strategies employed in the Section 28 pilot study. This study investigated whether the implementation

of GRHs and pre-recorded cross-examinations resulted in prosecutors and defence lawyers altering the types of questions they asked. It was predicted that: (i) Prosecutors and defence lawyers in the Section 28 condition would question children more appropriately, (i.e., by asking more free-recall invitations and directive prompts as well as fewer option-posing and suggestive prompts), (ii) Younger children would be more compliant with lawyers' suggestive questions than older children, regardless of condition, and (iii) The occurrence of a GRH *alone* would improve lawyers' questioning strategies, regardless of whether or not the cases were involved in the Section 28 pilot study.

Methods

Sample

Her Majesty's Courts and Tribunals Service searched for trials that took place in England between 2012 and 2016 involving children under the age of 16 who were alleged victims of sexual abuse. They identified 138 Non-Section 28 (hereafter, NS28) cases in 7 different Crown Courts and 84 Section 28 (hereafter, S28) cases in 3 different Crown Courts. Researchers made every effort to obtain all available S28 cases for the current study. Of the 222 cases, 44 NS28 and 43 S28 cases met all the necessary research criteria in that they included complete transcripts of the ABE interviews and involved children under the age of 16 testifying as alleged victims of sexual abuse. The 44 NS28 cases came from Bradford (n = 6), Durham (n = 6), Hull (n = 7), Luton (n = 6), Newcastle (n = 12), Norwich (n = 5), and Oxford (n = 2), whilst the 43 S28 cases came from Kingston (n = 1), Leeds (n = 16), and Liverpool (n = 26). Recordings of the relevant court proceedings were transcribed and anonymised at the Ministry of Justice in London, and corresponding trial logs and ABE transcripts were also obtained. In all but 3 cases (all in the NS28 condition), the ABE interviews served as the majority of the direct-examinations at trial; in those 3 cases, there were no ABE interviews, but the alleged victims were interviewed by police officers, who then produced written statements.

Information regarding case characteristics is provided in Table 3. The sample included 69 girls and 18 boys between the ages of 6 and 15 years (M = 12.02, SD = 2.43), categorised into two age groups at the time of trial: 6- to 12-year-olds and 13- to 15-year-olds. These categories were chosen because they accord with the Sexual Offences Act (2003); 16 years is the age of sexual consent, but a person aged 16 or over can claim to be innocent of the charge of committing sexual offences with a child aged between 13 and 16 years if that person

'reasonably believed' that the child was over the age of 16. However, this reasonable belief provision does not apply if the offence involved a child under the age of 13. There were insufficient numbers of young children to create three groups, so the youngest children (6- to 9-year-olds; *n* = 10 in NS28, *n* = 7 in S28) were not distinguished from the pre-teens (10-to 12-year-olds; *n* = 14 in NS28, *n* = 15 in S28). Children in the selected cases reported single (*n* = 36) or multiple (*n* = 44) incidents of abuse (in 7 cases, the number of alleged incidents was unclear). Intermediaries assisted a minority of children (*n* = 14) during trial. GRHs are permitted in all cases with vulnerable witnesses, in the NS28 condition, 6 cases involved GRHs. In the S28 sample, all 43 cases had GRHs (see Table 3).

The alleged offenses were categorised based on the most severe offense as defined in the Crown Prosecution Services Sexual Offense Legislation documentation (Crown Prosecution Service, 2003). The sample included charges of rape (i.e., the intentional penetration of the child's mouth, vagina, or anus with the penis), penetration (i.e., the intentional penetration of the vagina or anus with a part of the body or anything else), sexual assault (i.e., intentionally touching the child in a sexual way), sexual activity (i.e., intentionally causing the child to engage in sexual acts that may or may not involve the defendant; e.g., forcing the child to masturbate, forcing the child to engage in sexual activity with a third party), incitement to engage in sexual activity (i.e., encouraging the child to engage in a sexual act that did not take place), and grooming (i.e., communicating and arranging to meet with a child with the intention of committing a sexual offense against him or her) (see Table 3).

All defendants were male and were categorised as "father figures" (i.e., biological fathers, stepfathers, or mother's boyfriends), "family members" (i.e., brothers, grandfathers, cousins, uncles, or more distant relatives), "friends/acquaintances," or "strangers." In five cases, the victim-defendant relationships could not be determined. At trial, over half (*n* = 49) of the defendants were found guilty while 38 were acquitted (see Table 3).

A binary logistic regression confirmed that the NS28 and S28 groups did not significantly differ with respect to key case facts, including the children's ages, gender, frequency of alleged abuse, severity of alleged abuse, child-perpetrator relationship, verdict, and intermediary presence (see Table 3 for *p* values). The groups significantly differed only with regard to whether a GRH took place (see Table 3), because GRHs were mandatory in the S28 cases.

Table 3

Characteristics of Cases in the NS28 and S28 Conditions

Variables [a]		NS28 (*44*)	S28 (*43*)	*p* [b]
Gender	Male	11	7	0.32
	Female	33	36	
Age	6-12 years old	24	22	0.76
	13-15 years old	20	21	
Frequency	Single	20	16	0.14
	Multiple	23	21	
	Unknown	1	6	
Intermediary	Yes	6	8	0.53
	No	38	35	
GRH	Yes	6	43	0 .00*
	No	38	0	
Severity	Rape	16	16	0.85
	Penetration	3	3	
	Sexual Assault	14	13	
	Sexual Activity	7	10	
	Inciting to Engage	4	0	
	Grooming	0	1	
Relationship to Child	Father Figure	10	12	0.37
	Family Member	12	10	
	Friend/Acquaintance	21	13	
	Stranger	0	4	
	Unable to determine	1	4	
Verdict	Guilty	24	25	0.74
	Not Guilty	20	18	

[a] Variables adapted from Andrews & Lamb, 2016; Klemfuss, Quas, & Lyon, 2014.
[b] Binary logistic regression was run to identify any significant differences between the conditions.

Coding of Transcripts

The transcripts could have included direct-examinations, cross-examinations, redirect-examinations, and recross-examinations (see Table 2). The substantive and non-substantive utterances of prosecutors, defence lawyers, judges, and intermediaries were coded. Only "question-response pairs" were included in these analyses.

Substantive prompts.

Substantive prompts were defined as prompts that elicited details about events preceding, during, and after the alleged incident(s). Substantive questions were categorised as one of 4 types (i.e., invitations, directives, option-posing prompts, and suggestive prompts; see Table 2 for definitions and examples).

Non-substantive prompts.

Non-substantive prompts were defined as prompts that did not elicit details about the alleged incident(s), and were coded as procedural, facilitative, or inaudible. Non-substantive prompts were only included in the initial descriptive analyses.

Children's responses.

Children's responses were coded as either responsive or unresponsive. Children's responses to suggestive prompts were further coded as compliant or resistant (adapted from Andrews & Lamb, 2016) (see Table 2). Inaudible responses were excluded from analyses.

Only "question-response pairs" were coded.

Inter-rater Reliability

A second rater independently recoded a random selection of the transcripts (20%; n = 18), half in each trial condition. The inter-rater reliability coefficients for all variables were high, Kappa *(K)* > .90, including agreement regarding the classification of substantive and non-substantive prompts, K = .97 (SE = .01), 95% CI [.95, .99]; of specific utterances, K = .95 (SE = .01), 95% CI [.93, .97]; of children's responsiveness, K = .93 (SE = .02), 95% CI [.89, .97]; and of compliant and resistant responses to suggestive utterances, K = .92 (SE = .01), 95% CI [.90, .94]. The second rater coded at the same time as the principal researcher's coding, and the two raters resolved any disagreements through discussion.

Analytical Plan

Descriptive results are first provided for prosecutors', defence lawyers', judges', and intermediaries' substantive and non-substantive utterances. This was followed by preliminary analyses to determine whether any case facts were significantly associated with variations in the lawyers' questioning strategies. Afterwards, parametric analyses were used to compare the questioning strategies adopted by prosecutors' and defence lawyers' and measures of the children's responses (i.e., responsiveness and compliance) in the two types of trials (NS28, S28) in relation to children of different ages (6-12 years old, 13-15 years old).

All within-group variables were converted into proportional scores by dividing the cell count of interest (e.g., number of defence lawyer's suggestive prompts) by the appropriate grouping total (e.g., total number of defence lawyers' substantive prompts) to control for the number of questions asked by each lawyer. In analyses where Mauchly's test of sphericity was violated, Greenhouse-Geisser estimates were used to correct results. Power analyses confirmed that all inferential tests had enough power (set at 0.8) to detect small to medium effect sizes.

Results

Descriptive Information

Table 4 describes the average, maximum, and minimum numbers of substantive and non-substantive utterances asked by prosecutors, defence lawyers, judges, and intermediaries in both trial conditions. Non-substantive utterances asked by prosecutors and defence lawyers, and all utterances asked by judges and intermediaries were excluded from all analyses reported below. Invitations were so seldom used so they were also excluded from question type analyses. Table 5 reports the average proportions of directive, option-posing, and suggestive utterance types used by prosecutors and defence lawyers in each trial condition for both age categories.

Table 4

Non-Substantive and Substantive Questions Asked by Practitioners in S28 and NS28 Conditions

		Non-Section 28					Section 28				
		M	*SD*	*Min*	*Max*	*n*	*M*	*SD*	*Min*	*Max*	*n*
Prosecutor [a]	Substantive [b]	42	57	1	261	29	11	17	2	72	17
	Non-Substantive	6	11	1	59	31	3	1	1	5	16
Defence	Substantive [b]	128	84	4	350	44	73	55	11	328	43
	Non-Substantive	10	9	1	50	43	5	4	1	16	42
Judge	Substantive [b]	7	8	1	35	24	3	1	1	6	14
	Non-Substantive	12	8	1	37	44	9	7	1	28	43
Intermediary [a]	Substantive [b]	4	4	1	9	4	2	1	1	4	4
	Non-Substantive	5	5	1	13	5	2	2	1	4	4

[a] Prosecutors and intermediaries who did not ask any questions were excluded.

[b] Substantive utterances included invitations, directive, option-posing, and suggestive prompts.

Preliminary Analyses

Multiple regression analyses were computed to determine whether the proportion of directive, option-posing, and suggestive prompts asked by either type of lawyer were significantly associated with any case characteristics (i.e., severity and frequency of abuse, relationship to offender, verdict, intermediary presence, GRH occurrence). The results indicated that the occurrence of a GRH was significantly associated with the proportion of defence lawyers' option-posing prompts, $F(7,72) = 2.44$, $\beta = .39$, $p = .001$) and suggestive prompts, $F(7,72) = 3.56$, $\beta = -.46$, $p < .001$). No other case facts were significantly associated with the dependent variables and so they were not considered in subsequent analyses.

How Did Trial Condition Affect Lawyers' Questioning Strategies?

Prosecutors asked substantive prompts in 45 cases, while defence lawyers asked substantive prompts in all 87 cases. Prosecutors asked few, if any, questions in the majority of cases because the ABE interviews were used as the evidence-in-chief (see Table 4), so it was not possible to treat lawyer role as an independent variable in statistical analyses. Instead, the characteristics of prosecutors' and defence lawyers' questions were examined separately.

To begin, paired sample t-tests (with Bonferroni corrections, $p = .016$) were conducted in cases in which prosecutors asked substantive prompts ($n = 45$) to compare the proportions of questions asked by prosecutors and defence lawyers that were directive, option-posing, and suggestive prompts. Results indicated that defence lawyers used proportionally fewer directive, $t(44) = 2.66$, $p = .011$, and option-posing, $t(44) = 2.64$, $p = .011$, prompts as well as more suggestive prompts, $t(44) = -6.71$, $p < .001$, than prosecutors.

Prosecutors' questions.

A Repeated-Measures analysis (RM-ANOVA) conducted to compare the types of questions asked by prosecutors revealed a main effect for question type, $F(1.04, 45.68) = 150.93$, $p < .001$, $\eta_p^2 = .77$ Prosecutors asked proportionally more option-posing questions ($M = .73$, $SD = .20$) than directive ($M = .26$, $SD = .19$, $p < .001$) or suggestive questions ($M = .02$, $SD = .03$, $p < .001$) and more directive questions than suggestive questions ($p < .001$). Due to the small number of prosecutor utterances (see Table 4), there was not enough power to reasonably detect medium-sized effects of trial condition or children's age, but the descriptive statistics are included in Table 5.

Table 5

Utterance Type Proportions by Trial Condition, Lawyer Role, and Children's Age

			Non-Section 28				Section 28			
			M	*SD*	*Min*	*Max*	*M*	*SD*	*Min*	*Max*
6-12 years	Prosecutor	Directive	.24	.18	.00	.59	.34	.14	.10	.43
		Option-Posing	.75	.18	.40	1.00	.63	.17	.43	.90
		Suggestive	.01	.02	.00	.08	.03	.06	.00	.14
	Defence	Directive	.15	.14	.00	.53	.17	.10	.01	.34
		Option-Posing	.63	.17	.26	1.00	.76	.10	.54	.91
		Suggestive	.22	.19	.00	.68	.07	.09	.00	.32
13-15 years	Prosecutor	Directive	.28	.15	.00	.50	.21	.27	.00	.75
		Option-Posing	.69	.16	.50	1.00	.78	.28	.25	1.00
		Suggestive	.02	.03	.00	.08	.01	.03	.00	.09
	Defence	Directive	.11	.08	.00	.26	.18	.11	.00	.39
		Option-Posing	.57	.14	.27	.80	.70	.13	.38	.96
		Suggestive	.33	.18	.20	.71	.13	.15	.00	.62
Total	Prosecutor	Directive	.26	.16	.00	.59	.25	.24	.00	.75
		Option-Posing	.72	.17	.41	1.00	.74	.26	.25	1.00
		Suggestive	.02	.03	.00	.08	.01	.04	.00	.14
	Defence	Directive	.13	.11	.00	.53	.18	.10	.00	.39
		Option-Posing	.60	.15	.26	1.00	.73	.17	.38	.96
		Suggestive	.27	.19	.00	.71	.10	.12	.00	.62

Defence lawyers' questions.

An RM-ANOVA conducted to identify associations between trial condition and the types (proportion) of questions asked revealed a main effect for question type, $F(1.72, 142.69) = 256.89$, $p < .001$, $\eta_p^2 = .76$, with defence lawyers using option-posing prompts more frequently than any other type of question (directive, $p < .001$; suggestive, $p < .001$). In the NS28 condition, more suggestive prompts were used than directive prompts ($p < .001$)

while, in the S28 condition, there was no significant difference between the relative proportions of suggestive and directive prompts posed (see Table 5).

There was also an interaction between trial condition and question type, $F(1.72, 142.69) = 19.29$, $p < .001$, $\eta_p^2 = .19$. In the S28 condition, more option-posing prompts ($p < .001$) and fewer suggestive prompts ($p < .001$) were used than in the NS28 condition. There was not enough power to reasonably detect medium-sized effects of children's age but the descriptive statistics are provided in Table 5.

How were children's responses affected by trial condition, children's age, and lawyer role?

Table 6 shows the responsiveness of children to the prosecutors' and defence lawyers' prompts in both trial conditions. There was not enough power to examine children's responsiveness to different types of questions so univariate ANOVAs were used to examine the effects of trial condition, lawyer role, and children's age on children's overall responsiveness and children's compliance with suggestive questions. However, there was only enough power to examine children's responses to defence lawyers' suggestive utterances.

Children's Responses to Defence Lawyers' Suggestive Questions

A univariate ANOVA examining associations between children's age and the proportion of responses in which children complied with defence lawyers' suggestions revealed a main effect for children's age, $F(1, 69) = 10.01$, $p = .002$, $\eta_p^2 = .13$, with older children complying less than younger children (Table 7). There was not enough power to examine the effect of trial condition.

How did GRHs affect Defence Lawyers' Utterances?

An RM-ANOVA conducted to identify associations between the occurrence of GRHs and the types of questions asked by defence lawyers revealed a main effect for question type, $F(1.68, 143.10) = 236.01$, $p < .001$, $\eta_p^2 = .74$: regardless of whether or not there was a GRH, defence lawyers asked more option-posing than directive ($p < .001$) or suggestive ($p < .001$) questions. Post hoc analyses showed that, when there was no GRH, more suggestive than directive prompts ($p < .001$) were used, whereas, for cases with GRHs, there was no significant difference between the relative prominence of suggestive and directive prompts (see Table 8).

