MOCK JURORS' PERCEPTIONS OF 'I DON'T KNOW' ANSWERS IN CHILD TESTIMONY

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ABSTRACT

Attorneys questioning child witnesses often ask complex questions that negatively impact children's accuracy and consistency. Research has shown that instructing children to answer confusing questions with "I don't know" can improve their accuracy, but little research has examined the impact of using this strategy on jurors' perceptions of child witness credibility. The present study assessed 702 mock jurors' perceptions of a 4- or 10-year-old child witness in a fabricated sexual assault trial transcript. Number of "don't know" responses were manipulated, and half the jurors were told about the "I don't know" instruction. Results demonstrated that greater numbers of "I don't know" answers during questioning negatively impacted mock jurors' perceptions of children's honesty and cognitive ability, but making jurors aware of the "I don't know" instruction mitigated some of these negative effects. Findings from this study can be used to further inform legal and forensic strategies to protect child witnesses.

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CHAPTER I

INTRODUCTION

In the United States, over 147,000 child maltreatment cases went to court in 2018, almost 30% of all cases handled by Child Protective Services (US Department of Health and Human Services, 2020). In the United States, children as young as 4-years-old can be ruled as competent witnesses and be allowed to testify in court if they are deemed to have an understanding of the difference between right and wrong and can sufficiently demonstrate the capacity to observe events, recollect them, and communicate it. In Tennessee, children under fourteen years of age in the past were presumed incompetent; however, this rule has since been revised to allow a child under fourteen years old to be presumed competent in sexual abuse cases ("General Rule of Competency," 1992). Children may also be legally required to testify in person at trial due to the confrontation clause found in the 6th Amendment (Lyon & Dente, 2012). In many cases, the victim's testimony is the only piece of evidence available in a case (Tabak & Klettke, 2014). For these reasons, many children who experience abuse must testify in court and be questioned by lawyers. Recent research on children's involvement in the legal system has shown that questions asked by lawyers can be too complex for children to understand and could lead to inaccuracies in a child's testimony (Perry, McAuliff, Tam, Claycomb, Dostal, & Flanagan, 1995; Zajac & Hayne, 2003).

Complexity of Legal Language

The language used in legal proceedings, termed “lawyerese”, has been described as an overly complex jargon heavy, ambiguous form of language that only lawyers understand (Burukina, 2012; Perry et al., 1995; Zajac, Westera, & Kaladelfos, 2017). Researchers studying the complexity of questions asked by attorneys when examining eyewitnesses during trials have found that the disparity between what lawyers ask and laypeople’s understanding of those questions and subsequent responses can create issues in the pursuit of justice (Horowitz, ForsterLee, & Brolly, 1996; Kebbell & Giles, 2000; Perry et al., 1995). Both jurors and witnesses can be confused by lawyers’ complex questions. The accuracy and consistency of witness testimony is at risk when complex, confusing questions are asked during examination (Kebbell & Johnson, 2000; Zajac & Hayne, 2003), and jurors make less appropriate decisions for trial outcome when complex language is used (Horowitz et al., 1996).

Language complexity becomes a particular concern during the cross-examination phase of a court trial. Cross-examination refers to the process during a trial when a witness is questioned by the opposing side with the intent to evoke feelings of doubt and reveal untruths in the plaintiff’s testimony ("Cross Examination," 2020). A major responsibility of the defense attorney in sexual abuse cases is to use cross-examination to elicit inconsistencies in eyewitness testimonies and decrease their credibility by introducing reasonable doubt (Szojka, Andrews, Lamb, Stolzenberg, & Lyon, 2017). Ultimately, the defense lawyer’s goal during cross-examination is to ask types of questions that allow for the witness’s testimony to be controlled to fit with the defense’s case; they can do this by asking closed questions (i.e., questions that can be answered with yes or no) or complex, confusing questions that encourage inconsistencies (Eichelbaum, Arnold, & Wilson, 1989).

Cross Examination Questions

When adults are asked difficult questions, their accuracy suffers. In Kebbell and Johnson's (2000) study, adults age 18-46 were asked questions containing negatives ("Did the woman not have black hair?" p. 632), double negatives ("Is it not true to say that the woman did not wear trousers?" p. 632), leading questions ("It is true to say that the attack happened in a park, isn't it?" p. 632), complex vocabulary ("Did the female flee from the perpetrator?" p. 632), and double-barreled questions ("Would you say that it was raining? Could you hear thunder?" p. 632), which were reflective of cross-examination questions. Participants who answered difficult questions on average answered only 67% accurately, while participants asked simplified versions of the questions answered 81% of the questions accurately. Adults had the greatest difficulty with negatives, double negatives, and leading questions (Kebbell & Johnson, 2000).

Even when questioning young children, lawyers have been found to use such tactics during cross-examination (Zajac, Gross, & Hayne, 2003; Zajac, O'Neill, & Hayne, 2012; Zajac et al., 2017). For example, in a sexual assault trial of a 9-year-old alleging an attempted kidnapping by an adult, one of the defense attorneys asked her the following question:

> You don't know if any of your brothers or sisters or if I was your brother—well, any of your brothers or sisters didn't really tell what happened, didn't quite tell the truth once, you don't know of any of that happening in your family? (Perry et al., 1995, p. 610).

In this same trial, the child was also asked:

> Prior to seeing Mr. B. in his front yard on that night—on that day—and the individual in the car, did you ever see Mr. B. get into his car before that, or get out of his car? (Perry et al., 1995, p. 610).

This case provides a notable example of the complex nature of questions attorneys ask when trying to elicit inconsistencies in a witness's testimony (Perry et al., 1995). It is entirely legal,

and common practice, for lawyers to use certain linguistic tactics during cross-examination (Myers, 2017; Perry et al., 1995; Zajac et al., 2017). Complex questions that are used often in cross-examination are typically leading (e.g., "That's what you said, right?") and closed-ended (e.g., "Was it at your house?", prompting a yes/no response) and often involve complex sentence structure, such as double negation (e.g., "Is it not true that you didn't go into his car?" and "So is it not true that you did not stay overnight?"), frequent topic switching (e.g., changing from details about the alleged crime to details about school) and double-barreled questions (e.g., "Did you ride in his car and did he give you a toy?") (Zajac et al., 2003). Additionally, lawyers may use complex, confusing legal terms (e.g., "Is there *evidence* that…?" and "Where did you see the *perpetrator*?") (Zajac et al., 2003). Defense attorneys may also ask questions that do not follow a temporal structure (i.e., not placing events in a time order) (Mugno, Klemfuss, & Lyon, 2016). Studies show that complex questions are more typical of defense attorneys during cross-examination than prosecutors during direct-examination (Zajac et al., 2003), but even prosecutors ask a number of closed-ended or complex questions (Andrews, Lamb, & Lyon, 2015; Evans, Lee, & Lyon, 2009). Andrews and colleagues (2015) analyzed the most common types of questions asked by both prosecutors and defense attorneys in the United States when questioning children. Their results showed that approximately 52% of questions asked by prosecutors were closed-ended and 16% were leading. Questions asked by defense attorneys were approximately 46% closed-ended, and 42% were leading. Their study indicates that the majority of questions that children are asked during trial are complex and difficult for children to answer. Research has indicated that the actual effect of these questioning tactics is that they can hurt the accuracy of both adult and child witnesses (Kebbell & Johnson, 2000; Zajac & Hayne, 2003).

A growing area of research has explored children's difficulties with testifying in trial and, more specifically, being cross-examined. Zajac and Hayne's (2003) research suggests that children have even greater difficulty with cross-examination questions than adults. They asked young children (age 5 and 6) to report on an event that they had witnessed, and later gave some of the children false information. All children were then asked questions reflective of a direct examination six weeks after the event and questions reflecting a cross-examination after eight months. Regardless of whether the child was exposed to misinformation, during the cross-examination phase, 85% of the children in the study changed at least one part of their original report from the direct examination, and 33% changed all parts of their original report. Importantly, even children who did *not* receive any false information significantly declined in accuracy after being cross-examined. In another study, Righarts, Jack, Zajac, and Hayne (2015), observed how delay between a memory event and cross-examination affected children's accuracy. Regardless of delay (a couple of days after event versus 8 months after event), children's accuracy during cross-examination significantly decreased from their accuracy during a prior direct-examination style interview. However, when questioned again using open-ended and non-leading questions one week after cross-examination, the children had much higher accuracy in retaining the memory event. These studies show that it is primarily the nature of cross-examination questions rather than the child's memory capacity that is responsible for inconsistencies and inaccuracies in their testimonies.