There was also an interaction between the occurrence of a GRH and question type, $F(1.68, 143.10) = 17.41$, $p < .001$, $\eta_p^2 = .17$. In cases with GRHs, defence lawyers used more directive ($p = .03$) and option-posing prompts ($p < .001$) and fewer suggestive prompts ($p < .001$) than defence lawyers in cases without GRHs (see Table 8).

Table 6

Responsiveness to different types of questions addressed to children in each age group by prosecutors and defence lawyers.

			NS28			S28		
			M	*SD*	*n*	*M*	*SD*	*n*
6-12 years	Prosecutor	Directive	.88	.17	11	.92	.20	6
		Option-Posing	.88	.15	14	.90	.22	5
		Suggestive	1.0	.00	2	1.0	.00	2
	Defence	Directive	.84	.24	23	.88	.19	22
		Option-Posing	.94	.05	24	.87	.20	22
		Suggestive	.90	.08	19	.91	.20	14
13-15 years	Prosecutor	Directive	.87	.27	13	.72	.42	5
		Option-Posing	.94	.11	15	.96	.13	11
		Suggestive	1.0	0.0	8	1.0	-	1
	Defence	Directive	.89	.10	19	.94	.07	19
		Option-Posing	.88	.20	20	.95	.04	21
		Suggestive	.90	.10	20	.91	.17	18
Total	Prosecutor	Directive	.87	.23	24	.83	.32	11
		Option-Posing	.91	.13	29	.94	.16	16
		Suggestive	1.0	.00	10	1.0	.00	3
	Defence	Directive	.87	.19	42	.91	.15	41
		Option-Posing	.92	.14	44	.91	.15	43
		Suggestive	.90	.09	39	.91	.18	32

Table 7

Compliance with Defence Lawyers' Suggestive Utterances by Trial Condition and Children's Age

	6 to 12 years old				13 to 15 years old			
	M	*SD*	*Min*	*Max*	*M*	*SD*	*Min*	*Max*
Non-Section 28	.64	.20	.31	1.0	.55	.16	.29	.82
Section 28	.69	.33	.00	1.00	.39	.27	.00	.89
Total	.66	.26	.00	1.0	.48	.23	.00	.89

Table 8

Types of Questions Asked by Lawyers in Cases With and Without GRHs

		No GRH			GRH		
		M	*SD*	*N*	*M*	*SD*	*n*
Prosecutor	Directive	.26	.15	25	.25	.24	20
	Option-Posing	.72	.15	25	.73	.25	20
	Suggestive	.02	.03	25	.01	.04	20
Defence	Directive	.12	.10	38	.18	.11	49
	Option-Posing	.60	.16	38	.71	.12	49
	Suggestive	.28	.19	38	.11	.13	49

Discussion

The results of the present study demonstrate that implementation of the special measures outlined in S28 of the Youth Justice and Criminal Evidence Act were positively associated with the way child witnesses were questioned by significantly reducing the proportion of suggestive questions that were asked by defence lawyers. In addition, analyses revealed that, regardless of pre-recorded cross-examinations, GRHs were associated with improved questioning procedures, although suggestive questions were still asked with some

frequency. Younger children were more compliant with defence lawyers' suggestive questions, and, disconcertingly, risky suggestive questions were merely being replaced by risky option-posing questions in the S28 condition.

Key Findings

We hypothesised that prosecutors would question children more appropriately in the S28 condition than in the NS28 condition, but because the use of ABE interviews as evidence reduced the need for prosecutors to ask many questions, it was not possible to explore the effects of S28 on the prosecutors' behaviour. However, as in previous studies (Andrews & Lamb, 2016; Hanna et al., 2012; Klemfuss et al., 2014; Stolzenberg & Lyon, 2014; Zajac & Cannan, 2009), prosecutors in both trial conditions used virtually no invitations but used more directive and option-posing prompts and fewer suggestive prompts than defence lawyers. In Scottish direct-examinations in the absence of pre-recorded evidence, by contrast, prosecutors asked, on average, 252 (*SD* = 182) substantive questions (Andrews & Lamb, 2016) whereas in the current sample, prosecutors asked 11 (*SD* = 17) substantive questions in the S28 condition and 42 (*SD* = 57) substantive questions in the NS28 condition. Similarly, in New Zealand, where pre-recorded evidence is also permitted, prosecutors asked an average of 35 (*SD* = 6) substantive questions (Zajac & Cannan, 2003). Thus, although the small sample size limited the conclusions that could be drawn with regards to prosecutors' questioning, the findings underline the importance of high-quality forensic interviews. Not only do ABE interviews play critical roles in fact-finding investigations, but they also constitute a significant proportion of the direct-examination in court, rendering their quality especially important.

We also hypothesised that defence lawyers would question children more appropriately in the S28 than in the NS28 condition. Findings regarding defence lawyers' questioning strategies were consistent with research in Scotland, New Zealand, and the United States (Andrews & Lamb, 2016; Hanna et al., 2012; Klemfuss et al., 2014; Stolzenberg & Lyon, 2014; Zajac & Cannan, 2009). Defence lawyers in both trial conditions used virtually no invitations and asked significantly more option-posing than suggestive or directive questions. In the S28 condition, defence lawyers asked significantly more option-posing questions and significantly fewer suggestive questions than their NS28 counterparts. Suggestive questions are significantly more likely than option-posing questions to contaminate evidence and elicit self-contradictions (Andrews & Lamb, 2016; Zajac et al.,

2003). Therefore, the reduction in the numbers of suggestive questions asked in the S28 condition may help to ensure that more reliable evidence is obtained. However, while option-posing prompts do not imply an expected response like suggestive prompts do, they are still problematic because they restrict productivity and are associated with increases in the numbers of incorrect details elicited (Lamb et al., 2015). Thus, while the reduction in the number of suggestive utterances used in S28 cases is commendable, it is problematic that the majority of questions asked during cross-examination were closed-ended option-posing prompts.

Although risky prompts were not eliminated from children's examinations, it is noteworthy that the defence lawyers in both the NS28 (*M* = .27, *SD* = .19) and S28 cases (*M* = .10, *SD* = .12) asked many fewer suggestive questions than counterparts studied in other countries. For example, in Scotland, the United States, and New Zealand, the comparable percentages were 48.6% (Andrews & Lamb, 2016), 42% (Andrews et al., 2015), and 56.5% (Hanna et al., 2012), respectively. This may reflect the impact of both relevant research and a number of educational and training programs in England for lawyers and the judiciary (see The Advocate's Gateway, 2016), as well as interventions by intermediaries and judges (particularly in pre-trial GRHs).

Regarding children's responses, we hypothesised that younger children would be more compliant than older children. Results demonstrated that the quality of the children's responses was very similar in the NS28 and S28 conditions. As in other field research (Andrews et al., 2015; Andrews & Lamb, 2016; Klemfuss et al., 2014), children were highly responsive in the NS28 condition (> 90%), leaving little room for improvement in the S28 condition. Interestingly, children in the younger age group (6-12 years old) did comply with defence lawyers' suggestions more often than the 13- to 15-year-olds did, highlighting the need for lawyers, judges, and intermediaries (if involved) to fully discuss in the GRHs how younger children will be questioned, and specifically how risky questions can be avoided. In these circumstances, having questions drafted and approved by the judge and/or intermediary might significantly enhance the quality of questioning during the cross-examination, thereby eliciting more reliable testimony.

Finally, we hypothesised that GRHs alone would be associated with more appropriate questioning strategies. Analyses revealed that children involved in cases with GRHs, whether or not they benefitted from the Section 28 special measure, were asked fewer suggestive

questions and, crucially, more directive questions. Only a small number of cases that were not involved in the S28 pilot study held GRHs, so additional research is necessary to further elucidate the specific effects of GRHs on questioning although it is possible that judges and lawyers who were not implementing Section 28 still made accommodations for young witnesses. If the restrictions placed during GRHs continue to be appropriately adhered to, the use of GRHs may improve the ways in which children, as well as other vulnerable witnesses, are questioned. Critically, these hearings are already permitted in all cases involving vulnerable witnesses.

Limitations and Future Directions

Several limitations of the current study should be noted. Firstly, most of the children's examinations consisted of closed-ended, option-posing prompts asked by the defence lawyers. This again emphasises the importance of using ABE forensic interviews as evidence but does limit researchers' abilities to explore the effects of the S28 reforms on how children are questioned in court, in part because many in-court examinations were so brief. As well, because of the limited number of young children in the sample, developmental differences in children's responsiveness could not be fully investigated. The age categories employed in this study are common practice in field research (e.g., Andrews & Lamb, 2016; Stolzenberg & Lyon, 2014) but future researchers should investigate the effect of children's age on courtroom questioning, especially when the children are very young. However, it should be noted that *all* relevant S28 cases were included in the study. Therefore, the results have high ecological validity and reliably reflect current practices in the English legal system.

Secondly, the study did not explore the quality of questioning conducted during the ABE forensic interviews (as Lamb et al., 2009 and Sternberg et al., 2001, did). As shown in Table 2, the forensic interviews comprised most or all of the children's direct examinations. Particularly in the English system, where the forensic interview is played as the child's direct-examination, it is critical that interviewers elicit accurate, coherent, and complete accounts from alleged victims.

Thirdly, we examined only question types in the current study; however, several other factors, such as question content, complexity, and repetition may affect children's testimonial accuracy. Research has shown that many lawyers' questions focus on peripheral details that are not directly relevant to the abusive action(s) (Andrews & Lamb, 2018) even though children typically respond more accurately to questions about central elements of the relevant

events (Candel, Merckelbach, Jelicic, Limpens, & Widdershoven, 2004). Furthermore, lawyers often fail to adjust the complexity of their questions depending on children's ages (Andrews & Lamb, 2017a) even though children may not possess the necessary linguistic capabilities to effectively communicate in court (Hanna et al, 2012) and seldom ask for clarification when asked grammatically complex questions (Zajac et al., 2003). As well, lawyers commonly repeat questions, significantly increasing the likelihood that children will contradict themselves, particularly when the questions are suggestive (Andrews & Lamb, 2017b). Future research should further investigate the many ways in which S28 and GRHs may be improving conditions for child witnesses in English courts. As well, researchers may wish to investigate potential associations between case facts (e.g., relationship to offender and verdict) and questioning strategies to better understand children's experiences in legal proceedings.

Finally, the judges in the S28 condition all volunteered to participate in the pilot study, and thus their willingness may have inflated the apparent benefits of the S28 reforms. Future research should investigate the effects that judges and intermediaries both may have on questioning strategies to fully elucidate the potentially benefits of GRHs and pre-recorded cross-examinations. However, it is promising that NS28 judges who did *not* volunteer also imposed constructive restrictions in their GRHs and/or effectively proscribed risky questioning.

Conclusions

In recent decades, psychological research has begun to inform public policy (e.g., Andrews & Lamb, 2016; Bull, 2010; Hanna et al., 2010; Lamb et al., 2007) contributing to significant international legal reforms. Several Australian states and territories now permit vulnerable witnesses to provide pre-recorded evidence (Office of the Director of Public Prosecutions and Australian Federal Police, 2005). In 2017, a High Court of Justiciary Practice Note was published in Scotland describing plans to improve the treatment of vulnerable witnesses by expanding the existing procedures for the taking of evidence by a commissioner (i.e., where a witness' examination and cross-examination is recorded in advance of a trial; Dorrian, 2017). Furthermore, New Zealand has begun to consider the use of intermediaries as an additional special measure for children testifying in court (Hanna, Davies, Henderson, & Hand, 2013; Randell, 2017).

The trial implementation of the S28 reforms represented an important acknowledgement of the need to improve the treatment of vulnerable witnesses in English and Welsh courts. The present study reveals room for considerable further improvement. For example, although fewer suggestive questions were asked in the S28 condition (and in cases with GRHs), they were still asked with some frequency, and few invitations or directive questions were posed. Younger children were found to be more vulnerable to defence lawyers' suggestive questions. It is particularly concerning that when suggestive questions were asked less often, the use of risky option-posing prompts increased.

Nevertheless, as the Lord Chief Justice Sir John Thomas said, "[T]he real need [is] – not yet more initiatives and reforms, but the cultural change that is necessary to make the new framework a reality" (Plotnikoff & Woolfson, 2009, pp. i-ii). The continuing implementation of legal reforms in many common-law countries such as England, Scotland, and Australia reflects a global recognition of the need for reform. With continued research, outreach, and education, we may contribute to the cultural shift needed to make these reforms a reality.

Chapter 4: The Discussion of Ground Rules Issues in Pre-trial Preparation for Vulnerable Witnesses in English Crown Courts[1]

The treatment of vulnerable witnesses in criminal trials has been a matter of great concern in recent years. There have been a number of cases addressing this[2] and Criminal Procedure Rules and Directions have been issued to deal with the management of these cases[3]. In 1989, the Criminal Justice Act introduced a provision allowing video recordings of testimony from child witnesses (s.32a).[4] Later that year, the Pigot Committee convened to consider the implementation of this provision, and they conclusively recommended that child witnesses *should* give their direct- and cross-examination testimony out of court. [5] They further recommended that "lawyers…[should]…understand how to speak to children and… appreciate the consequences of leading or oppressive questioning (7.9)."[6] In 1990, Parliament authorised pre-recorded forensic interviews to replace the evidence-in-chief in court, and nearly a decade later, the Youth Justice and Criminal Evidence Act (YJCAE, 1999) permitted pre-recorded cross-examination (s.28),[7] although this provision was not implemented at the time. However, the provision was implemented in a pilot study in 2014 in Liverpool, Leeds, and Kingston Crown Courts.[8]

The Section 28 pilot study was intended to assess the appropriateness of full nationwide implementation of Section 28's provisions and included mandatory Ground Rules Hearings (GRHs) during which advocates, the judge, and an intermediary (if applicable) would discuss how best to facilitate the participation of the child witness. Afterwards, children's cross-examinations were to be pre-recorded and, months later, replayed in court for the jury.[9] This study was the first to compare pre-trial preparation in the Section 28 pilot study cases and in a comparable sample of Non-Section 28 cases.

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[1] Because this paper was prepared for publication in the Criminal Law Review, the footnotes are in accordance with the journal's formatting requirements.
[2] For example, see R v Barker [2010] EWCA Crim 4, R v E [2011] EWCA Crim 3028, R v Lubemba [2015] 1 CR. App. R 12, R v Wills [2011] EWCA Crim 3028
[3] *The Criminal Procedure Rules Part 3 (*CPR) [2016]; Criminal Practice Directions (CPD) [2015] EWCA Crim 1567 3D to G
[4] Criminal Justice Act 1989, s.32a (CJA, 1989)
[5] Pigot, *Report of the advisory group on video-recorded evidence* (Home Office, 1989).
[6] id (7.9)
[7] YJCEA, 1999 s.27-28
[8] Ministry of Justice, *Transforming the CJS: A strategy and action plan to reform the criminal justice system (Ministry of Justice, 2013).*
[9] Henderson and Lamb, "Pre-Recording Children's Testimony: Effects on Case Progression" (Criminal Law Review, 2017).

The Questioning and Effective Participation of Children and Vulnerable People in Criminal Trials

In September of 2014, the government announced that all publicly funded advocates would have to undergo mandatory specialist training before being allowed to conduct serious sexual assault and rape cases.[10] A multi-professional group headed by HHJ Peter Rook QC designed a course, "Advocacy and the Vulnerable," which included research from developmental experts and psychologists as well as legal experts, practitioners, and the judiciary.[11] This course is now being delivered to all advocates nationwide through the Inns of Court School of Law, the Bar Council, and The Law Society (see note).[12] This course aims to teach advocates how to appropriately question vulnerable people, including children, in accordance with their cognitive and developmental requirements.[13]

In addition, the Court of Criminal Appeal has repeatedly stated, in a growing body of case law, that advocates who question vulnerable witnesses must adhere to appropriate standards when questioning children and other vulnerable witnesses.[14] Thus, the advocate must now adapt to the witness's communication levels, not the other way around. Rules of court and case law are intended to regulate advocacy and protect children and vulnerable witnesses from inappropriate treatment and questioning.