Perry and colleagues (1995) designed a study to determine the specific developmental deficits related to language and metacognition that would account for children's unique difficulties in answering difficult "lawyerese" questions. To measure children's abilities to comprehend lawyer questions, they first asked them to repeat the question back verbatim (Perry

et al., 1995, p. 612). A separate score measured if the child's repetition of the question also maintained the sense of the question, such that even if errors are made in verbatim repetition, they could still maintain the original gist of the question. For example, if the child is asked "Did Susan say she did not go into the kitchen?" a response that retains the sense of the question would be, "Did Susan say *that* she did not go into the kitchen?" whereas, "Did Susan say she went into the kitchen?" does not retain the sense of the question. Finally, comprehension as a function of metacognitive ability was measured using a mock traffic light visual representation. Children were asked to point to a green light if the question was easy and they knew the answers, a yellow light if they felt the question was easy but did not know the answer, and a red light if they felt the question was difficult and they did not know the answer.

Perry and colleagues (1995) found developmental trends in children's abilities to repeat questions. Kindergarteners could only repeat the sense of the "lawyerese" questions 23% of the time, while fourth graders repeated around 50% and adults repeated 71.5% of the questions. Though all age groups made significantly more errors repeating the lawyer questions and retaining their sense compared to the simplified questions, the disparity was greatest for the kindergarteners and fourth graders, who were able to correctly repeat a much higher number of simplified questions (73% and 89%, respectively). This suggests that the difficult lawyer questions require a greater language capacity than young children typically achieve in normal development and can disrupt communication with the child.

Children's accuracy can also be affected if they do not fully understand legal vocabulary. Children's knowledge of legal terms increases with age, though adolescents and even adults still often misunderstand the actual meaning of some legal terms (Warren-Leubecker, Tate, Hinton, & Ozbek, 1989). Comprehension is also affected by question structure; sentences with complex

structure are more difficult to comprehend than ones with simple structure. Understanding of double negatives increases with age (Gleason, 1993; Jou, 1988). Children under the age of 8 often mistakenly interpret questions with double negatives as single negatives, which can lead them to misunderstand and, subsequently, incorrectly answer a question. For example, if a child is asked "Did she not tell you she wasn't happy?" he/she may only hear the question in as if it were a single negative (i.e., "Did she not tell you she was happy?"), thus changing the meaning of the question as well as the meaning of the child's intended response. Perry and colleagues (1995) found that both children and adults incorrectly answered questions with double negatives. Kindergarteners and fourth graders achieved 45% and 43% accuracy respectively, and adults achieved only 40% accuracy. All age groups were significantly more capable of answering correctly when the double negative was removed from the question (65% for kindergarteners, 87.5% for fourth graders, and 85% for adults). In addition, children have difficulties answering double-barreled questions (i.e., two questions in one) and often only answer one part of the question (Saywitz, 1995). For example, if asked "Where was your brother? Did you see him?" the child may only respond with "yes, I saw him," which only answers the second half of the question and does not address the first part. Specifically, Perry and colleagues (1995) found that both child and adult participants struggled to answer double-barreled questions, and no age group was able to correctly answer over 35% of that question type.

Perry and colleagues (1995) suggested that metacognitive deficiencies can also explain why children struggle with answering difficult questions. Metacognition refers to the ability to appraise one's own thought process as well as regulate and manage thinking. When answering questions about an event that took place in the past, metacognition is used to determine if the memory of the event that is being retrieved is accurate, whether the memory itself is available for

retrieval, and whether the memory, once retrieved, should be reported or not (Hiller & Weber, 2013). Children's metacognitive skills develop during the preschool years and tend to level off around age 6, particularly in their evaluations of confidence regarding their ability to comprehend a question and recall the correct answer (Markman, 1979; Roebers, 2002; Rohwer, Kloo, & Perner, 2012). Perry and colleagues (1995) found that children have difficulty gauging both their comprehension of difficult lawyer questions and confidence that their responses to those questions are accurate, suggesting that underdeveloped metacognitive skills may lead children to choose to answer difficult questions even when they do not know the answer. In their study, 90% of participants across age group indicated that they understood a question and then answered it correctly when asked simple questions, which was regarded as a "hit." However, when asked the "lawyerese" questions, only 55% of Kindergarteners and 73% of fourth graders said they understood the question and answered it correctly. Kindergarteners had the most difficulty gauging their comprehension compared to older children and college students. Though all age groups showed less comprehension of their understanding with difficult lawyer questions compared to simple questions, older students (fourth graders, ninth graders, and college students) achieved a higher rate of hits (Perry et al., 1995). If a child cannot determine that a question is confusing or that they do not know the answer, they are likely to respond anyway and can risk answering a question inaccurately. Children are more likely to give a response rather than say "I don't know" to confusing or nonsensical questions if they are framed as yes/no questions than if they are open-ended (Waterman, Blades, & Spencer, 2000), suggesting that children are likely to come up with an answer to a closed-ended question regardless of whether they understand what the interviewer is asking or not.

For these reasons, complex lawyer questions are not considered to be developmentally appropriate for children because they do not always *reveal* untruths but rather can *create* untruths. Legal systems have taken some measures to try and limit children's direct involvement in the courtroom and with difficult lawyer questions. For example, Canada's judicial system allows children to present their testimonies via closed-circuit television or a pre-recorded interview (Chong & Connolly, 2015). These strategies allow the child to answer questions from a trained, unbiased interviewer while being in a more comfortable environment. However, no such measures have been widely implemented in the United States, as the 6th Amendment that states that defendants have the right to confront their accusers directly (which, in literal terms, means confront face-to-face, in the same room) is very strictly upheld (Goodman, Levine, Melton, & Ogden, 1991).

Despite the concerns regarding cross-examining children, there is little indication that attorneys are changing their questioning strategies to be more developmentally appropriate. Zajac and colleagues (2017) compared the number of different question types defense attorneys in New Zealand asked children during cross-examination in the 1950s versus those asked in 2018. They found that contemporary defense attorneys asked more questions overall (M=357, SD=23) than historical defense attorneys (M=112, SD=11). More importantly, they found that the contemporary defense attorneys asked a *higher* proportion of complex language (46%) and complex syntax (13%) questions than historical defense attorneys (39% and 7%, respectively). Both historical and contemporary defense attorneys' questions were majority leading (62% for both). Results from Andrews and colleagues' (2015) study examining questions asked by lawyers in the United States also indicated that defense attorneys' questions are still frequently inappropriate for children. They found that the majority of defense attorneys' questions were

closed-ended (46%) and leading (42%). Zajac and colleagues (2017) found that question type was correlated with the child's age (sample ranged from 6 to 18), such that younger children were asked more open ended questions (r=-.18) and fewer leading (r=.33) and complex language (r=.27) questions than older children but were also asked more closed-ended questions (r=-.31) than older children. These studies suggest that the research revolving around children's capacities to report accurate information is not being considered in practice.

One promising development in the United Kingdom, however, is the implementation of ground rules hearings, in which lawyers are required to discuss their cross-examination questions with the judge to determine which questions are developmentally appropriate (Henderson & Lamb, 2018). These ground rules hearings were found to significantly reduce the complexity of defense lawyers' questions, suggesting that the required ground rules hearing may discourage lawyers from asking riskier types of questions. However, these reforms have not been widely used in the United States legal system despite child witness testimony being a commonly accepted form of evidence in child sexual abuse cases.

Effective vs. Ineffective Questioning Strategies

To resolve the difficulties of complex questions that children may face when being questioned in court, legal professionals may look to the substantial body of research examining the types of questions and interviewing strategies that help to increase the accuracy of a child's statement. Children are capable of accurately recounting events as long as they are interviewed using certain developmentally appropriate interviewing techniques (Lamb, Orbach, Hershkowitz, Esplin, & Horowitz, 2007). Specifically, research suggests that interviewers should ask primarily open-ended prompts ("Tell me what happened.") rather than closed-ended questions ("Did he

hurt you?"); when asked open-ended questions, children report more accurate, though less detailed, information (Strange & Hayne, 2013). Closed-ended, yes/no questions should be asked only near the end of the interview if necessary to achieve more detailed information that may be relevant to the investigation (Lamb et al., 2007).

Heavy reliance on closed-ended questions is discouraged because they force the child to make a choice in their response (yes or no) and are framed around what the interviewer knows rather than what the child knows (Lyon, 2010). When both younger and older children are asked closed-ended questions, they are likely to only answer with a single word (e.g., yes or no) and are unlikely to elaborate on any details spontaneously (Lyon, 2010). In addition, yes/no questions can become suggestive questions when they are used to introduce misleading information (Bruck & Ceci, 1999). For example, when interviewers ask questions like "What happened?" and "Who was with you?" they are not introducing any new information, true or false. However, closed-ended questions naturally require the interview to present some level of specific information that the child can either confirm or deny (e.g., "Did he hurt you?" "Was your mom with you?"). This information may be false and, if so, can decrease a child's accuracy (Bruck & Ceci, 1999).

In cases where opposing sides have different beliefs and motivations, interviewers may be more motivated to use developmentally inappropriate questioning techniques, such as asking closed-ended over open-ended questions (Bruck & Ceci, 1995). Lamb and colleagues (2007) investigated the role of interviewer bias and suggestive questioning in increasing inaccuracies in children's statements. Interviewers who believe an assault occurred are more likely to ask questions that are suggestive and leading towards eliciting information that confirms their beliefs. These types of questions can lead children to give responses that are incorrect but consistent with the interviewers' desired outcome (Szojka et al., 2017; Zajac & Hayne, 2003).

Additionally, when interviewers want to elicit highly detailed reports of events from children, they tend to use more closed-ended and leading questions (Guadagno, Powell, & Wright, 2006). In some circumstances, this bias may be unintentional; forensic interviewers know only one side of the story (the child's) and are motivated to pursue that line of reasoning (Bruck & Ceci, 1995). However, in the case of a criminal trial, lawyers are biased to benefit their own clients. Pettit, Fegan, and Howie (1990) found that interviewers who were biased about an event were more likely to ask closed-ended and leading questions, and these questions were more likely to elicit incorrect responses from children.

Because children's reports often lack a lot of detail, interviewers may be motivated to ask questions repeatedly during a forensic interview with a child in order to gain greater clarification and detail (Andrews & Lamb, 2014). Defense attorneys, on the other hand, may ask repeated questions during cross-examination in order to challenge a response that does not align with the defense's case. Howie, Sheehan, Mojarrad, and Wrzesinska (2004) found that children are more likely to contradict themselves in response to repeated questions that are suggestive and that children are likely changing their responses because they are being led to believe their earlier responses were incorrect. Thus, repeated questions may elicit more contradictions and inaccurate information in young children.

These developmentally inappropriate interviewing strategies are often used by defense lawyers when questioning children. Given our adversarial legal system, attorneys are biased to either believe or not believe the child's testimony, so the questions they ask are typically constructed to suggest that something did or did not happen (Szojka, Andrews, Lamb, Stolzenberg, & Lyon, 2017). Additionally, as Perry and colleagues (1995) suggest, lawyers use

language as a tool, and often this takes the form of manipulating the way they ask questions to influence the respondent's answers; children are not equipped to withstand this influence.

Forensic Interviews and 'Ground Rules'

Research has shown that children can be reliable witnesses as long as they are interviewed the right way; as a result, it has become a common practice to have specially trained forensic interviewers to interview children using developmentally appropriate questioning techniques (Lamb et al., 2007). In a forensic interview, this involves asking the child open-ended, non-leading questions. A separate but equally important strategy to help preserve the integrity of a child's report involves encouraging children to follow a set of 'ground rules' when answering interviewers' questions. These ground rules have been developed to aid children in responding to questions in order to increase their accuracy and credibility and to protect them against potentially suggestive questioning (Brubacher, Poole, & Dickinson, 2015; Lamb et al., 2007). There are five different ground rules: 1) stating to the child that the interviewer does not know what event occurred, 2) instructing the child to correct the interviewer when they make a mistake in recounting the child's report, 3) cautioning the child that the interviewer may ask repeat questions, and 4) instructing the child to say "I don't know" or "I don't understand" or ask for clarification if they do not understand or know the answer to a question.

Telling the child that the interviewer does not know what happened, termed the *naivete rule,* is done by either direct statement from the interviewer or from another person (Brubacher et al., 2015; Lamb et al., 2007). Because they are accustomed to conversations with parents and teachers who generally share more background knowledge with them, children may not be able to comprehend that the interviewer does not know what occurred and cannot offer assistance

(Mulder & Vrij, 1996). Children as young as 4 who are informed of the naïveté rule are less likely to give incorrect information if asked misleading questions (Mulder & Vrij, 1996).

The second ground rule involves telling children that they should correct interviewers' mistakes (Brubacher et al., 2015). This rule has been shown to be a predictor of accurate reports of an event in 5- and 9-year-olds when asked non-leading, developmentally appropriate questioning (Brown et al., 2019), but not when they were asked suggestive questions. Children with higher mental ages were better able to use the rule to increase their accuracy, implying that children's effective use of ground rules may be influenced by their ability to recognize the situations in which using ground rules such as the "correct me" rule would be most important (Ceci, Fitneva, & Williams, 2010). The "correct me" rule also includes a warning that interviewers can ask tricky questions (Brubacher et al., 2015). This encourages children to be consciously looking for inaccurate information as well as reducing the social pressure to comply with an interviewer who may be seen by the child as an authority figure. Warren, Hulse-Trotter, and Tubbs (1991) examined the effect of a warning on 7-year-olds', 12-year-olds', and adults' resistance to misleading questions and found that a warning was equally effective for all age groups, suggesting that both older children and adults can benefit from this ground rule. The warning has also been found to work with children as young as 4, effectively reducing errors to misleading questions compared to children who did not receive a warning, particularly in instances of repeated questions (Endres, Poggenpohl, & Erben, 1999).

The third rule encourages understanding that questions can be repeated in interviews so that children will not feel that they need to change their answers (Brubacher et al., 2015). The purpose of this rule is to assure children that asking a repeated question does not mean that their initial response was incorrect, reducing the likelihood that they will try to change their response

(La Rooy & Lamb, 2011). Howie and colleagues (2004) examined children's responses to repeated questions when they were provided with a rationale for why questions were asked repeatedly. When children were told that the interviewer was just trying to remember all the information rather than challenging the child's responses, they were less likely to shift from a correct response to the initial question to an incorrect response to the repeated question, suggesting that this rule could be beneficial in helping children resist suggestibility through repeated questions. However, younger children (4-5 years) changed significantly fewer of their responses to repeated questions, but only when the first instance and repeated instance of each question was asked by the same person. This effect was not present for the 7- to 8-year-olds (Howie et al., 2004). Thus, this rule may not be applicable to a defense lawyer whose rationale for repeating questions is to mislead rather than to reinforce.

One important aspect of these ground rules is that children's ability to understand and use these rules is reliant on their developmental level. Children who have achieved theory of mind as well as metacognition are going to be more likely to understand and benefit from the first three rules; having theory of mind allows understanding the thought process of another person (the interviewer), and metacognition is necessary to understand their own thought processes (Brubacher et al., 2015). Therefore, older children may benefit from these ground rules more than younger children. However, the fourth rule, or the "I don't know" rule, may be more useful for a child of any developmental level because it can still be used by the child regardless of whether they understand *why* they do not know the answer to the question or not (Brubacher et al., 2015). Researchers suggest that saying "I don't know" is better for the child's overall consistency and accuracy than giving an inaccurate response. Children are unlikely to say "I don't know" to difficult questions spontaneously (Waterman et al., 2000). However, children

who practice the “I don’t know” rule are more likely to comprehend and use the rule appropriately, which in turn improves their overall accuracy (Dickinson, Brubacher, & Poole, 2015; Scoboria & Fisico, 2013).

The age of the child and the amount of practice with the “I don’t know” rule have all been found to affect how the child uses “I don’t know” responses. Some studies have shown that, when the “I don’t know” ground rule is simply stated to the child, children younger than five are no more likely to say “I don’t know” than if they had not heard the ground rule instruction (Ellis, Powell, Thomson, & Jones, 2003; Peterson & Grant, 2001). However, in a study where children three to five years old were given more thorough explanations of the rule (e.g., watched a puppet show that showed characters using the “I don’t know” rule or received explicit instructions on how to correctly use the ground rule), the ground rule instruction did increase the number of times the children said “I don’t know” and subsequently increased their accuracy (Endres et al., 1999; Nesbitt & Markham, 1999). Finally, conducting practice interviews to teach the child to use “I don’t know” significantly increased “I don’t know” responses and accuracy for both older and younger children (Cordón, Saetermoe, & Goodman, 2005; Gee, Gregory, & Pipe, 1999; Mulder & Vrij, 1996; Saywitz & Moan-Hardie, 1996).