The Section 28 Pilot Study

The Section 28 pilot study attempted to address two critical –and unresolved— problems in the current legal system: systematic delay that adversely affects the quality of children's memories, and inappropriate cross-examination strategies that manufacture false evidence rather than uncovering untruthful witnesses.[15] The implementation of pre-recorded cross-examination was intended to reduce excessive delay,[16] while the GRHs were intended

[10] As of yet, no date has been set for this requirement. Ministry of Justice, *Our commitment to victims: September 2014* (Ministry of Justice, 2014)
[11] ICCA, *Advocacy and the Vulnerable*, www.icca.ac.uk/advocacy-the-vulnerable
[12] https://www.icca.ac.uk/advocacy-the-vulnerable, https://www.barcouncil.org.uk/media-centre/news-and-press-releases/2016/november/bar-council-launches-vulnerable-witness-advocacy-training/, https://events.lawsociety.org.uk/default.aspx?tabid=633
[13] ICCA, *Advocacy and the Vulnerable*
[14] R v Barker [2010] EWCA Crim 4, R v E [2011] EWCA Crim 3028, R v Lubemba [2015] 1 CR. App. R 12, R v Wills [2011] EWCA Crim 3028
[15] Spencer & Lamb, (Eds.) "*Children and cross-examination: Time to change the rules* (2012)
[16] Henderson and Lamb, "Pre-Recording Children's Testimony" (Criminal Law Review, 2017).

to reduce the incidence of risky and developmentally inappropriate questioning strategies (i.e., leading and suggestive questions) that are more likely to elicit unreliable evidence.[17]

Systematic Delay

A 2009 study conducted for the National Society for the Prevention of Cruelty to Children revealed problematic delays for child witnesses in the UK legal system. The average delay for children testifying in Crown Court cases was 13 months between reporting the offense (i.e., forensic interview) and testifying in trial. Children also spent, on average, 5.8 hours waiting at court to give their evidence. [18] It was predicted that a pre-recorded cross-examination would expedite children's involvement in the proceedings.[19] Henderson and Lamb's later study revealed that children in the Section 28 pilot study indeed experienced significantly shorter delays between disclosure and cross-examination (291 days versus 423 days), as well as in time spent at the courthouse (21 minutes versus 79 minutes), thereby demonstrating that the pre-recorded cross-examinations effectively reduced systematic delay, as intended.[20] As the Section 28 procedure became more routine and established, it was hoped that even greater reductions in delay might be achieved.

Cross-Examination

Cross-examination traditionally involves questioning designed to undermine the witness' evidence and credibility, with advocates taught to do so by asking leading questions when cross-examining witnesses. More specifically, these leading questions often involve suggestive, frequently tagged, questions (i.e., close-ended utterances that assume unintroduced information and/or imply an expected response, e.g., "And then he touched you, right?") or narrow option-posing questions (i.e., close-ended utterances that require a confirmation, negation, or selection of interviewer-given options, e.g., "Did he touch you?")[21] even though these risky questions elicit less information,[22] are more likely to

[17] Spencer and Lamb, (Eds.) "*Children and cross-examination: Time to change the rules*" (2012).
[18] Plotnikoff and Woolfson, "Measuring up?" In *Evaluating Implementation of*. (2009).
[19] Spencer and Lamb, "*Children and cross-examination: Time to change the rules*" (2012).
[20] Henderson and Lamb, "Pre-Recording Children's Testimony" (Criminal Law Review, 2017).
[21] Andrews and Lamb, "How do lawyers examine and cross-examine children in Scotland?" (2017); Klemfuss, Quas, and Lyon, "Attorney's questions and children's productivity in child sexual abuse criminal trials" (2014); Stolzenberg and Lyon, "How attorneys question children about the dynamics of sexual abuse and disclosure in criminal trials" (2014).
[22] Lamb, Orbach, Hershkowitz, Esplin, and Horowitz, "A structured forensic interview protocol improves the quality and informativeness of investigative interviews with children: A review of research using the NICHD Investigative Interview Protocol" (2007).

contaminate children's evidence,[23] and more often encourage self-contradictions than do less risky questions.[24] Younger children are even more likely than older children to respond erroneously to leading and suggestive questions.[25] Furthermore, because children forget more rapidly than adults do,[26] extended pre-trial delays adversely affect children's memories of the events, further degrading the accuracy of their reports and making them even more susceptible to suggestion.[27] Lastly, the stress experienced while awaiting questioning and during cross-examination can interfere with memory and attention, thus inhibiting children's abilities to recall details and to communicate these details effectively.[28]

In cross-examination, there is also the issue of "putting the case" whereby the advocate challenges the witness by relaying the defendant's version of the alleged events. Children can find this very upsetting and confusing and, as a result, the topic has been dealt with in numerous Court of Appeals authorities. For example, in the landmark case of R v Barker [29], the then Lord Chief Justice determined, "When the issue is whether the child is lying or mistaken… it should not be over-problematic for the advocate to formulate short, simple questions which put the essential elements of the defendant's case to the witness." It was later noted in R v Lubemba that "if there is a right to 'put one's case' (about which we have our doubts) it must be modified for young or vulnerable witnesses."[30] In addition, the Criminal Practice Directions recognises that the court may dispense with normal practice and impose restrictions on "putting the case." [31]

It is emphasised throughout case law that, despite restrictions that may be imposed during the cross-examination, the defendant still has the right to a fair trial and, if deemed necessary, the judge should explain the limitations to the jury. Research demonstrates that children are able to handle cross-examination if they are questioned appropriately.[32]

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[23]Ceci and Bruck, "Suggestibility of the Child Witness: A Historical Review and Synthesis" (1993).
[24] Andrews and Lamb, "How do lawyers examine and cross-examine children in Scotland?" (2017).
[25] Goodman, Jones, and McLeod, "Is There Consensus About Children's Memory and Suggestibility?" (2017).
[26] Brainerd, Reyna, Howe, and Kingma, "The development of forgetting and reminiscence" (1990).
[27] Flin, Boon, Knox, and Bull, "The effect of a five-month delay on children's and adults' eyewitness memory" (1992).
[28] Hupbach and Dorskind, "Stress selectively affects the reactivated components of a declarative memory" (2014); Quas, Bauer, and Boyce, "Physiological reactivity, social support, and memory in early childhood" (2004).
[29] R v Barker [2010] EWCA Crim 4
[30] R v Lubemba [2015] 1 Cr. App.R 12, see also R v E [2011] EWCA Crim 3028, R v Wills [2011] EWCA Crim 3028
[31] CPD 3E.4
[32] Andrews and Lamb, "How do lawyers examine and cross-examine children in Scotland?" (2017); Klemfuss, Quas, and Lyon, "Attorney's questions and children's productivity in child sexual abuse criminal trials" (2014);

Specifically, the tone and language of 'challenges' differ from the traditional approach, by virtue of being briefer and gentler. The case law and training described above are premised on the assumption that advocates can draft simple and direct questions that comply with ground rules and allow the witness to fairly deal with the advocate's challenges. These issues should be dealt with prior to the cross-examination in Ground Rules Hearings (GRHs), sometimes with the assistance of intermediaries.[33]

Historically, the adversarial style of questioning has been traumatic and counter-productive when the witnesses are young or otherwise vulnerable. It is now recognised, at least in theory, that leading questions (e.g., option-posing, suggestive, tagged, etc.) are risky because they may produce unreliable responses, thereby degrading the quality of evidence. Educational outreach and training opportunities, including programs such as 'Advocacy and the Vulnerable' and 'The Advocates Gateway,' have made acquiring this new knowledge and skillset increasingly accessible. However, research must continue to ensure that judges enforce and advocates adhere to the appropriate protocols dictated by the Criminal Practice Directions and Criminal Procedure Rules.

Intermediaries and Ground Rules Hearings

The YJCEA introduced not only pre-recorded cross-examinations but also the use of intermediaries (s.29) for any or all of the examination of vulnerable witnesses. In 2003, the first Ministry of Justice (MoJ) intermediaries were trained "to assist the administration of justice and not the vulnerable individual represented."[34] The use of intermediaries was piloted in 2006,[35] and reports produced in 2007 indicated that judges and advocates alike were overwhelmingly supportive of the intermediary system.[36] The cited benefits of their involvement included: facilitating communication both prior to trial (e.g., assisting in planning more effective interviews) and at trial; increasing access to justice (e.g., ensuring that cases with vulnerable participants reached trial); and potentially saving time and money

Stolzenberg and Lyon, "How attorneys question children about the dynamics of sexual abuse and disclosure in criminal trials" (2014).

[33] i.e., court-appointed specialists responsible for facilitating communication between witnesses and lawyers

[34] Cooper and Wurtzel, "Better the second time around? Department of Justice Registered Intermediaries Schemes and lessons
from England and Wales" (2014).

[35] Plotnikoff and Woolfson, "The 'Go-Between': evaluation of intermediary pathfinder projects" (2007).

[36] Id, Cooper and Wurtzel, "Better the second time around? Department of Justice Registered Intermediaries Schemes and lessons
from England and Wales" (2014).

(e.g., assisting police in identifying prosecutable cases at an early stage).[37] In 2007, the MoJ began to roll out the scheme nationally.[38]

Because intermediaries must ensure that witnesses are questioned appropriately, they were taught to recommend 'ground rules' in their reports, and to request GRHs so these 'ground rules' could be agreed upon. Thus, they would only need to intervene during questioning when a ground rule was breached.[39] In 2013, a Criminal Practice Direction (CPD)[40] required GRHs in cases involving intermediaries and identified them as good practice in all cases involving vulnerable witnesses.[41] Ground Rules involve the setting down of basic principles to be followed at trial and these hearings are now an essential part of case management in trials involving the vulnerable. GRHs should be held *in advance* of trial except in the most exceptional cases.[42] A thorough knowledge of practice and procedure in this area is required from advocates (and judges), and effective and interventionist case management is expected from the Bench.[43]

Because intermediaries commonly set the agenda for GRHs, practical issues were identified by registered intermediaries and 'The Advocate's Gateway' and these were compiled into the "Ground Rules Hearings Checklist" to facilitate the development of best practice (see Table 1).[44] The checklist includes items that would assist vulnerable defendants, vulnerable witnesses, and intermediaries, and lists several issues to be discussed, including: what issues will be 'put to' the witness; whether a draft of proposed questions has been discussed and/or approved by the judge (and intermediary); and how to avoid repetitive

[37] Plotnikoff and Woolfson, "The 'Go-Between': evaluation of intermediary pathfinder projects" (2007).
[38] In England and Wales, the accused has no access to the Registered Intermediary Scheme; Cooper and Mattison, "Intermediaries, vulnerable people and the quality of evidence: An international comparison of three versions of the English intermediary model" (2017).
[39] Cooper and Wurtzel, "Better the second time around? Department of Justice Registered Intermediaries Schemes and lessons from England and Wales" (2014).
[40] CPD 2013
[41] For a detailed history of the first 10 years of the intermediary scheme in England and Wales see Cooper and Wurtzel, "Better the second time around? Department of Justice Registered Intermediaries Schemes and lessons from England and Wales" (2014) 65(1) Northern Ireland Legal Quarterly 39.
[42] (*Criminal Practice Directions* [2015] EWCA Crim 430 18.3.2015 as amended April 2016, Paragraph 3.E.3, *R v Lubemba* [2015] 1 Cr App R 12 and Sir Brian Leveson *Review of Efficiency in Criminal Proceedings*, January 2015 para. 8.3.1,)
[43] A thought provoking article by Dr Emily Henderson dealing with some of these topics was published in the *Criminal Law Review* 2016, 181; "*Taking control of cross-examination: judges, advocates and intermediaries discuss judicial management of the cross-examination of vulnerable people".*
[44] For a detailed history, see Cooper, Backen, and Marchant, "Getting to grips with Ground Rules Hearings: A Checklist for Judges, Advocates and Intermediaries to Promote the Fair Treatment of Vulnerable People in Court" (2015).

questions.[45] Children are inherently more vulnerable than adults due to their age,[46] and age is the most robust predictor of the quantity and quality of details encoded into memory.[47] Thus, the younger a child is, the more likely an intermediary will be involved to facilitate the child's participation.[48] As such, intermediaries may play especially important roles in GRHs to ensure children are able to give their best evidence.

The Criminal Practice Directions expressly state that pre-trial and trial processes should be adapted as necessary to allow for the effective participation of any vulnerable person.[49] As such, discussions in GRHs aim to reduce children's stress in order to facilitate better recall and communication[50] (e.g., by ordering that the judge and advocates may not wear wigs and gowns; the judge may meet child witnesses before and familiarise them with the live link technology).

The Criminal Practice Directions also state that 'the judiciary is responsible for controlling questioning.'[51] Therefore, discussions also address how children will be questioned during the evidence-in-chief (if applicable) and, in particular, the cross-examination, to ensure that unnecessarily risky questions are not asked of child witnesses. The Criminal Procedure Rules specify that ground rules may include directions about 'putting one's case,' the manner and duration of questioning, questions that may or may not be asked, and the use of models or other aids.[52]

[45] id
[46] YJCEA 1999, s.16; Cooper and Mattison, "Intermediaries, vulnerable people and the quality of evidence: An international comparison of three versions of the English intermediary model," (2017).
[47] Flin, Boon, Knox, and Bull, "The effect of a five-month delay on children's and adults' eyewitness memory," (1992).
[48] Cooper and Wurtzel, "Better the second time around? Department of Justice Registered Intermediaries Schemes and lessons from England and Wales" (2014).
[49] CPD [2015] EWCA Crim 1567 3D to G
[50] Lamb, Malloy, Hershkowitz, and La Rooy, "Children and the law," (2015).
[51] CPD 3E.1 to 3E.6
[52] CPR Part 3, Rule 3.9 (6) and (7), April 2016

Table 1

Ground Rules Issues[53]

Ground Rule	% Yes
ABE for Evidence-in-Chief	97.4%
Mention Use of Intermediary	31.2%
No Robes and/or Wig	28.6%
Screens	5.2%
Live Link	90.9%
Other Special Measure (e.g., witness support person)	7.8%
Special Oath/ Children's Promise	28.6%
Advocate Location During Questioning	2.6%
Duration of Questioning	40.3%
Witness Special Abilities	13%
Scheduling/ Requesting Breaks	3.9%
See Proposed Questions	32.5%
Discuss Questioning Strategies	59.7%
Discuss Repetitive Questions	3.9%
How to Explain Cross-Examination Limitations to Jury	6.5%
Familiarise Witness with Court and Live Link Beforehand	1.3%
When to Refresh Witness's Memory	58.4%
Judge Meeting Witness Before Cross-Examination	41.6%
Best Time of Day to Question Witness	0%
Use of Aids During Questioning	24.7%
Discuss Prosecutor's Questions for Potential Re-examination	5.2%
How to Interpret Nonverbal Communication	0%

[53] Adapted from Cooper, Backen, and Marchant, "Getting to grips with Ground Rules Hearings: A Checklist for Judges, Advocates and Intermediaries to Promote the Fair Treatment of Vulnerable People in Court" (2015)

The Present Study

This was the first study to quantitatively examine the contributions made by both Section 28 implementation and intermediaries during pre-trial preparations (and GRHs). The study examined 1) the effect of Section 28 on pre-trial preparation and GRHs, and 2) the effect of intermediary involvement on pre-trial preparation and GRHs. It also explored 3) whether the discussion of ground rules issues was associated with a reduction in the use of risky questions during the children's cross-examinations. It was hypothesised that more issues would be discussed in cases that required GRHs, specifically Section 28 cases and cases involving intermediaries. It was further hypothesised that the discussion of more ground rules issues would be associated with less risky questioning during cross examination.

Methods

Sample

The MoJ HM Courts and Tribunals Service identified 87 cases (44 Non-Section 28 - hereafter 'NS28' - cases, and 43 Section 28 - hereafter 'S28' - cases) that met the necessary criteria, i.e., they involved children under the age of 16 testifying as alleged victims of sexual assault. All S28 cases took place in 2014, while NS28 cases took place from 2012 to 2016. Analyses confirmed that the year of the case did not affect any dependent variables examined in the paper (i.e., number of GRH issues, proportions of question types), and thus all cases were included in analyses.[54] Cases for the NS28 group came from Bradford, Durham, Hull, Luton, Newcastle, Norwich, and Oxford, while cases for the S28 group came from Liverpool, Leeds, and Kingston. The NS28 and S28 cases were matched with respect to child's gender, child's age at the time of cross-examination, frequency and severity of abuse, child-suspect relationship, and verdict.