Perceptions of Credibility

Ground rules and developmentally appropriate interviewing strategies have been shown to improve the accuracy of a child’s statement. However, jurors hearing a child testify in court who are not certain of the actual events that transpired do not know an accurate report from an inaccurate one, particularly if there is very little corroborating evidence. Therefore, it is also important to examine how jurors make judgements of a child’s credibility. There are notable

differences in how jurors perceive a child's credibility based on the child's age. Multiple factors, including cognitive competence, suggestibility, and honesty, have been shown to change with age to affect jurors' perceptions of child credibility (Goodman, Golding, & Haith, 1984; Kehn, Warren, Schweitzer, Nunez, & Pepper, 2014; Nunez, Kehn, & Wright, 2011; Ross, Jurden, Lindsay, & Keeney, 2003)

Honesty

Children younger than 12 years old are viewed as being more honest than older children and adults specifically in child sexual abuse cases (Nunez et al., 2011). Honesty ratings have also been found to relate to verdict, such that higher honesty ratings predict more verdicts (i.e., mock jurors tend to believe the child when they are perceived as being more honest) (Wright, Hanoteau, Parkinson, & Tatham, 2010). Adults view younger children as having little knowledge of or experience with sexual acts, so they are seen as less likely to be capable of describing a sexual abuse if it did not actually occur (Pozzulo, Dempsey, Maeder, & Allen, 2010; Ross et al., 2003). Regardless of the type of case, mock jurors also make credibility judgements based on how much they think children of different ages lie in general. Gender also interacts with age to affect perceptions of honesty (Nunez et al., 2011). Males and females are seen as equally honest up until around the age of 6; then boys' perceived honesty begins to decrease, while girls' perceived honesty increases until around age 10, suggesting that girls are seen as being honest for longer than boys (Nunez et al., 2011).

Cognitive Ability

Another factor found to influence jurors' perceptions of a child's credibility is cognitive ability. When mock jurors view the child as more cognitively competent, they are more likely to believe the child and choose a guilty verdict (Wright et al., 2010). In general, mock jurors view younger children as less cognitively able than older children (Buck & Warren, 2009; Kehn et al., 2014; Ross et al., 2003). This is tied to the perception that memory improves with age, and relates to the finding that jurors view children who make fewer recall errors as more credible (Bruer & Pozzulo, 2014). Mock jurors feel that children's memory reliability increases with age and levels off around age 6 or 7 (Nunez et al., 2011; Wright et al., 2010). This presents an issue because, as studies on difficult lawyer questions and interview strategies have shown, children's ability to recall events accurately does not solely rely on their abilities alone but is also affected by the type of questions they are asked (Jou, 1988; Perry et al., 1995).

Suggestibility

Kehn and colleagues (2014) suggest that a third factor affects how jurors make judgements about children's credibility: suggestibility. Suggestibility refers to the extent to which someone accepts information presented by sources outside of their own memory into their account and memory of an occurrence (Newcombe & Siegal, 1996). In general, younger children are perceived as being more suggestible than older children (Quas, Thompson, Alison, & Clarke, 2005), which does reflect, to an extent, the reality of children's vulnerabilities to suggestion (Connolly & Price, 2006). While 4- and 5-year-old children are perceived as being more suggestible than 6 and 7-year-olds, suggestibility is also determined by other factors such as the

types of questions asked (Bruck & Ceci, 1995; Lamb et al., 2007). A recent study by Mugno and colleagues (2016) examined jurors' perceptions of a child witness according to whether the child was being direct-examined (by a prosecutor) or cross-examined (by a defense attorney) (Mugno et al., 2016). The testimony excerpts came from an actual sexual assault trial and the cross-examination contained more suggestive and leading questions than the direct-examination excerpt. Mock jurors rated the child more favorably if they read the direct-examination of the child versus the cross-examination, suggesting that mock jurors may view children as less credible when they are asked more suggestive and leading questions because they do not see them as being able to resist being misled.

In conclusion, mock jurors determine a child's credibility based on perceived honesty, cognitive ability, and suggestibility, and their ratings on these three dimensions vary based on age, type of case, and type of questions asked. However, if children are equipped with strategies to resist suggestive questioning, how might mock jurors' perceptions change? The present study aims to address this question.

Rationale for Current Study

Jurors place importance on an accurate, consistent eyewitness testimony and rely on the child's age to determine many aspects of their credibility, including their ability to withstand suggestive questioning, their capacity to lie, their naïveté in sexual assault cases, and the reliability of their memory. However, these perceptions are not always accurate reflections of a child's actual abilities; as stated previously, children, even those who are younger, are capable of accurately reporting events given that they are questioned appropriately (Lamb et al., 2007). Additionally, children can learn to protect themselves from suggestion using techniques such as

the “I don’t know” rule (Dickinson et al., 2015; Scoboria & Fisico, 2013). However, little research has examined if adherence to these rules changes jurors’ credibility perceptions when a child faces difficult or suggestive questions. Specifically, no research, to my knowledge, has examined how use of the “I don’t know” rule can affect a child’s credibility.

The study by Mugno and colleagues (2016) presents a concern that jurors feel children are not reliable witnesses under cross-examination, and their credibility could actually be hurt by being cross-examined in a child sexual assault trial. It is true that cross-examination uses complex and leading questions to increase inaccuracies and challenge the child’s credibility (Bruer & Pozzulo, 2014), but children can use ground rules to help them remain accurate and credible (Waterman & Blades, 2011). Specifically, the “I don’t know” ground rule is particularly helpful in decreasing inaccuracies in a statement when children are asked difficult or suggestive questions (Brubacher et al., 2015). It is important to explore how encouraging uncertain responses can affect a child’s credibility; if a case goes to court, increasing the accuracy of a testimony is only useful to the extent that jurors perceive it as a truthful statement. Do people perceive a child’s testimony to be more or less accurate and consistent if they respond to complex questions with “I don’t know”? Do perceptions of credibility regarding “I don’t know” responses vary by age of the child? Does the presence of a ground rule instruction (with the judge telling the child to say “I don’t know” as necessary) affect perceived credibility? The present study addressed these questions by manipulating child response to complex questions, child age, and the presence of a ground rule instruction in a fabricated child sexual assault trial.

The Current Study

The present study was designed to measure mock jurors' perceptions of child witness credibility based on three factors: honesty, credibility, and suggestibility. The proposed study determined how ratings of these three dimensions varied by the age of the child, whether the child said used the "I don't know" rule (responded to difficult questions with "I don't know"), and whether or not the child in the fabricated trial received instruction from the judge to use the "I don't know" rule. The ages represented in this study are 4-years old and 10-years-old, which were chosen based on prior research. Children younger than 6 are seen as significantly more honest regardless of gender (Nunez et al., 2011), and preschool-age children (4 and 5 years of age) are viewed as more suggestible while cognitive ability levels off around 7 years of age (Quas et al., 2005). Therefore, a 4-year-old victim was chosen to represent a child of preschool age. An age of 10 was chosen because they are still viewed as being honest (when they are female) (Nunez et al., 2011) but are seen as more cognitively competent than a 4-year-old (Kehn et al., 2014). Additionally, both ages have frequently been used in the literature on child credibility.

This study was also designed to examine the effect of judicial instruction, in which the judge will instruct the child witness prior to their testimony that they may say "I don't know" if a question is confusing or difficult to them. While not commonly used in the US, the New Zealand judicial system has developed and implemented judicial instructions in child sexual assault cases where child witnesses testify, which often involve the judge giving jury directions such as the following example from Goodman-Delahunty, Cossins, and O'Brien (2011):

> (a) even very young children can accurately remember and report things that have happened to them in the past, but because of developmental differences, children may not report their memories in the same manner or to the same extent as an adult would;

> (b) this does not mean that a child witness is any more or less reliable than an adult witness;
> (c) one difference is that very young children typically say very little without some help to focus on the events in question;
> (d) another difference is that, depending on how they are questioned, very young children can be more open to suggestion than other children or adults;
> (e) the reliability of the evidence of very young children depends on the way they are questioned, and it is important, when deciding how much weight to give to their evidence, to distinguish between open questions aimed at obtaining answers from children in their own words from leading questions that may put words into their mouths (p. 199).

In Goodman-Delahunty's and colleagues' (2011) study, providing judicial instructions was effective in countering misperceptions about children's true abilities to testify in court. In the proposed study, providing a judicial instruction in which the judge tells the child that she can say "I don't know" could influence how mock jurors perceive children who say, "I don't know." Because the instructions bring their attention to the possibility that some of the lawyers' questions may be too difficult, they may rate the child more favorably. Additionally, this judicial instruction may lead mock jurors to realize that saying "I don't know" does not necessarily mean the child failed to remember the event in question, but instead may stem from their lack of understanding of the question.

Hypotheses

Past research has found that younger children (< 6-years-old) are perceived to be honest, but suggestible and low in cognitive ability in sexual assault cases, while older children (>12-years-old) are less suggestible and honest but more cognitively competent, (Kehn et al., 2014; Nunez et al., 2011; Ross et al., 2003).

H1: When no ground rules instruction is provided, I predict that age will have a main effect on cognitive ability, honesty, and suggestibility.

1a: The 4-year-old will be rated lower than the 10-year-old on cognitive ability.

1b: The 4-year-old will be rated more honest than the 10-year-old.

1c: The 4-year-old will be rated more suggestible than the 10-year-old.

Uncertain responses, such as "I don't know" or "I'm not sure," may influence mock jurors' credibility judgements. Research has shown that older children are more able to lie (Talwar, Lee, Bala, & Lindsay, 2002) and that jurors perceive older children (>6 years) as being more prone to lying behavior (Connolly, 2008) which may lead mock jurors to interpret certain behaviors (such as saying "I don't know" to a lawyer's question) as lying in older children more so than younger children. Because older children are perceived to have higher cognitive ability, indications of uncertainty (e.g., saying "I don't know") may be attributed to their capacity to lie rather than their ability to remember events accurately, but for younger children, it could be attributed to their lower cognitive ability. Therefore:

H2: When no ground rules instruction is provided, I predict an age by response type interaction for honesty and cognitive ability.

2a: The 10-year-old who uses "I don't know" responses will be viewed as less honest than the 10-year-old who does *not* use "I don't know" responses. Honesty ratings for the 4-year-old who uses "I don't know" responses compared to the 4-year-old who uses *no* uncertain responses will not differ as much.

2b: The 10-year-old who uses "I don't know" responses will be viewed as less cognitively competent than the 10-year-old who does *not* use "I don't know"

responses. The effect of response type on the cognitive competency ratings for the 4-year-old will not be as strong.

If mock jurors are informed of the "I don't know" ground rule, their perceptions of the child could be influenced as well. Mock jurors may be sensitive to when questions are complex or confusing for children (Mugno et al., 2016). They may perceive a child to be suggestible if they give a response to a question that they think is too difficult for the child to answer, particularly in a condition where they have been told that the child has been given permission to say "I don't know" to difficult questions. It is also possible that when mock jurors are given the ground rules instruction and the child uses the "I don't know" rule, they may attribute the child's "I don't know" responses to their confusion with the question itself rather than their inability to recall information, which could increase their ratings of cognitive ability.

However, the effect of response type and presence of ground rules instruction could be moderated by the age of the child. Awareness of the "I don't know" ground rule could have a strong effect on how mock jurors perceive children in terms of cognitive ability, suggestibility, and honesty, but this could differ depending on the child's age. If a 4-year-old is given the "I don't know" rule and does not use "I don't know" responses, this could increase their perceived suggestibility because attention is drawn to the fact that some questions will be difficult, but the young child is answering them anyway, despite their low cognitive ability. Because mock jurors can be sensitive to difficult questions (Mugno et al., 2016), they may see the child's acquiescence as an indication of suggestibility. However, this may not be the case for the 10-year-old, whose non-use of the "I don't know" rule could be attributed to their higher cognitive ability (Bottoms & Goodman, 1994; Crowley, O'Callaghan, & Ball, 1994; Mugno et al., 2016; Talwar et al., 2002). Therefore:

H3: When ground rule instructions are provided, I hypothesize that ratings for suggestibility, cognitive ability, and honesty will change depending on age and response type.

3a: When the ground rules instruction is present, the 4-year-old child who uses “I don’t know” responses will be rated less suggestible than the 4-year-old child who does not use “I don’t know” responses. This effect will not be as strong for the 10-year-old.

3b: When the ground rules instruction is present, the 10-year-old who uses “I don’t know” responses will be rated as more cognitively competent than the 10-year-old who does not use “I don’t know” responses, though this will not be the case for the 4-year-old.

3c: The 10-year-old who uses “I don’t know” responses will be viewed as more honest when the ground rules instruction is present compared to when it is not present, but this effect will not be as strong between ground rules instruction condition for the 4-year-old.

CHAPTER II

METHODOLOGY

Pilot Study

Before conducting the main study, I designed a pilot study to determine if two of the independent variables, age and amount of "I don't know" (IDK) responses, were manipulated strongly enough in the materials to be detected by participants. Sections of the materials where the child's age was to be directly stated were removed and replaced with blanks so that participants would have to guess her age based off of the way she spoke and answered questions in the trial transcript excerpts. "I don't know" responses were presented as they would be used in the main study. The results of the pilot study were used to make adjustments to the trial transcripts to be used in the main study.

Participants

The sample for the pilot study consisted of 88 student volunteers from the University of Tennessee at Chattanooga. Participants were recruited from psychology courses using the SONA Recruitment system. They ranged in age from 18 to 42 (M_{age}=20.9). The sample was majority female (91.1%) and majority White (81%).

Participants were randomly assigned to one of four groups, where age of the child (4-year-old vs 10-year-old) and amount of "I don't know" responses (low vs high) was

manipulated. The ground rules instruction was not presented to any of the participants in this study.

Materials

Materials used for the pilot study consisted of a case background vignette, a vignette of the case arguments, transcript excerpts from a fabricated trial, a perceptions questionnaire, and a demographics questionnaire.

Case Background Vignette

One version of the case background vignette was used for the pilot study. Though there were two age conditions used for this study, the child's age was not directly stated in the case background and was instead presented as a blank (refer to Appendix B). Therefore, only one version of the case background was needed. The case background vignette described 1) the allegation (i.e., who was accused, where the alleged assault took place), 2) how the allegation was reported (i.e., who the child first told about the assault), and 3) witness reports from the other family members (i.e., mother, brother, biological father). The details of the allegation were consistent throughout all conditions—a girl name Lauren (4- or 10-years-old) tells her teacher that her stepfather has been sexually abusing her. Her teacher contacts Child Protective Services (CPS), and a CPS worker interviews Lauren and her other family members about the allegation. Lauren says she has been abused multiple times within the past year by her stepfather. Her mother and brother say they have never witnessed the stepfather assault Lauren. Lauren's biological father reports feeling that he should have been given custody of Lauren instead of his ex-wife, Lauren's biological mother.

Case Argument Summary

One version of the case argument vignette was given to all participants (refer to Appendix C). The vignette briefly detailed the arguments that were presented by the prosecution (e.g., *"Lauren's stepfather, Anthony, sexually abused her on multiple occasions…"*) and defense (e.g., "*Lauren's stepfather has never sexually abused her… Lauren was coached to make the accusation by her father, Troy."*) in Lauren's trial against her stepfather. Because the trial transcript excerpts only include Lauren's testimony, this material was included to briefly describe the defendant's argument in the trial and present the possibility to participants that the sexual assault did not occur and the defendant is innocent.

Trial Transcripts

To increase ecological validity of this study, the trial transcript excerpts used were based on actual trial transcripts in which a young girl is questioned by lawyers. I located the transcripts by searching for child sexual abuse court cases using the public case history search tool on the Tennessee State Courts website. This database is publicly available and stores information on cases (status of the case, history of appeals, motions, orders, judgments, opinions, etc.) that go through the Court of Appeals and Court of Criminal Appeals in Tennessee (Tennessee State Courts, n.d.). Using this database, I searched for cases that involved sexual assault of a child and indicated that the child testified in court. I contacted the district attorney's offices that the cases were affiliated with and requested the transcripts from those cases, specifically where the child was questioned during trial. I received two transcripts from two separate cases and used them to inform the development of the transcripts used in these studies (i.e., the types of questions the prosecutor and defense attorney asked, the way the child responded). Details of the allegation

described in this study were inspired by these cases but do not closely resemble either one. All names in the fabricated case are different from those in the actual cases.