Recordings of the courtroom examinations were transcribed, anonymised, and coded, while the accompanying forensic interview ("Achieving Best Evidence") transcripts and trial logs were also combed for relevant information. The trial logs consisted of a detailed timeline of the legal proceedings, accompanied by court clerks' notes, from the first preliminary hearing through trial and sentencing.

[54] A linear regression assessing the association between year and the number of GRH issues discussed was not significant, $F(1, 39) = .078$, $p = .78$, $R^2 = .05$; A linear regression assessing the association between year and the proportion of questions asked that were suggestive or option-posing was not significant, $F(2, 41) = .71$, $p = .50$, $R^2 = .18$.

Coding

In this study, the trial logs were scoured for details regarding pre-trial preparation. Coding was adapted from Cooper and colleagues' "Ground Rules Hearings Checklist."[55] 22 ground rules issues were coded as "1" if mentioned in the trial logs and "0" if not mentioned. For example, if the judge and/or lawyers considered the use of a live link but, in the end, the witness asked for a screen instead, this would be coded as a "1" for both live link and for screen. All ground rules issues considered are listed on Table 1 along with an indication of how often each was discussed. The numbers of issues discussed were tabulated in a 'total score.' An additional reliability coder scored a random selection of the trial logs (20%, n = 15) to ensure consistency in the coding. Interrater reliability coefficients for all variables were high, K = 1.0, indicating consensus regarding the presence or absence of all GRH issues.

A rater also extracted and recorded details about case facts: the complainant's age at trial or S28 hearing; relationship to the defendant; verdict; and frequency and severity of alleged abuse. When the trial log indicated that there was a discussion about how to appropriately question the witness, the duration of the discussion was noted (N = 13, NS28; N = 33, S28). Lastly, the proportions of option-posing and suggestive prompts used by the defence barristers during the cross-examination were calculated (Henderson & Lamb, 2018).[56]

Overall, 77 trial logs were coded, accounting for 87 child witnesses because several cases had multiple child witnesses. The Non-Section 28 ("NS28") condition had 41 trial logs (44 children) and the Section 28 ("S28") condition had 36 trial logs (43 children). 13 trial logs (6 NS28 cases, 7 S28 cases) referred to participation by intermediaries. Intermediaries were not used significantly more in the S28 cases than in the NS28 cases. As well, intermediary presence did not differ according to child's age.

Results

Preliminary Analyses

To ensure that no extraneous variables would affect analyses and interpretations, discriminant function analyses were conducted to identify any associations between the

[55] Cooper, Backen, and Marchant, "Getting to grips with Ground Rules Hearings: A Checklist for Judges, Advocates and Intermediaries to Promote the Fair Treatment of Vulnerable People in Court" (2015)
[56] Proportions were calculated out of question-response pairs. Thus, if a question was interrupted and the child was not given the opportunity to interrupt, the question was excluded from analyses.

number of GRH issues and any case facts (e.g., relationship to offender, severity, and frequency). Child's age was the only variable significantly associated with the number of GRH issues discussed:[57] the child's age affected the number of GRH issues discussed in pre-trial preparation. Thus, the effect of child's age on the GRH issues discussed is explored below.

What GRH Issues were discussed?

The most frequently discussed GRH issue was the use of the ABE interview recording as the evidence-in-chief – only 2 trial logs (both NS28) did not mention discussion of this special measure, likely because those children only gave written witness statements when they disclosed. The use of live link (90%), questioning strategy (60%), and refreshing of the complainant witness's memory (58%) were all mentioned frequently in the trial logs. However, the interpretation of nonverbal communication (e.g., nodding the head; 0%), the location of the advocate during questioning (3%), the scheduling of breaks during questioning (4%), the avoidance of repetitive questions (4%), familiarisation of the witness with the live link (1%), and the best time of day to question the witness (0%) were all seldom, or not at all, mentioned (see Table 1 for additional frequencies).

Did Discussion of GRH Issues Differ by Condition?

Analyses revealed that significantly more GRH issues were discussed in the S28 condition cases (M = 7, SD = 2) than in the NS28 condition cases (M = 5, SD = 3).[58] Chi-square analyses showed that preliminary hearings in the S28 condition were significantly more likely to mention the following issues: the use of live link; the duration of questioning; seeing a draft of proposed questions; discussing questioning strategies; refreshing the witness's memory; barristers meeting the witness before questioning; and questioning strategies to be used in re-examination.[59] In the S28 condition, barristers, judges, and intermediaries (if applicable) discussed questioning strategy significantly longer (M = 23 min, SD = 38) than in the NS28 condition (M = 5 min, SD = 12).[60]

[57] A discriminant function analysis was significant for child's age, $\Lambda = .77$, $\chi 2(8) = 18.13$, $p = .02$, $R^2 = .28$

[58] A generalised linear model (GLM) found a significant effect for condition, $b = -2.38$, Wald $\chi 2(1) = 21.07$, $p < .001$.

[59] Pearson's chi-square analyses found significant relationship between trial conditions and GRH issues: $c^2(1, N = 77) = 6.76$, $p = .01$; $c^2(1, N = 77) = 45.65$, $p < .001$; $c^2(1, N = 77) = 16.44$, $p < .001$; $c^2(1, N = 77) = 28.65$, $p < .001$; $c^2(1, N = 77) = 7.63$, $p = .01$; $c^2(1, N = 77) = 5.45$, $p = .02$; $c^2(1, N = 77) = 4.81$, $p = .04$

[60] A GLM found a significant effect for duration, $b = -16.99$, Wald $\chi 2(1) = 8.48$, $p = .004$.

Did Discussion of GRH Issues Differ by Intermediary Presence?

Analyses revealed that significantly more GRH issues were discussed in cases involving intermediaries (*M* = 10, *SD* = 3) than in cases that did not involve intermediaries (*M* = 5, *SD* = 3).[61] Chi-square analyses showed that cases involving intermediaries were more likely to mention the following GRH issues: advocate location during questioning; witness's particular capabilities; and refreshing the witness's memory. [62] Cases involving intermediaries discussed questioning strategy significantly longer (*M* = 34 min, *SD* = 58) than cases without intermediaries (*M* = 9 min, *SD* = 16).[63]

Did the ground rules discussions reduce the use of risky questions?

Analyses revealed that defence barristers in the S28 condition (*M* = .10, *SD* = .12) used significantly fewer suggestive questions than in the NS28 condition (*M* = .27, *SD* = .19).[64] Neither intermediary presence (No intermediary, *M* = .20, *SD* = .20; intermediary *M* = .17, *SD* = .11), nor the number of GRH issues discussed were significantly associated with the proportion of suggestive questions used in the cross-examination.

Similarly, trial condition was significantly associated with the proportion of option-posing prompts used in cross-examination, whereas intermediary presence (No intermediary, *M* = .65, *SD* = .16; Intermediary, *M* = .68, *SD* = .11) and GRH issues were not.[65] Defence barristers in the S28 condition used more option-posing prompts (*M* = .73, *SD* = .17) than in the NS28 condition (NS28, *M* = .60, *SD* = .15).

Effects of Child's Age on GRH issues

Analyses showed that child's age was positively associated with the discussion of GRH issues: as child's age increased, so did the number of GRH issues mentioned in trial preparation.[66] However, age was not significantly associated with the duration of discussion regarding questioning strategies or the proportion of suggestive or option-posing questions asked in cross-examination.

Discussion

[61] A GLM found a significant effect for intermediary presence, b = -4.07, Wald $\chi2(1) = 35.10$, $p < .001$.
[62] Pearson's chi-square analyses found a significant relationship between intermediaries and GRH issues: $c^2(1, N = 77) = 10.11$, $p = .03$; $c^2(1, N = 77) = 15.23$, $p = .001$; $c^2(1, N = 77) = 4.41$ $p = .03$
[63] A GLM showed a significant effect for duration, b = -23.91, Wald $\chi2(1) = 9.54$, $p = .002$
[64] A GLM showed a significant effect for condition, b = 0.14, Wald $\chi2(1) = 12.54$, $p < .001$.
[65] A GLM showed a significant effect for condition, b = 0.10, Wald $\chi2(1) = 8.11$, $p = .004$.
[66] A GLM showed a significant effect for age, b = 0.24, Wald $\chi2(1) = 4.87$, $p = .03$.

The results demonstrated that, although Section 28 implementation, the holding of GRHs, and the use of intermediaries had the desired effects on the testimonial circumstances for child witnesses, considerable further progress could be made.

Cases involved in the Section 28 pilot study, as well as those in both conditions involving intermediaries, did discuss more GRH issues than the other cases. However, fewer than half, and sometimes, fewer than a quarter, of the GRH issues identified as appropriate were discussed, even in Section 28 cases and/or cases involving intermediaries. It was encouraging that questioning strategies were discussed in a majority of the cases, along with the use of the ABE interview as the evidence-in-chief, the use of live link, and when to refresh the witness's memory. However, the other 18 'recommended' GRH issues were not discussed in more than half of the cases. The best time of day to question the witness or how to interpret the witness's nonverbal communication were not discussed in any case. However, courts have been advised to schedule the cross-examination in the morning so that children will more likely be "fresh" and able to complete their evidence in one day. [67] As well, failure to verbalise a child's nonverbal responses may prevent them from being officially recorded, especially when transcripts rather than video recordings are later referenced (for example, upon appeal).

Cases in the Section 28 pilot study involved fewer suggestive questions in the cross-examination than Non-Section 28 cases, perhaps because Section 28 cases were required to have Ground Rules Hearings, and therefore, were more likely to involve review and/or discussion of proposed cross-examination questions. The presence of an intermediary did not significantly reduce the number of risky questions asked, although cases involving intermediaries discussed questioning strategy longer than cases without intermediaries. It should also be noted that the risky question proportions involved question-response pairs, so when a question was interrupted and thus went unanswered, it would have been excluded from analyses.

These findings demonstrate that risky questioning strategies were still common, even in cases involving progressive and innovative special measures such as pre-recorded cross-examinations and/or the use of intermediaries. The Section 28 cases did involve fewer suggestive questions, but a large minority of the questions asked were still suggestive, and

[67] Plotnikoff and Woolfson, "Measuring up?: Evaluating Implementation of Government commitments to young witnesses in criminal proceedings" (2009).

significantly more option-posing questions were asked than in the NS28 cases. Thus, for all cases, including those with Ground Rules Hearings (including Section 28 cases and those with intermediaries), it is important to underline the need to reduce the use of risky questions, including option-posing questions. While the latter do not explicitly suggest expected responses, they still reduce productivity and are associated with increased numbers of incorrect details in the responses they elicit.[68]

Unexpectedly, more issues were discussed in cases involving older than younger children, and there was no association between the testifying child's age and either the duration of discussion regarding questioning strategies or the proportion of suggestive and option-posing prompts asked in cross-examination. Although children of all ages are vulnerable when subjected to risky questioning, older children encode a higher quality and quantity of details into memory,[69] and are more resistant to suggestion than younger children.[70] Younger children also have a more difficult time understanding commonly discussed concepts such as timing, frequency, duration, and references to other people's intentions.[71] It is also worth noting that age was not associated with the presence of an intermediary: younger children and older children were equally likely to have an intermediary involved.

Our findings suggest that lawyers are failing to adequately recognise and adapt to children's developmental limitations, thereby risking the elicitation of less reliable testimony. However, future research should address in closer detail the contents of GRHs and other pre-trial preparation, because some of the GRH issues may have been discussed pre-trial but not so indicated in the trial logs (e.g., familiarising the witness with the live link, determining the best time of day to question the witness). As well, research should further investigate the effects of GRHs discussions on the quality of testimony and on children's welfare.

The study was the first to address the content of pre-trial preparation in the Section 28 pilot study and its effect on children's subsequent evidence. It showed that more issues were discussed in preliminary hearings in the Section 28 cases and this may have helped reduce the

[68] Lamb, Orbach, Hershkowitz, Esplin, and Horowitz, "A structured forensic interview protocol improves the quality and informativeness of investigative interviews with children: A review of research using the NICHD Investigative Interview Protocol" (2007).
[69] Flin, Boon, Knox, and Bull, "The effect of a five-month delay on children's and adults' eyewitness memory" (1992).
[70] Melnyk, Crossman, and Scullin, "The suggestibility of children's memory" (2007).
[71] Hanna, Davies, Crothers and Henderson, "Questioning child witnesses in New Zealand's criminal justice system: Is cross-examination fair?" (2012)

numbers of suggestive questions asked by the cross-examining barristers. Likewise, intermediary involvement also resulted in more thorough discussions of relevant issues in preliminary hearings. This suggests that these special measures, and others, should continue to be utilised in efforts to ensure that just outcomes are obtained in criminal trials.

Chapter 5: Does Implementation of Reforms Authorised in Section 28 of the Youth Justice and Criminal Evidence Act Affect the Complexity of the Questions Asked of Young Alleged Victims in Court?

> "In short, there seemed to be nothing essentially wrong with this child's competence as a speaker or competency as a witness in a court of law…There did seem to be something very wrong, however, with the adults' competence at asking questions." - (Walker, 1993, p. 67)

Research consistently shows that children can be effective witnesses when they are questioned in developmentally appropriate ways (e.g., Jack, Leov, & Zajac, 2014; Lamb, Brown, Hershkowitz, Orbach, & Esplin, 2018; Sutherland & Hayne, 2001; Walker, Kenniston, & Inada, 2013). Despite this, child witnesses are commonly subjected to developmentally *inappropriate* questioning in and out of court which adversely affects the richness and accuracy of their responses (Andrews & Lamb, 2017; Carter, Bottoms, & Levine, 1996; Hanna, Davies, Crothers, & Henderson, 2012; Lamb et al., 2018; Zajac, Gross, & Hayne, 2003). Not only are children frequently asked risky close-ended and suggestive questions (Andrews & Lamb, 2016; Zajac, Westera, & Kaladelfos, 2017; see Table 1 for definitions) that have been found to contaminate the information provided (Lamb, Orbach, Hershkowitz, Esplin, et al., 2007) and elicit self-contradictions (Andrews & Lamb, 2016; Orbach & Lamb, 2000), but they are often also asked questions whose complexity exceeds their developmental capabilities (Andrews & Lamb, 2017; Hanna et al., 2012; Zajac et al., 2003). Accordingly, British lawyers have been instructed to adapt their questions to children's developmental abilities (*Criminal Practice Directions*, 2015) but when children are asked complex, close-ended, and suggestive questions, they are unable to give their best evidence in court.