The types and amounts of questions asked by the prosecutor and defense attorney in the fabricated transcripts were based on several studies that analyzed types of lawyer questions asked in child sexual assault cases. Andrews and colleagues (2015) found that, in a typical trial, approximately 52% of prosecutors' questions were option-posing (i.e., eliciting yes/no response), and 29% were directive prompts (i.e., open ended questions asking who, what, where, when, how). Invitations and suggestive questions were used at much lower rates (3% and 16%, respectively). They found that defense attorneys' questions during a typical trial were mainly option-posing questions (46%) and suggestive questions (42%), and they rarely asked directive prompts (13%) or invitations (<1%). In another study analyzing question types in New Zealand CSA cases, 56.5% of defense attorney's questions when cross-examining a child were closed-ended, leading questions, while prosecutors used much fewer leading questions (13.2%). Andrews and colleagues (2015), as well as Evans and colleagues (2009), found that prosecutors typically ask a higher proportion of questions than defense attorneys. The fabricated transcripts were developed to mirror these parameters as closely as possible but vary in some ways in order to make the case flow naturally and be representative of an actual trial. The age and "I don't know" response manipulations caused the four transcripts to be slightly different in the total amount of questions asked and the proportions of each question type. As a result of the age manipulation, the lawyers often had to ask more follow-up questions with the 4-year-old when she would give less detailed responses, increasing the number of questions asked and altering the question-type proportions. Because of the different response conditions, the lawyers would have

to ask different questions after the child said "I don't know" than if they responded a different way.

There were four versions of the trial transcript used in the pilot study. They were manipulated by age (4-year-old vs 10-year-old) and amount of "I don't know" responses (high vs low). In all excerpts, there are three sections: a direct-examination, a cross-examination, and a redirect-examination. In the direct examination, Lauren is questioned by the prosecuting attorney. In the cross-examination, Lauren is questioned by the defense attorney, and in the redirect-examination, Lauren is again questioned by the prosecuting attorney.

Lauren's age was not directly stated in the trial transcript excerpts for the pilot; instead, blanks were written in where her age or birth year would have been stated. Participants were informed in the instructions that Lauren's age had been removed. The transcripts differed depending on whether they represented the 4-year-old or the 10-year-old in the language used by the child. For example, in the 4-year-old condition, when describing where the defendant allegedly touched her, Lauren says, "*He touched my pee-pee*." In the 10-year-old condition, Lauren says "*He touched my private parts."* There were also differences in the way Lauren would answer closed-ended questions between the 10-year-old condition (e.g., "*Did he take his clothes off?" "No.")* and the 4-year-old condition [e.g. "*Did he take his clothes off?" "Nuh-uh." (shakes head*)]. In addition, Lauren would provide more detail in some of her responses in the 10-year-old condition than in the 4-year-old condition. For example, when asked, "*How did your stepdad wake you up?",* in the 10-year-old condition, Lauren responds, "*He came into my room and shook me awake and told me to go to the living room."* In the 4-year-old condition, she responds, "*He shook me."* (refer to Appendix D).

Perceptions Questionnaire

The perceptions questionnaire consisted of 8 attention check questions, Child Credibility Assessment Scale questions, verdict judgements, and questions about the manipulations. The main purpose of this perceptions questionnaire was 1) to determine if participants were able to correctly estimate Lauren's age based off of the materials for both the 4-year-old and 10-year-old transcripts and 2) to determine if participants could accurately estimate how many times Lauren says "I don't know" in the high "I don't know" and low "I don't know" transcript versions.

Attention Checks. Participants were asked 9 attention check questions throughout the trial transcript. The transcript was divided into sections, and two attention check questions followed each section. Seven of the questions were open-ended, free recall questions and 2 were multiple choice (see Appendix E). Because the trial transcript was long, the questions were asked throughout the transcript rather than afterwards. This was done to ensure that the answers would be fresh in participants' minds, and inaccurate responses could be attributed to not reading the materials thoroughly rather than forgetting the answers. Participants were asked to recall important names in the case as well as specific details about the alleged abuse (e.g., where it occurred, how many times it occurred) and details about the defense's argument against the allegation.

Child Credibility Assessment Scale. Each participant was given the Child Credibility Assessment Scale, developed by Kehn and colleagues (2014), which consists of 15 items measuring 3 factors: honesty (4 items, α=.76), suggestibility (4 items, α=.72), and cognitive ability (7 items, α=.94), which Kehn and colleagues (2014) found to have high reliability. All

items on the honesty subscale had inter-item correlations between .66 and .80. Items on the suggestibility subscale achieved inter-item correlations from .68 to .81. Items on the cognitive ability subscale had inter-item correlations between .80 to .89. Participants were asked to rate Lauren on each of the 15 items using a Likert scale from 1 (low) to 7 (high).

Verdict Judgements. Participants answered 2 questions regarding their verdict judgements (Appendix E). First, participants were asked "Based on what you have read about this case, what would your verdict be? Would you find the defendant, Anthony Smith, guilty or not guilty? (*guilty or not guilty)*". The second question asked how confident they were in their verdict decision. This was answered on a 7-point Likert scale, with 1 being "not at all" and 7 being "very confident."

Manipulation Questions. Participants were asked 3 manipulation questions to determine if the age and response manipulations were working. The first question asked, "What age do you think Lauren was at the time of the trial?" (*2, 4, 6, 8, 10, 12)* (refer to Appendix E). The second question asked participants to rate on a 7-point Likert scale (1=not at all, 7=very confident) how confident Lauren was in answering the attorneys' questions (refer to Appendix H). The third question asked "Approximately how many times do you think the child responded to a question with "I don't know" during questioning? (*never, once or twice, three or four times, five or six times, seven or eight times, nine or ten times, more than ten times*).

Demographics Questionnaire

Demographics have been shown to influence adults' perceptions of child witnesses, so I collected participant demographic information in this study. Past studies on mock jurors' perceptions of child credibility have found a relationship between participant gender and credibility ratings. Women in general tend to find children more credible and give more guilty verdicts than men in sexual assault cases (Bottoms & Goodman, 1994; McCauley & Parker, 2001). In McCauley and Parker's (2001) study, participant gender interacted with victim age, such that men viewed the 6-year-old victim to have worse memory than the 13-year-old victim, but women viewed both the 6-year-old and the 13-year-old as having relatively equal memory competence.

Participants completed the demographics questionnaire last (refer to Appendix F). Participants were asked to provide their age, gender, ethnicity, racial identity, and highest level of education achieved. Participants were also asked to identify if they had children and then were asked, if they responded yes, to give the ages of their children. The last question asked participants to rate their personal experience with child sexual abuse (self, family member, close friend, work) using a 7-point Likert scale (1=none, 7=a great deal).

Procedure

Before beginning the study, participants were given an informed consent form, which outlined the objectives and summary of the study, the length of time it would take to complete the study, and the potential benefits of participating in the study. It also stated that the study contained an allegation of child sexual abuse that could be disturbing to some. Once participants fully read the informed consent form, they were asked, "Are you at least 18 years old and do you

agree to participate in the following study? (*yes, no*). If participants clicked "yes" they were directed to the beginning of the study. If they clicked "no" they were redirected to the end of the survey. After agreeing to participant, participants were presented with the case background vignette. The case background informed participants of the details of the child's allegation but did not explicitly state her age. After reading the case background vignette, participants were then presented with the case argument vignette. This was presented to emulate opening statements in a trial and introduce the possibility to participants that Lauren's allegation may be false. Participants were then randomly assigned to read one of four trial transcript versions (4-year-old & low "I don't know" responses, 4-year-old & high "I don't know" responses, 10-year-old and low "I don't know" responses, or 10-year-old and high "I don't know" responses). Throughout the trial transcript, participants were presented with attention check questions. After reading all of the materials and answering the attention check questions, participants completed the remainder of the perceptions questionnaire. Once the participant completed the questionnaire, the study concluded.

Results of Pilot Study

Analysis of Age Manipulation

A 2 (age: 4 vs 10) x 2 (amount of 'IDK' responses: high vs low) ANOVA was conducted to assess the effect of the age manipulation and response manipulation on participants' estimations of Lauren's age. Participants in the 4-year-old condition (M=6.36 years, SD = 2.54) did view Lauren as younger than participants in the 10-year-old condition (M=7.14 years, SD = 3.36); however, the age effect was not significant. There was no significant main effect of response condition, and there was no significant interaction.

Analysis of IDK Response Manipulation

A 2 (age: 4 vs 10) x 2 (amount of 'IDK responses: high vs low) ANOVA was conducted to assess the effect of the age and response manipulations on amount of times participants recalled Lauren saying "I don't know." There was a significant main effect of the 'IDK' response condition, $F(1, 74)= 26.37$, $p<.001$. Participants in the 'low IDK' response group recalled fewer "I don't know" responses ($M=3.39$, $SD=1.25$) than participants in the 'high IDK' response condition ($M=4.80$, $SD=1.19$). Participants in the low 'IDK' response group most frequently indicated that Lauren said "I don't know" three or four times (37.8%), with five or six times being the next most common response (17.8%). Participants in the high 'IDK' response group most frequently chose five or six times (37.2%), and the next most common response was seven or eight times (25.6%). There was no significant main effect of age nor a significant interaction of age and amount of 'IDK' responses.

Conclusion

Although there was a slight difference in perceived age between participants in the 4-year-old condition and those in the 10-year-old condition, it was not statistically significant, and they generally thought Lauren was around 6 to 8 years old regardless of condition. To make the age difference more salient to participants, some of the child's responses in the 10-year-old condition were changed to reflect more mature language. For example, some of Lauren's responses in the original transcript were fragments rather than full sentences (e.g., "Lauren, where did you live when you were __ years old?" "In an apartment on 11th street."). Those types of responses were changed to full sentences to make Lauren seem more mature to participants (e.g., "I lived in an apartment on 11th street."). To make Lauren sound younger in the 4-year-old

transcript version, 6 of her "yes" or "no" responses were changed to "yeah," "uh-huh (nods head)," and "nuh-uh (shakes head)."

Although there was a statistically significant difference between the 'IDK' response conditions in the amount of "I don't know" responses they detected, their average responses were not sufficiently distinctive or clustered tightly around the actual numbers of IDK responses that appeared in the transcripts. The low "IDK" group mainly detected three or four to five or six times, and the high "IDK" group primarily detected five or six to seven or eight times. A large percentage of participants in both groups thought Lauren said "I don't know" five or six times. Because there was not a large difference between the two groups, it is possible that the 'IDK' response manipulation would not be strong enough to properly test its main effects or interactions with the other independent variables on perceptions of honesty, suggestibility, and cognitive ability. Therefore, I decreased the amount of "I don't know" responses in the low 'IDK' transcript from three to two and increased the amount of "I don't know" responses in the high 'IDK' transcript from 8 to 10. All the new "I don't know" responses that were added were in response to complex or confusing questions.

Main Study

Participants

For the main study, participants were recruited from Amazon Mechanical Turk (MTurk). MTurk is a data collection tool that has been shown to provide more diverse data than typical college or other Internet samples (Buhrmester, Kwang, & Gosling, 2011). Using MTurk along with CloudResearch platform enabled me to limit the sample to English-speaking U.S. citizens who were at least 18 years of age in order to gain a sample representative of the jury-eligible

population. I also used CloudResearch to screen out non-US IP addresses, block duplicate IP addresses, and filter the participant pool for higher approval ratings and number of Human Intelligence Tasks completed to ensure higher quality data (Litman, Robinson, & Abberbock, 2016). To ensure voluntary participation and to protect participants from potential harm, an informed consent form was given to all participants, which detailed the sensitive content in the study that could be uncomfortable to some, the estimated length of time to complete the study, and the requirements that had to be met in order to receive compensation.

The Amazon MTurk workers were compensated $1.00 for their participation. They received compensation if they answered the majority of the attention check questions with sensible answers. This compensation amount was determined as appropriate due to the length of time the study was estimated to take (approximately 40 minutes), which is common for other academic studies of similar length.

Data was collected from 818 MTurk workers. After attention check questions were analyzed and participants with more than two attention check failures were excluded, 702 participants were included in the final analyses. Their age ranged from 19 to 89 years (M=43.18, SD=14.1). For gender, 66.7% identified as female, 32.8% as male, and 0.4% as other. For racial identity, 80.5% identified as White, 7.8% as Black/African American, 5.3% as Asian, 0.9% as American Indian or Alaska Native, 2.6% as two or more races, and 2.3% did not identify with any of the provided ethnicities. One participant did not report age, one did not report gender, and four did not report racial identity; however, they were not excluded as they all passed the attention check questions.

Materials

Materials used in this study slightly differ from those used in the pilot study. Most notable are the addition of the ground rules manipulation in the trial transcripts and the inclusion of Lauren's age explicitly stated in the case background vignette and trial transcripts. More questions were added to the perceptions questionnaire, including 8 attorney performance questions, 7 questions about general child witness beliefs, and 5 additional questions about Lauren's credibility (refer to Appendix E). Materials consisted of two versions of a case background vignette, one version of the case argument summary, 8 versions of the trial transcripts, and the perceptions questionnaire.

Case Background Vignette

Lauren's age was explicitly stated for the main study, there were two versions of the case background vignette (refer to Appendix B). One described Lauren as 4 years old, and the other described Lauren as 10 years old. The only other difference was the length of time between the initial allegation made by Lauren and the time of her trial. In the 4-year-old condition, Lauren's trial is described to have occurred in July, 4 months after the initial allegation. In the 10-year-old condition, her trial occurs in January, 10 months after the initial allegation. The 4-year-old's timeline is shorter so that it is more believable that she is able to remember the details of the assault; the first instance of assault that she describes is a year prior to the trial. In the 10-year-old version, the trial is a year and a half after the first instance of assault.

Case Argument Summary

No changes were made to the case argument summary (see Appendix C).

Trial Transcripts

Trials transcripts were manipulated for age (4 vs 10), amount of 'IDK' responses (low vs high), and ground rules instruction (absent vs present), resulting in eight different versions (refer to Appendix D). Lauren's age was explicitly stated in all eight of the transcripts. The low 'IDK' response transcript contained three "I don't know" responses, and the high condition transcript contained ten "I don't know" responses. In the low "I don't know" condition, two "I don't know" responses said during the direct-examination with the prosecutor, and one was said during the cross-examination with the defense attorney. In the high "I don't know" condition, three "I don't know" responses were said during the direct-examination and seven during the cross-examination. This was decided because past research has shown that defense attorneys tend to use more complex and difficult questions than prosecutors, potentially eliciting more "I don't know" responses. Finally, ground rules instructions were added to half of the transcripts. The ground rules instruction was two sections of dialogue from the judge instructing Lauren to say "I don't know." The first instruction occurred at the beginning of the direct-examination, in which he says to Lauren,

"Mr. Johnson is going to ask you some questions now. You need to answer his questions with only the truth about what you remember. If he asks you a question that you don't understand, I want you to say, I don't know, okay?"

The second instruction reiterated the first and occurred at the beginning of the cross-examination. The judge says,

"…Mr. Williams is going to ask you some questions. Again, you need to answer his questions with only the truth about what you remember. If he asks you a question that you don't understand, I want you to say, I don't know, okay?"

In the ground rules instruction absent condition, the judge instructs the child to only tell the truth but does not mention how she should answer difficult or confusing questions.

Because of the 'IDK' response manipulation, each trial transcript differed slightly in the number of question-response pairs. The high 'IDK' transcripts had more question-response pairs because the lawyer would naturally need to follow up with additional questions when the child said, "I don't know." For example, at one point the defense attorney asks, "And you say that the defendant abused you in your room, right?" In the low 'IDK' condition, Lauren responds with "Yes." In the high 'IDK' condition, Laurens says "Um…I don't know." The lawyer then follows up with "You don't know if he abused you?" and Lauren responds, "Yes. He touched me." The "I don't know" response prompted the lawyer to ask an additional question. They also differed due to the age manipulation. For example, when the prosecutor asked, "How did your stepdad wake you up?", in the 10-year-old condition Lauren says "He came into my room and shook me awake and told me to go to the living room." In the 4-year-old condition, Lauren says, "He shook me." The lawyer then asks, "What did he do after that?" Lauren says, "Said go to the living room." In this instance, the lawyer had to ask an additional question to get the same amount of information from the 4-year-old as the 10-year-old.

Perceptions Questionnaire

All participants received a perceptions questionnaire consisting of 49 questions (see Appendix E). Several questions were added to the questionnaire for the main study, and some of the existing questions changed order from the pilot study. Participants first answered the attention check questions, then the verdict judgement questions, child credibility questions, attorney performance questions, and general beliefs about child witnesses questions.