Table 1[a]

Utterance Types

	Definition	Example
Invitation	An open-ended request that the child recall information about the incident.	"Tell me everything that happened"
Directive	A cued-recall prompt that focuses the child's attention on information already mentioned and requests additional information of a specific sort, typically using wh-questions (who, what, when, where, how)	"What color was the shirt?" (When the shirt had been mentioned)
Option Posing	A prompt that focuses the child's attention on aspects or details not previously mentioned, requiring confirmation, negation, or selection of an interviewer-given option	"Did it hurt?" "Were your clothes on or off when it happened?"
Suggestive	An utterance that assumes information not disclosed by the child or implies that a particular response is expected	"Did it hurt when he put his finger in you?" (When the child has not mentioned digital penetration). "He wanted you to kiss him, didn't he?"
Suggestive Confrontational	A suggestive utterance used by the lawyer to either explicitly or implicitly confront the child and make them contradict their testimony or cast doubt upon their credibility.	"Is what you are telling me true?" "I'm going to suggest that what you are saying happened did not really happen."
Suggestive Suppositional	A suggestive utterance which is built on the suppositional that an undisclosed action has happened, which may ignore earlier contradicting responses that rules that event out of question.	"What did X tell you?" (when the child did not mention that X told anything) – "Did it hurt when he touched you?" (When child said he was not touched)
Suggestive Introductory	A suggestive utterance where a lawyer introduces undisclosed information or provides restrictive, non-exhaustive options, is a forced-choice question.	"Tell me what happened with/at [a person/place not mentioned by child]"
Suggestive Tag	A tag is a phrase, which when added to another statement can turn the statement into a question and often invites the victim to agree with the statement.	"You told your mom what had happened to you, isn't that right?"
Suggestive 'Do you remember?'	Any utterance including the phrase 'Do you remember?' which implies that the event they are referring to actually took place.	"Do you remember when your mom went to the store?" (No prior mention of this event taking place)
Suggestive Declarative	An utterance directed at the child, but not in the form of an interrogative. It does not directly ask a question but instead seems to be a question only because of the intonation.	"Yeah, you're upset that that's quite important and you didn't tell the police that,"

[a] Andrews & Lamb, 2017; Lamb, et al., 2007

Recently, legal innovations have been implemented to improve conditions for child witnesses (Youth Justice and Criminal Evidence Act [YJCEA], 1999). One such special measure, Section 28 of the YJCEA, pilot-tested from 2014 to 2016, introduced mandatory Ground Rules Hearings in advance of pre-recorded cross-examinations, which relieved children of the obligation to testify during the subsequent trials (Criminal Practice Directions, 2015; Henderson & Lamb, 2017; Ministry of Justice, 2013). During the Ground Rules Hearing, lawyers, the judge, and the intermediary (if applicable) discuss how to best accommodate the child's unique developmental capabilities. In a previous analysis of the same transcripts analysed below, Henderson, Lamb, & Rafferty (under review) showed that implementation of these reforms indeed led defence lawyers to ask less risky questions than they otherwise would. The goal of the current study was to examine whether the implementation of the Section 28 reforms also reduced the complexity of lawyers' questions as intended (Criminal Practice Directions, 2015).

The Youth Justice and Criminal Evidence Act

In 1989, the Criminal Justice Act introduced a provision (s.32a) allowing courts to receive video-recorded testimony from child witnesses. The provision was supported by legal experts who recommended that children should give their direct- and cross-examination testimony out of court and as early as possible (Pigot, 1989). However, a year later, Parliament authorised only that the evidence-in-chief could be replaced by video-recorded evidence (s.27 of YJCEA, 1999). Since then child witnesses in England and Wales have participated in recorded evidential interviews by police officers (currently labelled 'Achieving Best Evidence' [ABE] interviews; Home Office, 2011), and these constitute the majority of the relevant evidence-in-chief in contemporary trials (Henderson & Lamb, 2017). However, child witnesses are still required to return to court months or years after their initial reports to be cross-examined by the defence (Home Office, 2011).

In 1999, Section 28 of the YJCEA authorised pre-recorded cross-examinations, and from 2014 to 2016, this reform was pilot-tested in Leeds, Liverpool, and Kingston Crown Courts. Section 28 aimed to reduce both systemic delay and risky questioning strategies via Ground Rules Hearings (GRHs) and subsequent pre-recorded cross-examinations (for additional information on GRHs, see Cooper, Backen, & Marchant, 2015). Henderson and Lamb (2017) found that the implementation of Section 28 significantly reduced systemic delays between initial disclosure (i.e., ABE interview) and cross-examination while also

reducing the amount of time spent under oath. Henderson, Andrews, and Lamb (in press) also found that Section 28 reduced the amount of suggestive questioning during the cross-examinations although, somewhat worryingly, the proportion of prompts that were closed-ended option-posing questions increased. However, Henderson et al. (in press) focused only on the information-seeking form of the questions asked and did not examine other developmentally relevant features, including their complexity.

Children's Developmental Limitations

Decades of developmental research has demonstrated that children bring unique capabilities and limitations into the legal system (for review, see Lamb, Malloy, Hershkowitz, & La Rooy, 2015), including distinctive and potentially problematic linguistic and communicative skills. Children's vocabulary is more literal (Walker, 1999), more idiosyncratic, and less descriptive than adults' (Dale, 1976; De Villiers & De Villiers, 1979). As a result, children struggle to provide the thorough and comprehensive narratives that are required in a legal setting, and adults frequently misinterpret their narratives (Walker, 1999).

Adults also overestimate children's and adolescents' comprehension of grammatically and linguistically complex sentences and vocabulary (Hanna, Davies, Henderson, Crothers, & Rotherham, 2010; Walker et al., 2013). Questions involving 'before' and 'after' may give children difficulty (Lamb et al., 2015; Olds, 1968), and questions involving temporal (e.g., duration, frequency) and numerical (e.g., height, distance) attributes require advanced conceptual skills that can even challenge adults (Lyon & Saywitz, 2006; Olds, 1968; Orbach & Lamb, 2007; Walker, 1999; Walker et al., 2013). Children have problems processing complex negation (Olds, 1968; Walker, 1999), 'why' questions that invite speculation about others' internal processes (Lamb et al., 2015; Walker, 1999), and verbs in passive voice (Slobin, 1966; Walker, 1999), all of which are likely to characterise many questions asked in court (Andrews & Lamb, 2017). Children and adolescents may not even realise that they have failed to understand complex questions (Perry et al., 1995; Walker, 1999). All of these factors, coupled with children's and adolescents' reluctance to seek clarification (Walker, 1999; Zajac et al., 2003), increase the likelihood of miscommunication.

Question Complexity in Courtrooms

The problem worsens in court where a high proportion of closed-ended and suggestive questions may be asked. Problematically, children often attempt to answer complex closed-ended questions even if they are incomprehensible or unanswerable

(Waterman, Blades, & Spencer, 2000) likely because a simple 'yes' or 'no' often satisfies the questioner (Walker, 1999). Field research consistently demonstrates that both prosecutors and defence lawyers mostly ask option-posing 'yes/no' questions (Hanna et al., 2012; Klemfuss, Quas, & Lyon, 2014; Zajac & Cannan, 2009), and that defence lawyers ask more suggestive questions than prosecutors do (Andrews & Lamb, 2016; Klemfuss et al., 2014; Stolzenberg & Lyon, 2014; Zajac & Cannan, 2009). Not only do closed-ended and suggestive questions elicit erroneous responses and self-contradictions (Lamb, Orbach, Hershkowitz, Horowitz, & Abbott, 2007; Zajac et al., 2003; Zajac & Hayne, 2003), but they also tend to be more linguistically complex (Andrews & Lamb, 2017; Walker et al., 2013). Research has also determined that suggestive questions vary, with some being more complex than others (e.g., tagged prompts; Andrews & Lamb, 2016; Evans, Stolzenberg, & Lyon, 2017; Walker, 1999). For example, Andrews and Lamb (2017) reported that tagged suggestive questions (e.g., "And then you lied to your mom, isn't that right?") were more complex than untagged suggestive questions (e.g., "Why did you lie to your mom?" when the child had not admitted lying). In addition, suggestive suppositional prompts (e.g., "Did it hurt when he touched you?" when the child had not mentioned being touched) were less complex than both suggestive confrontational (e.g., "In your forensic interview, you said it was in May, but now you say it was in August…") and suggestive introduction (e.g., "Tell me what happened with/at [a person/place not mentioned by child]") prompts (Andrews & Lamb, 2017).

Despite the abundance of research identifying the difficulties that children and adolescents have with adult language, few researchers have examined the complexity of the questions lawyers ask when examining children in court. Andrews and Lamb (2017) and Zajac et al. (2003) found that defence lawyers asked more complex questions than prosecutors, perhaps because defence lawyers use more suggestive prompts (Andrews & Lamb, 2016). Hanna et al. (2012) found that defence lawyers used more double negatives and questions with two or more subordinate clauses than prosecutors, but they also found that prosecutors asked more questions containing passive voice than defence lawyers. Hanna et al. (2012), Andrews and Lamb (2017), and Zajac et al. (2003) all showed that defence lawyers did not make accommodations for children's age whereas Zajac et al. (2017) reported that younger children were asked less complex questions than older children.

Thus, research indicates that suggestive questions are the most complex type of question and that defence lawyers often ask more complex questions than prosecutors.

However, additional research is needed to elucidate not only the specific problematic components of both prosecutors' and defence lawyers' questions, but also the relationship between child age and the complexity of lawyers' questions. Because complex questions not only reduce children's accuracy (Andrews & Lamb, 2017; Carter et al., 1996; Zajac et al., 2003), but also affect juror perceptions (Kebbell & Johnson, 2000) and trial outcomes (Evans, Kang, & Lyon, 2008), it is important to identify and attempt to reduce the complexity of questions asked in court.

Current Study

No previous study has investigated the complexity of the questions asked in court during trials pilot-testing the Section 28 reforms (hereafter S28). Accordingly, the complexity of the different types of questions asked of children and youths of different ages by the prosecutors and defence lawyers participating in the S28 cases were compared with those asked in comparable trials not employing the S28 procedures (hereafter NS28). To account for the multifaceted nature of complexity, complexity was measured using several count (i.e., word count, clause count, and number of false starts) and presence-absence (i.e., multiple negatives, 'why' questions, temporal and numeric attributes, 'before/after', and passive voice) measures of each of the questions asked (see Table 2).

Informed by the literature reviewed earlier, it was hypothesised that: (1) S28 lawyers would ask less complex questions than NS28 lawyers; (2) S28 lawyers would ask less complex questions when questioning younger children; (3) prosecutors would ask less complex questions than defence lawyers; (4) and suggestive utterances would be more complex than option-posing and directive utterances.

Table 2.

Definitions of the different dimensions of complexity coded for each utterance

	Definition	Example
Word Count	A count of audible, complete words	
Clause Count	A count of the clauses (units containing both a subject and a predicate)	"What happened that night?" = 1 "[He said] [that you couldn't], [he said] [you're not allowed to]," = 4
False Start	A count of stumbles/ abrupt changes in topic	"Ok, but you did – did you see him on your birthday?" = 1
Multiple Negatives	Utterances containing 2 or more negative terms	"And you replied that you **didn't** know, **didn't** you?"
'Why' questions	Questions that invite speculation about others' internal processes	"Why didn't he like your brother?"
Temporal and Numeric Attributes	Utterances that either (1) request information about time or number, or (2) refer to a specific time or number and request additional information	"Um, between the first and the last time, do you know roughly how long it was between that?"
Before/After	Utterances containing the word 'before' or 'after'	"So, the reason you've never mentioned this **before** is because it isn't true?"
Passive Voice	Utterances containing a passive verb. A passive verb is the form of a verb in which the subject undergoes the action of the verb	"Have you **been promised** money to say these things?"

Methods

Sample

Her Majesty's Courts and Tribunals Service identified 222 English Crown Court cases involving children younger than 16 years of age who testified as alleged victims of sexual abuse between 2012-2016. Of these, 44 NS28 cases and 43 S28 cases met all criteria for the current study: they involved children under the age of 16 who were alleged victims of sexual abuse and whose records contained complete trial recordings and ABE interview transcripts. Researchers made every attempt to obtain records of all S28 pilot study cases with these characteristics. The S28 cases came from Kingston (n = 1), Leeds (n = 16), and Liverpool (n = 26) Crown Courts whereas the NS28 cases came from Bradford (n = 6), Durham (n = 6), Hull (n = 7), Luton (n = 6), Newcastle (n = 12), Norwich (n = 5), and Oxford (n = 2) Crown Courts. Recordings of the relevant court proceedings were transcribed and anonymised at the Ministry of Justice in London. In all but 3 cases (all NS28 cases), the ABE

interviews served as the majority of the evidence-in-chief; witnesses in the remaining 3 cases provided written statements to the police and were more extensively examined in court (see Henderson & Lamb, 2017).

The sample included 69 girls and 18 boys aged between 6 and 15 years with a mean age of 12.02 years (S*D* = 2.53) in the NS28 condition and 12.02 years (S*D* = 2.36) in the S28 condition. Children were categorised into 2 age groups (12 years and younger, 13-15 years old) in accordance with the Sexual Offenses Act (2003), which states that children under the age of 13 can never legally give sexual consent. Children reported single (*n* = 36) or multiple (*n* = 44) incidents of abuse (in 7 cases, the number of alleged incidents was unclear). The alleged offenses were categorised based on the most severe offense as defined by the Crown Prosecution Services Sexual Offense legislation (Crown Prosecution Service, 2003) and included rape or penetration (*n* = 38), sexual assault and sexual activity (*n* = 44), incitement to engage in sexual activity (*n* = 4), and grooming (*n* = 1). All defendants were male and were either 'father' figures (including mothers' romantic partners; *n* = 22), other family members (*n* = 22), friends/acquaintances (*n* = 34), or strangers (*n* = 4). In 5 of the cases, the nature of the relationship was unknown. At trial, 49 of the defendants were found guilty and 38 were acquitted.

Binary logistic regressions confirmed that NS28 and S28 conditions did not significantly differ with respect to child's gender (*p* = 0.32), age (*p* = 0.76), frequency (*p* = 0.14) or severity (*p* = 0.85) of abuse, relationship to offender (*p* = 0.37), or verdict (*p* = 0.74; see Table 3).

Coding of Transcripts

The complexity of all substantive utterances by prosecutors, defence lawyers, judges, and intermediaries was coded using each of the variables defined below, whereas for non-substantive utterances, only word count, clause count, false starts, multiple negatives, and passive voice were coded. The form of all utterances was also categorised (invitation, directive, option-posing, and suggestive prompts; suggestive tagged, declarative, 'do you remember,' confrontational, suppositional, and introductory prompts) using commonly used definitions (see Andrews & Lamb, 2016; Henderson, Andrews, & Lamb, in press) as described in Table 1.

Table 3.

Characteristics of Cases in the NS28 and S28 Conditions

Variables [a]		NS28 (*44*)	S28 (*43*)	*p* [b]
Gender	Male	11	7	0.43
	Female	33	36	
Age	6-12 years old	24	22	0.69
	13-15 years old	20	21	
Frequency	Single	20	16	0.77
	Multiple	23	21	
	Unknown	1	6	
Intermediary	Yes	6	8	0.55
	No	38	35	
GRH	Yes	6	43	0 .00*
	No	38	0	
Severity	Rape	16	16	1.00
	Penetration	3	3	
	Sexual Assault	14	13	
	Sexual Activity	7	10	
	Inciting to Engage	4	0	
	Grooming	0	1	
Relationship to Child	Father Figure	10	12	0.85
	Family Member	12	10	
	Friend/Acquaintance	21	13	
	Stranger	0	4	
	Unable to determine	1	4	
Verdict	Guilty	24	25	0.77
	Not Guilty	20	18	

[a] Variables adapted from Andrews & Lamb, 2016; Klemfuss, Quas, & Lyon, 2014.
[b] Binary logistic regression was run to identify any significant differences between the conditions.

Complexity codes.

Table 2 describes the measures of complexity used in the present study. Absolute numbers of words, clauses, and false starts were tabulated for each utterance and analysed as count variables. The presence or absence of the other dimensions of complexity--multiple negatives, 'why' questions, temporal and numeric attributes, before/after, and passive voice--was also noted in each utterance and were treated as binary categorical variables in the

analyses. Temporal attributes included references to the date, number of occurrences (e.g., 'the third time he touched you'), duration, frequency, and time of day. Numeric attributes involved concepts such as weight, height, distance, and count estimation (e.g., 'how many people were there?').

Inter-rater Reliability

An independent reliability coder recoded 20% of the transcripts (n = 18). Words were counted using Microsoft Word so inter-rater reliability was not assessed. Inter-rater reliability coefficients for the other variables were all high, Kappa (K) > 0.82, indicating good agreement regarding clause count , K = .94 (SE = .01), 95% CI [.92, .96], false starts K = .94 (SE = .02), 95% CI [.90, .98], multiple negatives K = .94 (SE = .02), 95% CI [.90, .98], 'why' questions K = .93 (SE = .04), 95% CI [.85, 1.00], temporal and numeric attributes K = .91 (SE = .01), 95% CI [.89, .93], before/after K = .83 (SE = .04), 95% CI [.75, .91], and passive voice K = .90 (SE = .03), 95% CI [.84, .96].

Analysis Plan

Scores for each of the measures of complexity were compared using Generalised Linear Mixed-effects Logistic Models (GLMMs). Individual analyses were run for both the count and binary dependent variables. Fixed effects included trial condition (NS28, S28), lawyer role (prosecutor, defence), trial condition x lawyer role, question type (directive, option-posing, suggestive), trial condition x question type, and child's age (12 years old and below, 13-15 years old). Follow-up analyses examined the complexity of the different types of suggestive questions asked by defence lawyers (i.e., 'do you remember prompts' [DYR], tagged prompts, declarative prompts, and suggestive confrontational, suppositional, and introductory prompts) in both trial conditions. All GLMM models included a by-subject (i.e., 'child') random intercept to control for the different number of questions addressed to each child (i.e., utterances were nested within child). For example:

$$\textit{Word count} \sim \textit{Condition} \times \textit{Lawyer role} + \textit{Child's age} + (1|\textit{child})$$

Complexity analyses were performed using the *glmer* function in the R package *lme4* with the bobyqa optimiser (Bates, Machler, Bolker, & Walker, 2015). The logit function was used to address the dichotomous nature of the binary variables. GLMMs are preferable to traditional analysis of variance (ANOVA) models because they maximise power while simultaneously estimating between-subject variance (Bates et al., 2014, 2015; Galecki &

Burzykowski, 2013; Pinheiro & Bates, 2000). The most complex converged models are reported below, accompanied by the fixed effect estimates (β), standard errors of the estimates (SE), and estimates of significance (Z and p values). Only significant findings ($p < .05$) are reported below.

Results

Table 4 details the complexity of all speakers' (i.e., prosecutor, defence lawyer, judge, and intermediary) substantive and non-substantive utterances in both trial conditions. Because the analyses were designed to examine the complexity of the lawyers' substantive prompts, all non-substantive utterances and all judicial and intermediary utterances were excluded from the analyses reported below.

Overall Question Complexity

The initial analyses included condition (NS28, S28), lawyer role (prosecutor, defence), condition x lawyer role, and child's age (12 and under, 13-15) as fixed effects, child as a random effect variable, and each of the measures of complexity as dependent variables. All significant main and interaction effects are detailed in Table 5.

Condition. Lawyers made fewer false starts in the S28 condition than in the NS28 condition.

Lawyer role. Defence lawyers asked questions containing fewer words and fewer clauses than prosecutors and were less likely to use passive voice. However, defence lawyers were more likely than prosecutors to ask 'why' questions.

Child's age. Older children were asked questions containing more words and more clauses than younger children. In addition, when questioning older children, lawyers more frequently used 'before' and 'after' and passive voice than when addressing younger children.

Lawyer role x Condition interaction. Defence lawyers in the S28 condition used fewer words and clauses per utterance and fewer multiple negatives than defence lawyers in the NS28 condition. There were no comparable differences between prosecutors in the two conditions.

Table 4.

Descriptive Statistics for of Complexity for All Substantive and Non-Substantive Utterances

			Non-Section 28			Section 28		
	Complexity Measure	Speaker	M	SD	N	M	SD	N
Substantive	Word Count	Prosecutor	15.48	14.07	1243	16.60	12.47	192
		Defence	14.51	10.93	5720	12.88	8.27	3146
		Judge	15.25	16.64	183	12.20	8.08	50
		Intermediary	11.48	9.44	29	10.26	11.54	19
	Clause Count	Prosecutor	2.40	2.23	1243	2.77	2.13	192
		Defence	2.36	1.83	5720	2.11	1.47	3146
		Judge	2.60	2.84	183	2.24	1.62	50
		Intermediary	1.86	1.64	29	1.68	1.97	19
	False Start	Prosecutor	0.14	0.40	1243	0.11	0.39	192
		Defence	0.12	0.39	5720	0.09	0.35	3146
		Judge	0.17	0.46	183	0.04	0.20	50
		Intermediary	0.14	0.35	29	0.05	0.23	19
	Multiple Negatives	Prosecutor	0.02	0.13	1243	0.04	0.19	192
		Defence	0.03	0.17	5720	0.01	0.11	3146
		Judge	0.03	0.18	183	0.02	0.14	50
		Intermediary	0.00	0.00	29	0.05	0.23	19
	‘Why’ Questions	Prosecutor	0.00	0.07	1243	0.00	0.00	192
		Defence	0.02	0.14	5720	0.03	0.17	3146
		Judge	0.00	0.00	183	0.00	0.00	50
		Intermediary	0.03	0.19	29	0.00	0.00	19
	Temporal/ Numeric	Prosecutor	0.18	0.38	1243	0.18	0.39	192
		Defence	0.15	0.35	5720	0.14	0.35	3146
		Judge	0.13	0.34	183	0.18	0.39	50
		Intermediary	0.07	0.26	29	0.16	0.38	19
	Before/After	Prosecutor	0.07	0.25	1243	0.15	0.35	192
		Defence	0.05	0.23	5720	0.06	0.24	3146
		Judge	0.06	0.24	183	0.02	0.14	50
		Intermediary	0.03	0.19	29	0.05	0.23	19

	Passive Voice	Prosecutor	0.05	0.21	1243	0.08	0.27	192
		Defence	0.03	0.17	5720	0.03	0.16	3146
		Judge	0.02	0.15	183	0.04	0.20	50
		Intermediary	0.03	0.19	29	0.00	0.00	19
Non-Substantive	Word Count	Prosecutor	17.45	18.05	370	11.22	10.87	78
		Defence	15.45	15.58	653	13.49	11.49	294
		Judge	18.59	23.24	1145	19.13	19.79	571
		Intermediary	10.20	10.11	97	13.51	14.50	43
	Clause Count	Prosecutor	2.55	3.07	370	1.51	1.86	78
		Defence	2.37	2.58	653	1.95	1.85	294
		Judge	2.68	3.34	1145	3.10	3.51	571
		Intermediary	1.84	1.57	97	1.81	1.53	43
	False Start	Prosecutor	0.11	0.44	370	0.06	0.30	78
		Defence	0.11	0.37	653	0.06	0.32	294
		Judge	0.09	0.33	1145	0.05	0.27	571
		Intermediary	0.06	0.24	97	0.02	0.15	43
	Multiple Negatives	Prosecutor	0.01	0.10	370	0.01	0.11	78
		Defence	0.03	0.18	653	0.03	0.17	294
		Judge	0.04	0.19	1145	0.07	0.25	571
		Intermediary	0.01	0.10	97	0.00	0.00	43
	Passive Voice	Prosecutor	0.09	0.28	370	0.08	0.27	78
		Defence	0.04	0.19	653	0.04	0.19	294
		Judge	0.06	0.24	1145	0.08	0.26	571
		Intermediary	0.05	0.22	97	0.19	0.39	43

Table 5.

Results of GLMM Analyses Exploring Effects of Condition, Lawyer Role, and Child's Age on Dimensions of Complexity

	Fixed Effect	*β*	*SE*	*z* value	*p*
Word Count	Condition	-0.05	0.05	-1.05	0.29
	Lawyer	-0.07	0.01	-7.73	<0.001
	Child's Age	0.15	0.05	3.20	0.001
	Condition*Lawyer	-0.09	0.02	-4.14	<0.001
Clause Count	Condition	0.04	0.07	0.65	0.51
	Lawyer	-0.05	0.02	-2.02	0.04
	Child's Age	0.13	0.04	3.13	0.002
	Condition*Lawyer	-0.18	0.06	-3.18	0.001
False Start	Condition	-0.56	0.28	-1.98	0.047
	Lawyer	0.01	0.09	0.13	0.90
	Child's Age	-0.03	0.14	-0.24	0.81
	Condition*Lawyer	0.07	0.26	0.29	0.77
Multiple Negatives	Condition	0.48	0.54	0.89	0.37
	Lawyer	0.44	0.25	1.74	0.08
	Child's Age	0.31	0.24	1.29	0.20
	Condition*Lawyer	-1.52	0.53	-2.86	0.004
'Why' Questions	Condition	-12.99	11.80	-1.10	0.27
	Lawyer	1.30	0.43	3.01	0.003
	Child's Age	-0.40	0.27	-1.51	0.13
	Condition*Lawyer	13.19	11.80	1.12	0.26
Before/After	Condition	0.38	0.30	1.28	0.20
	Lawyer	-0.26	0.14	-1.82	0.07
	Child's Age	0.40	0.15	2.60	0.009
	Condition*Lawyer	-0.28	0.28	-1.00	0.32
Passive Voice	Condition	0.44	0.38	1.17	0.24
	Lawyer	-0.64	0.17	-3.71	<0.001
	Child's Age	0.78	0.20	3.81	<0.001
	Condition*Lawyer	-0.57	0.37	-1.56	0.12

Complexity of Different Types of Questions

Because prosecutors asked relatively few substantive questions (*n* = 1435, 7.2%), only the types of questions asked by defence lawyers were further examined. Because so few invitations were used by defence lawyers (*n* = 12), these too were excluded from further analyses. Fixed effects included the utterance type (i.e., directive, option-posing, and suggestive), condition, condition x utterance type, and child's age, whereas 'child' was modelled as a random effect. Table 6 describes the complexity of prosecutors' and defence lawyers' directive, option-posing, and suggestive utterances in both conditions, and Table 7 shows the significant main and interaction effects involving question type variables.

Next, the complexity of the different types of suggestive questions (i.e., DYR prompts, tagged prompts, declaratives, and the suggestive subtypes) and of their other prompts (e.g., tagged suggestive prompts vs. untagged suggestive, directive, and option-posing prompts) were compared. Table 8 describes the complexity of the different types of suggestive questions. Fixed effects included the types of suggestive questions, condition, and condition x suggestive question type with 'child' as a random effect. The significant effects are reported in Table 9.

Condition. The questions asked by defence lawyers in the S28 condition involved fewer words and fewer clauses than those asked by defence lawyers in the NS28 condition. In addition, defence lawyers in the S28 condition made fewer false starts and were less likely to refer to temporal and numeric attributes than defence lawyers in the NS28 condition.

Question types. Compared to option-posing prompts, directive utterances contained fewer words and clauses, while suggestive utterances contained more words and clauses. Suggestive utterances were more likely than option-posing utterances to be 'why' questions and were more likely to contain multiple negatives. Both suggestive and directive utterances were more likely than option-posing utterances to make reference to temporal and numerical attributes. However, directive utterances and suggestive utterances were both less likely to include 'before/after' than option-posing utterances. Lastly, directive utterances were less likely to contain passive voice than option-posing utterances.

Suggestive DYR prompts contained more words, clauses and false starts than the defence lawyers' other prompts. Tagged suggestive prompts contained more words and clauses than untagged prompts and were more likely to make reference to temporal and numeric attributes, passive voice, and multiple negatives. Declarative suggestive prompts

contained fewer words, fewer clauses and fewer false starts than defence lawyers' other prompts and were less likely to ask 'why' or use 'before/after.'

Compared to confrontational utterances, suppositional questions contained more words and clauses, whilst introductory questions contained fewer words and clauses. Both suppositional and introductory suggestive utterances were more likely to contain references to temporal and numerical attributes than confrontational suggestive utterances and were less likely to contain multiple negatives.

Child's age. On average, the questions asked of older children by defence lawyers included more words, clauses, and 'before/after' references, and were more likely to involve passive voice than the questions they asked of younger children.

Question type x condition. Directive utterances in the S28 condition included fewer false starts and were less likely to be 'why' questions than directive utterances in the NS28 condition. Both DYR prompts and tagged prompts in the S28 condition contained fewer words than those in the NS28 condition whereas declarative prompts in the S28 condition contained more words and more clauses and were more likely to ask 'why' than declarative prompts in the NS28 condition. Lastly, in the S28 condition, both suppositional and introductory utterances, respectively, contained fewer words and clauses than their counterparts in the NS28 condition.

Table 6.

Complexity of Lawyers' Directive, Option-Posing, and Suggestive Utterances in both S28 and NS28 Cases

			Non-Section 28			Section 28		
		Speaker	M	SD	N	M	SD	N
Prosecutor	Word Count	Directive	14.60	12.25	504	16.66	13.60	80
		Option-Posing	16.85	15.48	653	16.83	11.75	104
		Suggestive	17.07	9.24	30	10.50	7.68	4
	Clause Count	Directive	2.33	1.94	504	2.91	2.30	80
		Option-Posing	2.54	2.44	653	2.68	1.96	104
		Suggestive	2.80	1.58	30	1.75	1.50	4
	False Start	Directive	0.16	0.44	504	0.11	0.36	80
		Option-Posing	0.12	0.38	653	0.10	0.33	104
		Suggestive	0.13	0.35	30	0.00	0.00	4
	Multiple Negatives	Directive	0.02	0.14	504	0.04	0.19	80
		Option-Posing	0.02	0.12	653	0.02	0.14	104
		Suggestive	0.00	0.00	30	0.25	0.50	4
	'Why' Questions	Directive	0.01	0.09	504	0.00	0.00	80
		Option-Posing	0.00	0.06	653	0.00	0.00	104
		Suggestive	0.00	0.00	30	0.00	0.00	4
	Temporal/ Numeric	Directive	0.19	0.39	504	0.20	0.40	80
		Option-Posing	0.29	0.45	653	0.18	0.39	104
		Suggestive	0.20	0.41	30	0.00	0.00	4
	Before/After	Directive	0.06	0.24	504	0.08	0.27	80
		Option-Posing	0.07	0.26	653	0.21	0.41	104
		Suggestive	0.10	0.31	30	0.00	0.00	4
	Passive Voice	Directive	0.03	0.16	504	0.05	0.22	80
		Option-Posing	0.06	0.24	653	0.11	0.31	104
		Suggestive	0.10	0.31	30	0.00	0.00	4
Defence	Word Count	Directive	11.33	8.73	863	11.31	7.69	610
		Option-Posing	14.36	10.64	3198	13.04	7.96	2123
		Suggestive	17.40	11.66	1528	14.68	9.54	384

Clause Count	Directive	1.88	1.46	863	1.94	1.41	610
	Option-Posing	2.31	1.80	3198	2.10	1.41	2123
	Suggestive	2.89	1.90	1528	2.47	1.67	384
False Start	Directive	0.10	0.38	863	0.06	0.27	610
	Option-Posing	0.13	0.38	3198	0.09	0.35	2123
	Suggestive	0.13	0.42	1528	0.12	0.44	384
Multiple Negatives	Directive	0.01	0.10	863	0.01	0.10	610
	Option-Posing	0.02	0.12	3198	0.01	0.09	2123
	Suggestive	0.07	0.25	1528	0.03	0.16	384
‘Why’ Questions	Directive	0.01	0.11	863	0.01	0.11	610
	Option-Posing	0.02	0.13	3198	0.03	0.16	2123
	Suggestive	0.03	0.17	1528	0.07	0.26	384
Temporal/ Numeric	Directive	0.22	0.42	863	0.23	0.42	610
	Option-Posing	0.12	0.33	3198	0.12	0.32	2123
	Suggestive	0.16	0.37	1528	0.11	0.32	384
Before/After	Directive	0.04	0.20	863	0.04	0.21	610
	Option-Posing	0.06	0.24	3198	0.07	0.25	2123
	Suggestive	0.05	0.22	1528	0.06	0.23	384
Passive Voice	Directive	0.01	0.12	863	0.02	0.14	610
	Option-Posing	0.03	0.17	3198	0.03	0.16	2123
	Suggestive	0.04	0.19	1528	0.04	0.19	384

Table 7.

Results of GLMM Analyses Exploring Effects of Condition, Question Type, and Child's Age on Dimensions of Complexity

	Fixed Effect [a]	*B*	*SE*	*z* value	*p*
Word Count	Condition	-0.13	0.05	-2.94	0.003
	Directive	-0.13	0.01	-12.61	<0.001
	Suggestive	0.15	0.01	17.04	<0.001
	Child's Age	0.13	0.05	2.76	0.006
	Condition*Directive	0.00	0.02	0.03	0.98
	Condition*Suggestive	-0.04	0.02	-1.86	0.06
Clause Count	Condition	-0.11	0.04	-2.56	0.01
	Directive	-0.10	0.02	-4.09	<0.001
	Suggestive	0.19	0.02	8.63	<0.001
	Child's Age	0.11	0.04	2.70	0.007
	Condition*Directive	0.04	0.04	0.87	0.38
	Condition*Suggestive	-0.05	0.05	-1.17	0.24
False Starts	Condition	-0.48	0.16	-3.00	0.003
	Directive	0.05	0.10	0.51	0.61
	Suggestive	0.07	0.10	0.74	0.46
	Child's Age	-0.07	0.15	-0.50	0.63
	Condition*Directive	-0.49	0.21	-2.36	0.02
	Condition*Suggestive	0.21	0.20	1.03	0.30
Multiple Negatives	Condition	-0.51	0.31	-1.62	0.11
	Directive	0.19	0.28	0.69	0.49
	Suggestive	1.53	0.19	7.87	<0.001
	Child's Age	0.07	0.22	0.31	0.76
	Condition*Directive	0.08	0.51	0.17	0.87
	Condition*Suggestive	-0.64	0.48	-1.34	0.18
'Why' Questions	Condition	0.52	0.33	1.57	0.12
	Directive	0.11	0.32	0.35	0.72
	Suggestive	0.83	0.25	3.29	0.001
	Child's Age	-0.50	0.30	-1.63	0.10

	Condition*Directive	-1.13	0.54	-2.08	0.04
	Condition*Suggestive	0.00	0.38	0.00	0.99
Temporal/ Numeric	Condition	-0.34	0.16	-2.06	0.04
	Directive	0.70	0.10	7.24	<0.001
	Suggestive	0.23	0.10	2.28	0.023
	Child's Age	0.10	0.15	0.67	0.50
	Condition*Directive	0.12	0.16	0.80	0.42
	Condition*Suggestive	-0.25	0.22	-1.11	0.27
Before/After	Condition	-0.00	0.18	0.01	0.99
	Directive	-0.36	0.17	-2.16	0.03
	Suggestive	-0.33	0.15	-2.15	0.03
	Child's Age	0.46	0.17	2.71	0.007
	Condition*Directive	-0.21	0.27	-0.79	0.43
	Condition*Suggestive	0.28	0.30	0.94	0.35
Passive Voice	Condition	-0.39	0.21	-1.85	0.06
	Directive	-0.58	0.24	-2.41	0.02
	Suggestive	0.07	0.17	0.41	0.68
	Child's Age	0.67	0.19	3.60	< 0.001
	Condition*Directive	0.23	0.40	0.57	0.57
	Condition*Suggestive	0.14	0.39	0.37	0.71

Table 8.

Complexity of Defence Lawyers' Suggestive Questions in the S28 and NS28 Cases

		Non-Section 28			Section 28		
	Question Type	M	SD	N	M	SD	N
Word Count	DYR	23.44	14.92	133	16.60	7.92	47
	Tag	18.16	12.37	649	14.16	7.46	82
	Declarative	14.70	9.25	587	13.66	10.73	182
	Confrontational	18.07	13.40	295	17.32	15.60	56
	Suppositional	22.83	14.31	155	16.60	7.64	50
	Introductory	16.44	10.44	1078	13.81	8.03	278
Clause Count	DYR	3.96	2.54	133	2.94	1.13	47
	Tag	3.23	1.89	649	2.60	1.16	82
	Declarative	2.26	1.52	587	2.19	1.97	182
	Confrontational	3.18	2.29	295	3.25	2.60	56
	Suppositional	3.83	2.44	155	2.86	1.11	50
	Introductory	2.67	1.62	1078	2.24	1.45	278
False Start	DYR	0.17	0.42	133	0.13	0.34	47
	Tag	0.12	0.39	649	0.13	0.49	82
	Declarative	0.12	0.42	587	0.12	0.47	182
	Confrontational	0.10	0.35	295	0.13	0.51	56
	Suppositional	0.18	0.42	155	0.16	0.42	50
	Introductory	0.14	0.43	1078	0.12	0.43	278
Multiple Negatives	DYR	0.04	0.19	133	0.02	0.15	47
	Tag	0.09	0.29	649	0.05	0.22	82
	Declarative	0.05	0.22	587	0.02	0.13	182
	Confrontational	0.13	0.34	295	0.02	0.13	56
	Suppositional	0.04	0.19	155	0.02	0.14	50
	Introductory	0.06	0.23	1078	0.03	0.17	278
'Why' Questions	DYR	0.02	0.12	133	0.04	0.20	47
	Tag	0.04	0.20	649	0.04	0.19	82
	Declarative	0.02	0.14	587	0.09	0.28	182
	Confrontational	0.00	0.06	295	0.00	0.00	56

	Suppositional	0.02	0.14	155	0.06	0.24	50
	Introductory	0.04	0.20	1078	0.09	0.29	278
Temporal/ Numeric	DYR	0.19	0.39	133	0.06	0.25	47
	Tag	0.16	0.37	649	0.13	0.34	82
	Declarative	0.16	0.37	587	0.12	0.33	182
	Confrontational	0.08	0.27	295	0.04	0.19	56
	Suppositional	0.17	0.38	155	0.08	0.27	50
	Introductory	0.18	0.39	1078	0.13	0.34	278
Before/After	DYR	0.07	0.25	133	0.04	0.20	47
	Tag	0.05	0.22	649	0.04	0.19	82
	Declarative	0.04	0.19	587	0.07	0.25	182
	Confrontational	0.05	0.22	295	0.02	0.13	56
	Suppositional	0.07	0.26	155	0.04	0.20	50
	Introductory	0.05	0.21	1078	0.07	0.25	278
Passive Voice	DYR	0.03	0.17	133	0.06	0.25	47
	Tag	0.05	0.21	649	0.01	0.11	82
	Declarative	0.03	0.18	587	0.04	0.19	182
	Confrontational	0.03	0.18	295	0.04	0.19	56
	Suppositional	0.03	0.16	155	0.06	0.24	50
	Introductory	0.04	0.20	1078	0.04	0.19	278

Table 9.

Results of GLMM Analyses Exploring Effects of Trial Condition and Types of Suggestive Questions on Dimensions of Complexity

Suggestive Question	Complexity Measure	Fixed Effect [a]	*B*	*SE*	*z* value	*p*
'DYR'	Word Count	Condition	-0.15	0.05	-2.95	0.003
		DYR subtype	0.45	0.01	31.65	<0.001
		Condition*DYR	-0.10	0.028	-3.60	<0.001
	Clause Count	Condition	-0.13	0.05	-2.75	0.006
		DYR subtype	0.52	0.03	15.41	<0.001
		Condition*DYR	-0.11	0.07	-1.74	0.08
	False Start	Condition	-0.48	0.16	-3.07	<0.001
		DYR subtype	0.41	0.16	2.65	0.008
		Condition*DYR	0.41	0.27	1.49	0.14
Tagged Prompts	Word Count	Condition	-0.13	0.05	-2.72	0.007
		Tag	0.19	0.01	21.40	<0.001
		Condition*Tag	-0.06	0.02	-2.94	0.003
	Clause Count	Condition	-0.08	0.04	-1.88	0.06
		Tag	0.33	0.02	15.35	<0.001
		Condition*Tag	-0.06	0.05	-1.20	0.23
	False Start	Condition	-0.43	0.16	-2.75	0.006
		Tag	0.08	0.10	0.82	0.41
		Condition*Tag	0.01	0.25	0.04	0.97
	Multiple Negatives	Condition	-0.61	0.30	-2.05	0.04
		Tag	1.20	0.19	6.32	<0.001
		Condition*Tag	-0.92	0.65	-1.41	0.16
	Temporal/ Numeric	Condition	-0.36	0.17	-2.14	0.03
		Tag	0.25	0.10	2.45	0.01
		Condition*Tag	0.09	0.25	0.35	0.73
	Passive Voice	Condition	-0.32	0.22	-1.48	0.14
		Tag	0.36	0.17	2.12	0.03
		Condition*Tag	0.27	0.41	0.67	0.51
Declarative Prompts	Word Count	Condition	-0.20	0.05	-3.97	<0.001
		Declarative	-0.29	0.01	-30.30	<0.001
		Condition*Declarative	0.12	0.02	6.46	<0.001

	Clause Count	Condition	-0.19	0.05	-3.95	<0.001
		Declarative	-0.32	0.02	-13.67	<0.001
		Condition*Declarative	0.16	0.04	3.60	<0.001
	False Start	Condition	-0.50	0.16	-3.14	0.002
		Declarative	-0.26	0.10	-2.57	0.01
		Condition*Declarative	0.22	0.20	1.10	0.27
	Why Questions	Condition	0.07	0.35	0.20	0.84
		Declarative	-0.70	0.33	-2.14	0.03
		Condition*Declarative	0.89	0.43	2.09	0.04
	Before/After	Condition	0.03	0.18	0.16	0.88
		Declarative	-0.36	0.15	-2.37	0.02
		Condition*Declarative	0.26	0.26	1.00	0.32
Suggestive Subtype	Word Count	Condition	0.01	0.09	0.10	0.92
		Suppositional	0.27	0.03	10.74	< 0.001
		Introductory	-0.12	0.02	-6.63	< 0.001
		Condition*Suppositional	-0.26	0.06	-4.10	< 0.001
		Condition*Introductory	-0.12	0.05	-2.36	0.02
	Clause Count	Condition	0.09	0.11	0.82	0.41
		Suppositional	0.20	0.06	3.29	<0 .001
		Introductory	-0.19	0.04	-4.46	<0 .001
		Condition*Suppositional	-0.34	0.14	-2.40	0.02
		Condition*Introductory	-0.22	0.11	-2.0	0.047
	Multiple Negatives	Condition	-1.74	1.04	-1.66	0.10
		Suppositional	-1.23	0.50	-2.47	0.01
		Introductory	-0.90	0.25	-3.62	<0 .001
		Condition*Suppositional	1.20	1.52	0.79	0.43
		Condition*Introductory	0.96	1.13	0.85	0.40
	Temporal/ Numeric	Condition	-0.62	0.79	-0.80	0.43
		Suppositional	0.85	0.35	2.41	0.02
		Introductory	1.03	0.27	3.86	<0 .001
		Condition*Suppositional	-0.11	0.97	-0.12	0.91
		Condition*Introductory	0.08	0.80	0.10	0.92

Discussion

The present study demonstrated that, overall, the S28 reforms reduced the complexity of the questions asked by defence lawyers. It also showed that, although directive, option-posing, and suggestive questions were sometimes complex, suggestive questions were the most complex. Regardless of condition, defence lawyers appeared to adapt the complexity of their questions in accordance with children's ages. Details, interpretations, and implications of the research findings are discussed below.

Key Findings

Contrary to our hypothesis and previous findings (Andrews & Lamb, 2017), prosecutors' questions contained more words and clauses than defence lawyers' questions. However, the finding should be interpreted cautiously because the prosecutors asked so few questions, especially in comparison with the Scottish prosecutors in Andrews and Lamb's (2016) study, because most of the children's evidence-in-chief was provided in England by playing the pre-recorded ABE interviews. This fact underlines the importance of studying the complexity of the questions asked by the police officers who conduct most of the ABE interviews.

Both prosecutors and defence lawyers often asked questions that were quite complex. As in previous research (Hanna et al., 2012), prosecutors used passive voice more often than defence lawyers. This emphasises the need to ensure that both defence lawyers and prosecutors question children appropriately; passive voice questions are much harder than active voice questions for children and adolescents to understand (Walker, 1999) and it is not difficult to rephrase passive voice questions in the active voice (Hanna et al., 2010).

On the other hand, defence lawyers asked more 'why' questions which involved speculating about other people's internal states. Lay witnesses should testify only about facts observed and should not offer opinions (Tapper, 2010) so 'why' questions both violate the laws of evidence and unnecessarily tax children's capabilities.

Both prosecutors and defence lawyers in the S28 condition made fewer false starts than in the NS28 condition, perhaps because judges in the S28 condition frequently requested drafts of proposed questions in the Ground Rules Hearings (Henderson et al., in press), thereby ensuring pre-trial preparation. Defence lawyers in the S28 condition also asked questions that were simpler and less complex: They contained fewer words, clauses, false

starts, multiple negatives, and references to temporal and numerical attributes than in the NS28 condition. This underlines that the S28 reform attained the stated goal of making questions more developmentally appropriate.

Contrary to previous findings (Andrews & Lamb, 2017; Hanna et al., 2012; Zajac et al., 2003), both prosecutors and defence lawyers asked younger children less complex questions (i.e., questions containing fewer words, fewer clauses, fewer uses of 'before/after' and less passive voice) than they asked older children. This finding is particularly encouraging, and may reflect the effectiveness of a number of recent initiatives and training programs aimed at educating lawyers and judges about current psychological research (see "The Advocate's Gateway," 2016).

Prosecutors asked too few questions to allow an analysis of different types of questions, but defence lawyers' directive utterances contained fewer words, clauses, uses of 'before/after,' and uses of passive voice than their option-posing prompts. Although directive utterances included more references to temporal and numerical attributes than option-posing questions overall, the defence lawyers' directive utterances were less complex than their option-posing utterances. On the other hand, defence lawyers' suggestive utterances contained more words, clauses, 'why' questions, multiple negatives, and temporal and numerical attributes than option-posing prompts, indicating that they were the most complex. Option-posing prompts, however, contained more 'before/after' terms than suggestive prompts, demonstrating that all types of questions could be complex. Results also showed that directive utterances in the S28 condition involved fewer false starts and were less likely to be 'why' questions than directive utterances in the NS28 condition, further demonstrating that implementation of the S28 special measures successfully reduced question complexity.

Interesting trends were identified when examining the complexity of the different types of suggestive questions asked. Both 'do you remember' (e.g., "Do you remember when your mom and dad got into a fight?" when the child has never mentioned a fight) and tagged suggestive prompts (e.g., "And then they got in a fight, right?" when the child has never mentioned a fight) contained more words and clauses than other questions. As well, 'do you remember' prompts contained more false starts, and tagged prompts included more references to temporal and numerical attributes, multiple negatives, and passive voice, demonstrating that these questions are often highly complex. Interestingly, however, the opposite was true for declarative suggestive prompts (e.g., "And then they got in a fight…?"): they contained

fewer words, clauses, false starts, 'why' questions, and use of 'before/after' than other questions. Klemfuss et al. (2014) showed that declarative questions are commonly used in court where they elicit responses similar to those elicited using traditional suggestive questions. These findings suggest that 'do you remember' and tagged suggestive prompts may be more complex than declarative suggestive prompts. However, because question complexity is a multifaceted concept, it is also possible that the complexity of declarative questions was not captured by the measures used in this study. Researchers should thus continue to investigate the complexity of declarative questions and its effect on the accuracy of children's responses.

When we compared the types of suggestive questions asked in the two conditions, both 'do you remember' and tagged suggestive prompts in the S28 condition were less complex, containing fewer words than their NS28 counterparts. However, declarative suggestive prompts in the S28 condition were more complex, containing more words, clauses, and uses of 'why' than those asked in the NS28 condition. In fact, declarative suggestive questions were the only types of questions examined in this study that were more complex in the S28 condition. This is concerning, not only because such questions are frequently asked in cross-examinations (Klemfuss et al., 2014), but also because the suggestiveness and complexity of declarative questions has yet to be studied. In recent years, the risks associated with tagged prompts have been extensively documented by researchers (Andrews & Lamb, 2016, 2017; Lamb et al., 2018; Spencer & Lamb, 2012; Walker et al., 2013) and in legal training manuals ("Ground rules hearings and the fair treatment of vulnerable people in court," 2016; "The 20 Principles of Questioning," 2017; "The Advocate's Gateway," 2016). To a lesser extent, the complexity of 'Do you remember' prompts has also been noted (Evans et al., 2017; "The 20 Principles of Questioning," 2017). However, as noted by Klemfuss et al. (2014), there has been little research or educational outreach regarding the complex and leading nature of declarative prompts. Thus, the present findings may demonstrate that S28 lawyers are replacing one well-recognised type of risky question with another subtler form: declarative suggestive prompts.

Compared to confrontational suggestive prompts, suppositional suggestive prompts contained more words and clauses while introductory suggestive prompts contained fewer words and clauses. Confrontational suggestive prompts also contained fewer temporal and numerical attributes and more multiple negatives than both suppositional and introductory suggestive prompts. The suppositional and introductory suggestive prompts asked by

defence lawyers in the S28 condition contained fewer words and clauses than those asked by defence lawyers in the NS28 condition. Again, these findings indicated that the S28 reforms had successfully reduced the complexity of lawyers' questions.

Limitations

A number of limitations of the study should be noted. First, outside the ABE interviews, the majority of the children's evidence was provided in response to closed-ended questions asked by defence lawyers. This reduced statistical power necessary to thoroughly examine the question subtypes, and therefore, future research should examine these and additional dimensions of complexity in a larger and more varied data set. The reliance on ABE interviews as evidence-in-chief also restricted our ability to explore the effects of complexity on children's responsiveness. However, research has shown that complex questions elicit less accurate responses from children (Andrews & Lamb, 2017; Carter et al., 1996; Zajac et al., 2003).

In addition, a limited number of young children testified in court, thereby restricting our ability to thoroughly explore the effects of age. However, the study included all relevant S28 cases (i.e., all of those in which young alleged victims of sexual abuse testified). Thus, these results have high ecological validity, despite the relatively small sample sizes, and are likely to reflect current practices in the English system accurately.

Although the ABEs made up the majority of the evidence-in-chief, the complexity of questions asked (typically by police investigators) in the ABEs was not investigated. The current study focused on the complexity of lawyers' questioning; however, it is important to examine the complexity of forensic interviewing, particularly as these interviews may determine whether or not cases proceed to trial. Hanna et al. (2012) found that the questions posed by forensic interviewers in New Zealand were superior to those posed by both types of lawyers and rarely involved passive verbs, complex vocabulary, or double negatives. It remains to be determined whether the ABE questioning experienced by the children in the current study was superior to the quality of questioning that children would have endured had they been directly examined by prosecutors (as in Andrews & Lamb's 2017 study in Scotland).

Lastly, all judges in the S28 condition agreed to participate in the pilot study and thus the benefits associated with implementation of the special measures may have been exaggerated by their self-selection. However, it is promising that, in both conditions, lawyers

seemed to adapt their questioning strategies to the children's ages. Because Ground Rules Hearings have been found to improve questioning strategies regardless of whether the cross-examinations were pre-recorded (Henderson et al., 2017), the present findings similarly indicate that lawyers, judges, and intermediaries are making appropriate accommodations.

Conclusions

The current study demonstrated not only that the implementation of S28 reduced the complexity of the questions asked, but also that lawyers in the English system were appropriately accommodating younger children by asking them less complex questions. The results also provide additional evidence regarding the complexity of suggestive questions, and in particular the complexity of different types of suggestive questions. However, the results also raise new questions regarding the effect of declarative suggestive questions on the accuracy of children's responses and the effect of using pre-recorded ABE interviews in court on prosecutors' questioning strategies.

Overall, the present findings show that the English system is evolving towards a fairer process in which children are being enabled to give their best evidence. These changes are likely attributable not only to progressive legislative reform such as S28, but also to educational and training programs, and crucially, to the dedication and efforts of judges and lawyers who are willing to accommodate the cognitive and linguistic limitations of young witnesses.

Chapter 6: General Discussion

Overall, the four studies described above showed that Section 28 was successful in reducing systemic delay, improving pre-trial preparation, and minimising the risky adversarial nature of questioning. The study described in Chapter 2 showed that children whose cross-examinations were pre-recorded resolved their participation in the system sooner, spent less time on the stand under oath, and gave their testimony earlier in the day, thereby granting them earlier freedom from the legal process. Because age is a major determinant of the accuracy and richness of memory, earlier cross-examination reduces the risk of forgetting or contamination and ensures that children could draw on higher quality memories when giving evidence. As well, children spent significantly less time in the courthouse, thereby reducing the amount of stress endured waiting to testify and further increasing children's ability to effectively communicate their evidence. The reduction in delay and stress, as Pigot reasoned in 1989, should improve the quality of evidence obtained, thereby increasing the likelihood that just verdicts will be reached (Pigot, 1989; Spencer & Lamb, 2012).

Chapter 3 reported that, although the majority of both lawyers' questions were option-posing, defence lawyers in the Section 28 condition asked fewer suggestive questions than their counterparts. Similarly, defence lawyers in cases that involved GRHs asked fewer suggestive and more directive questions. However, younger children were more compliant to defence lawyers' suggestive questions than older children. These findings were significant for several reasons. Firstly, lawyers successfully adopted protocols that subsequently improved their questioning strategies; by reducing their use of suggestive questions, defense lawyers decreased the likelihood of contaminating children's evidence and ensured higher quality evidence for trial. The results also importantly demonstrate younger children's vulnerability to suggestive questions, demonstrating that their language abilities and/or reduced memory of the event made them particularly compliant to defense lawyers' suggestions.

Chapter 4 reported that both the implementation of Section 28 special measures and the use of intermediaries increased both the number of Ground Rules issues discussed in pre-trial preparation, as well as the duration of discussion regarding questioning strategies for cross-examination. Section 28 was associated with more option-posing and fewer suggestive questions, while the use of intermediaries and the number of discussed Ground Rules issues were not associated with the number of risky questions asked in cross-examination. The pre-

trial issues in the checklist aimed to address many of children's developmental limitations that may prevent their effective participation in legal proceedings. An increase in the discussion of GR issues would theoretically make children more comfortable (e.g., removal of wigs and gowns, greeting the child before giving evidence), thereby reducing their stress and improving their descriptions of the alleged event(s). As well, if lawyers discuss the appropriate manner in which to question the children during GRHs, children will further provide more reliable evidence with little risk of contamination. Hence, it is critical that lawyers and judges take advantage of special measures offered to them, such as those noted in the GRH checklist, so that children's best quality evidence can be elicited for trial.

Lastly, Chapter 5 determined that Section 28 defence lawyers asked less complex questions than their Non-Section 28 counterparts. In addition, both prosecutors and defence lawyers, regardless of trial condition, asked younger children less complex questions than older children. The findings were significant demonstrations of defense lawyers' improvement in questioning strategies. Children, and in particular young children, struggle with adult language and grammar; thus, the reduction in question complexity will ensure that lawyers elicit more reliable evidence from child witnesses. It was particularly noteworthy that lawyers also accommodated children's age by asking younger children less complex questions than older children, again highlighting the successes of current training protocols. Because children are often unaware of incomprehension and are also reluctant to ask for clarification, it is imperative that lawyers continue to ask children less complex questions to ensure reliable evidence and, ultimately, just verdicts.

Overall, the results revealed the enormous progress being achieved within the English criminal justice system, likely as a result of special measures, GRHs, intermediary and judicial involvement, and training programs (e.g., "The Advocate's Gateway," 2016). Even in the Non-Section 28 condition, English defence lawyers used proportionally fewer suggestive questions than defence lawyers in Scotland (Andrews & Lamb, 2016), New Zealand (Hanna et al., 2012), and the United States (Andrews, Lamb, & Lyon, 2015a). This may reflect the value of special measures implemented in England, alongside a cultural shift amongst English legal practitioners. GRHs *alone* reduced the use of suggestive questions and increased the use of directive questions, demonstrating the willingness of judges and lawyers to accept and adopt these progressive special measures regardless of their involvement in the pilot study. Similarly, regardless of condition or lawyer role, lawyers asked younger children

less complex questions, again emphasising the ability to and desire of legal practitioners to appropriately question children.

The implementation of Section 28 itself reflected the enlightened nature of the English legal system, and the progress seen in these studies highlights the significant improvements being made in the treatment of vulnerable victims. Rather than halt these efforts, however, this progress should encourage all parties to strive for even higher-quality questioning procedures, as it has been noted that there is still notable room for improvement. Regardless, the current trajectory of English lawyers' acceptance and implementation of special measures bodes well for continued progress in the future.

Limitations

As noted in the previous chapters, there are a number of limitations that should be mentioned. First, due to Section 27 of the Youth Justice and Criminal Evidence Act (1999), children's evidence-in-chief examinations were often replaced by their pre-recorded forensic interviews. The current studies did not investigate the content, style, or quality of the forensic interviews; however, this should be examined as the quality of the interviews not only affects whether cases progress to trial, but also, how jurors later reach a verdict. It would also be fruitful to compare the quality of forensic interviews in cases that did and did not proceed to trial.

Second, because forensic interviews replaced the prosecutors' evidence-in-chief, the majority of children's evidence was elicited by close-ended questions posed by defence lawyers. This restricted the ability to further investigate how children were examined in court (e.g., the use of invitations), as well as the effects of question type on children's responsiveness. However, all relevant Section 28 cases were included in the study, and thus, the results have high ecological validity and reliably reflect the current practices in the English legal system.

Third, while children's experiences in court are defined by a multitude of factors, the current study could examine only a handful of elements likely to affect children's accuracy, informativeness, and welfare. Regarding children's evidence, several factors other than question type and complexity may affect children's accuracy and informativeness, including the content (Andrews & Lamb 2018; Candel, Merckelbach, Jelicic, Limpens, & Widdershoven, 2004) and repetition of questions (Andrews et al., 2015b; 2017). Similarly, the current study only investigated the effect of pre-trial planning on the use of risky prompts.

Future research should investigate the effects of GRHs, intermediaries, and other pre-trial planning not only on the types of questions used, but also on children's responses and well-being throughout the process.

Finally, in the Section 28 condition, judges chose to participate and, as a result, their willingness may inflate benefits of the special measures. However, it is promising that all lawyers, regardless of condition, used less complex questions when questioning children. As well, it appears that judges who held Ground Rules Hearings in the Non-Section 28 condition imposed constructive restrictions similarly to their Section 28 counterparts. Regardless, future research should continue to evaluate the implementation of Section 28 as it is rolled out nationally.

Recommendations for Researchers and Practitioners

The research has identified several topics that merit additional research. Chapter 2 found that younger children experienced longer delays between forensic interview and cross-examination. It is imperative that researchers continue to identify causes of delay as well as strategies to reduce it so that children, particularly younger children, can provide their best evidence. The results also suggested that increased conviction rates were negatively correlated with delay between forensic interview and cross-examination. While this finding was not significant when outliers were excluded from the analyses, it does raise important questions regarding the effects of Section 28 and other special measures on conviction rates. Because special measures are not intended to directly increase conviction rates, but instead, aim to improve the treatment of witnesses and increase accessibility to justice, this does not imply that the special measures are ineffective. Rather, it demonstrates that future research should continue to investigate the relationship between special measures, juror perceptions, and conviction rates.

Chapter 4 found that judges made more accommodations for older children in pre-trial preparation. Future research should explore the reasons for this and the effects of pre-trial preparation on children of all ages, particularly in cases involving Ground Rules Hearings and/or intermediaries. Lastly, due to the restricted sample of question types, problematic question types such as declarative questions (noted in Chapter 5) could not be examined further. Future research should continue to identify risky questioning strategies that reduce accuracy and informativeness, particularly because results of Chapter 3 indicate that lawyers

may swap suggestive questions for option-posing questions, rather than increasing their use of open-ended utterances.

The results of these studies also inform recommendations that may improve practitioners' interactions with children in the legal system. Firstly, although policy barriers prevent pre-recorded cross-examinations from being mandated nationally, Ground Rules Hearings can and should be employed in all cases involving vulnerable witnesses. Analyses revealed only positive effects of Ground Rules Hearings, even though advocates failed to take full advantage (Chapter 4). This suggests that as Ground Rules Hearings become more common, the treatment of child witnesses will continue to improve. Secondly, background literature, particularly in Chapter 2, demonstrates the necessity to include children's perspectives on these issues. Research demonstrates that adults overestimate children and adolescent's capabilities (Chapter 5) and similarly that there are long-term negative effects of children's involvement in the legal system (Chapter 2). It is imperative that practitioners seriously consider the well-being of all involved parties, so the legal system does not unintentionally victimize its participants. Lastly the findings demonstrate the efficacy of interdisciplinary cooperation. The roll-out of special measures, increased training and awareness, and subsequent improvements in the English criminal justice system are the result of tireless cooperation both within and between social scientists, legal practitioners, and policy makers. The noted improvements should hopefully inspire further cooperation and additional progress, rather than inviting complacency.

Implications

Nearly 30 years ago, the Pigot committee suggested 'that a fundamental change of attitude towards children in the legal context is now required' (Pigot, 1989, para. 7.9). At that time, lawyers and judges accepted that cross-examination was theoretically intended to 'discover the truth.' However, they simultaneously welcomed the opportunity to persuade jurors, and they were fully aware that their questioning tactics might impact the reliability of the elicited evidence (Henderson, 2015b). In 2009, Lord Chief Justice Sir John Thomas further emphasised, "[T]he real need [is] – not yet more initiatives and reforms, but the cultural change that is necessary to make the new framework a reality" (Plotnikoff & Woolfson, 2009, pp. i-ii). That 'cultural change' came a year later in the form of a transformative judicial decision (i.e., *R v Barker* [*Barker*], 2010) in which the English Court

of Appeals began to introduce research-informed judgements regarding the appropriate and inappropriate manners for questioning child witnesses.

In 2013, research examining practitioners' opinions following the *Barker* decision found astonishingly optimistic results (Henderson, 2015a, 2015b, 2016). Both lawyers and judges seemed to have abandoned the 1990s interpretation of cross-examination as a way to influence jurors' opinions, and instead, they were increasingly concerned about the incomprehensibility and leading nature of their cross-examinations. They seemed to accept and embrace the *Barker* model of cross-examination, in which one must seek the best evidence rather than purely advocating for one's client (Henderson, 2015b). One judge remarked that '*Barker* has been a turning point … change isn't in the last ten years but in the last five years and *Barker* is the reason because that gave permission to everyone to behave differently,' (Henderson, 2016). However, as Henderson (2016) noted, the study's conclusions need to be tested against a proper English transcript analysis of recent cross-examinations. The current study was the first to independently investigate the effects of the Section 28 reforms on children's questioning procedures. In addition, this study was the first proper transcript analysis of recent English cross-examinations, and as such, provided unprecedented insight into the effects of the both Section 28 and the *Barker* case on English lawyers' behaviour.

It is difficult to separate the success of Section 28 from the *Barker* decision in 2010. In fact, the optimistic results from Henderson's qualitative study (2015a, 2015b, 2016) are mirrored in the results of the current analyses. The Section 28 special measures and the *Barker* decision complement each other: *Barker* instigated the cultural change necessary for real, achievable progress, and Section 28 provided invaluable tools to implement this new culture. In 2010, *Barker* incited a spark that ignited legal reform. GRHs were discussed as early as 2000; however, it was a decade before they were officially recommended for trials involving vulnerable people (Cooper, Backen, & Marchant, 2015; Henderson, 2016). Similarly, the pre-recorded cross-examination was recommended in 1989 (Pigot, 1989), but was not implemented for 25 years. Without the cultural revolution of *Barker*, these Section 28 special measures may have been yet another failure on a growing list of reform failures.

While legal philosophy was drastically altered, the improvement in judges' and lawyers' skills and expertise understandably lagged behind (Henderson, 2015a). In 2013, the majority of judges and lawyers called for increased training, and while the majority had a

huge desire to improve their questioning style, they noted the difficulty in translating research into practice (Henderson, 2015a). Encouragingly, the current analyses also demonstrate that English lawyers in the Section 28 pilot study did successfully translate research into practice. Although there is room for further improvement, they did use fewer suggestive prompts and ask less complex questions than their counterparts, highlighting that English practitioners are willing to take advantage of increased education (e.g., GRHs, training programs) and subsequently adjust their behaviour.

The success of Section 28 has implications for other jurisdictions that are hoping to improve the treatment of vulnerable witnesses yet are facing resistance within the legal culture. They should recognise the prevailing strength of a judiciary-led legal reform. As Henderson (2015a) notes, 'it is practitioners, not the legislature, who govern what happens in cross-examination,' and thus, 'a cultural revolution requires leadership from within the culture.' By reminding lawyers and judges that they are 'guardians of the fair trial,' the current English system demonstrates that lawyers and judges can (and will) become 'revolutionaries' fighting for a fairer system (Henderson, 2015b).

While the *Barker* decision may seem to be a reinterpretation of cross-examination, it is, in actuality, a powerful reiteration of principles that have been embedded in the English legal system as long as cross-examination itself, namely to protect the fairness of the justice system by eliciting the best evidence (Henderson, 2015b). English lawyers were reminded by *Barker* of the fundamental concern to address fairness, and 'once convinced [that] their current practices impede[d] fairness, they [became] the drivers of reform,' (Henderson, 2015b, p. 14). The implementation and subsequent success of Section 28 is a result of this cultural shift, and the current studies amply demonstrate that Section 28 can and should be fully endorsed, nationally rolled-out, and dutifully implemented.

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