Attention Checks. The attention check questions used were the same as those used in the pilot study (refer to Appendix E). The question asking what age Lauren was at the time of the trial was moved to the beginning of the survey, before the verdict judgement questions, and was included as an attention check question, as her age was provided in the materials.

Verdict Judgements. One open-ended question was added that asked participants to list three reasons why they chose their verdict (refer to Appendix E).

Child Credibility Questions. The Child Credibility Assessment scale (Kehn et al., 2014) was used again in the main study. Five additional questions were added regarding Lauren's credibility (refer to Appendix E). Participants were asked to rate Lauren's language ability, sexual knowledge, ability to distinguish imagination from reality, emotional maturity, intelligence, and knowledge of right and wrong using a 7-point Likert scale (1= low, 7=high). They also rated Lauren's confidence in answering the attorneys' questions on a 7-point Likert scale (1= not at all confident, 7= very confident). In addition, they were asked several other specific questions about Lauren (e.g. *How likely is it that Lauren understood the questions being asked?, How likely is it that Lauren honestly believes she was sexually abused by her stepfather when she really was not?,* and *How likely is it that an adult convinced Lauren to make a false report against her stepfather?*) (refer to Appendix E).

Attorney Performance Questions. The attorney performance questions were modeled after questions used in the Mugno and colleagues (2016) study. Participants were asked to rate both the prosecutor and defense attorney on 1) how suggestive or leading they were during

questions, 2) how convincing their argument was, 3) how complex their questions were, and 4) how understandable their questions were. Each question used a 7-point Likert scale, with 1 indicating "none" of each specific quality and 7 indicating "a great deal" of each quality (refer to Appendix E).

Child Witness Beliefs Questions. Participants were asked to rate 7 statements regarding their general beliefs about child witnesses using a 7-point Likert scale (1=strongly disagree, 7=strongly agree). The statements describe various common beliefs about child witnesses (e.g., *Children are no more influenced by leading questions than are adults, Children are sometimes led by an adult into reporting that they have been sexually abused when they have not, A child cannot describe sexual abuse unless he/she actually experienced it*). These statements were developed by (Quas et al., 2005) to measure how much adults' understand about children's ability as witnesses (refer to Appendix E). The items chosen for this study pertain to suggestibility in children as well as patterns in how they disclose sexual abuse. Therefore, it may be expected that participants who are more aware of children's vulnerability to suggestion may also rate the child in the study as more suggestible. Quas and colleagues (2005) found that the majority of their respondents knew that children are suggestible and can be led by an adult to report sexual abuse when none occurred. Additional analyses were conducted to determine if the ground rules instruction or the child's use of the "I don't know" rule influence participants' perceptions when they already see children as being suggestible.

Demographics Questionnaire

No changes were made in the demographics questionnaire (refer to Appendix E).

Procedure

Participants were first presented with an informed consent form which summarized the study and described the anticipated length of the study and level of compensation. Once they read the informed consent form, agreed to participate, and confirmed they were 18 years or older, they were then randomly assigned to one of two case background vignettes (4-year-old or 10-year-old). All participants were then presented with the case argument summary. After reading the case argument summary, participants were then randomly assigned to one of eight trial transcripts (4-year-old, high 'IDK' responses, ground rules absent; 4-year-old, low 'IDK' responses, ground rules absent; 4-year-old, high 'IDK' responses, ground rules present; 4-year-old, low 'IDK' responses, ground rules present; 10-year-old, high 'IDK' responses, ground rules absent; 10-year-old, low 'IDK' responses, ground rules absent; 10-year-old, high 'IDK' responses, ground rules present; 10-year-old, low 'IDK' responses, ground rules present). The age presented in the trial transcript corresponded to the age that was presented in the case background vignette. After reading the trial transcript and answering the attention check questions, participants were then asked to complete the perceptions questionnaire. Last, participants completed the demographics questionnaire. After completion, participants were thanked for their participation and exited from the study.

CHAPTER III

RESULTS

Analysis Plan

Before conducting any analyses, I analyzed participants' responses to 9 attention check questions that were presented throughout the beginning of the survey. Next, a one-way ANOVA was used to determine if there was a significant difference between "I don't know" conditions in the amount of times participants thought the child said "I don't know." Then, a logistic regression was conducted to determine whether there were main effects of interactions of the independent variables (age, 'IDK' responses, and ground rules instruction) on the verdict, which was a dichotomous variable (*guilty*, *not guilty*). Chi-square analyses were conducted to further investigate differences in proportions of verdicts between groups. An ANCOVA was then conducted with ground rules condition and number of "I don't know" responses detected entered into the model as moderators to examine main effects of demographic variables and interaction effects with the conditions. Preliminary qualitative data analyses on the open-ended responses were assessed in order to find common themes in participants' main reasons for choosing their verdict.

Next, the effects of the independent variables (age, 'IDK' responses, and ground rules instruction) on the three dependent variables (honesty, cognitive ability, and suggestibility) were assessed using a series of 2x2x2 ANOVAs. The variable indicating the amount of "I don't know" responses participants detected was then used as a covariate in a series of 2 (child age: 4 vs. 10) x

2 (ground rules instruction: present vs. absent) analyses of covariance (ANCOVAs), with honesty, suggestibility, and cognitive ability as the dependent variables.

To analyze perceptions of attorney performance as predictors of credibility ratings, a series of multiple regressions were conducted for each of the credibility subscales (honesty, suggestibility, and cognitive ability). ANCOVAs were used to assess perceptions of attorney performance as dependent variables of the manipulations.

Next, general child witness beliefs were assessed as predictors of the credibility subscales using a series of linear regression analyses with the Child Witness Beliefs score as the independent variable and each of the credibility subscales as dependent variables. Ground rules instruction condition and the amount of "I don't know" responses detected were then added into the model as moderators to examine interaction effects. Individual items from the scale were analyzed by child age, ground rules instruction, and amount of "I don't know" responses detected using a series of binary logistic regressions.

Last, linear regression analyses were conducted to assess various demographic variables as predictors of honesty, suggestibility, and cognitive ability ratings. In addition, to determine if any of the significant demographic variables moderated the relationship between the conditions and credibility subscales, a series of ANCOVAs were conducted.

Attention Checks

Data were collected from 818 participants. Attention check questions were included in the study to ensure participants fully read and understood the materials they were provided (see Appendix E). All questions except for two were open-ended; the questions *"How many times does Lauren say she was abused in the apartment?"* and *"How many times does Lauren say she*

was abused in the house?" were multiple choice (*once, a couple times, daily).* Participants were excluded from the study if they missed more than 2 of the attention-check questions asking about the family members' names, which were not considered strong indicators of the participants' inattention. Other questions that were more specific to the details of the case (e.g., where the abuse occurred, how many times it occurred, who Lauren spoke to about the abuse, etc.) would merit exclusion if they were missed. Additionally, to ensure that the "I don't know" response manipulation was detected by participants, a one-way ANOVA was conducted. The independent variable was the "I don't know" response condition (high vs low), and the dependent variable was the participant's estimation of how many times they thought the child said, "I don't know."

After analyzing the attention checks, 102 (12%) participants were excluded from the sample due to incorrectly answering more than 2 of the attention check questions. An additional 14 participants were excluded for incorrect responses to the question "What age was Lauren at the time of the trial?" In the 4-year-old condition, participants were excluded if they chose 8, 10, or 12 as Lauren's age. Participants in the 10-year-old condition were excluded if they chose 2,4, or 6 as Lauren's age.

Amount of "I don't know" Responses Detected

Participants were asked to recall how many times they remember Lauren saying "I don't know" in the transcript. A one-way ANOVA determined that there was a significant difference between the high 'IDK' and low 'IDK' responses conditions [F (1, 700) = 122.29, p<.001]. Participants in the low 'IDK' responses condition (M=3, SD=1.16) detected significantly fewer "I don't know" responses than in the high 'IDK' responses condition (M=4.05, SD=1.35). However, though there only two "I don't know" responses on the low 'IDK' response condition,

only 25.4% (N=90) of participants chose the answer "once or twice." The largest percentage of participants, which was 40.4% (N=143), chose "three of four times," and 18.4% (N=65) chose "five or six times." There were ten "I don't know" responses in the high 'IDK' response condition, but only 9.8% (N=34) of participants correctly chose "nine or ten times" as their answer. The largest portion of participants, at 32.5% (N=113) chose "three or four times," and the second largest portion, at 29.3% (N=102) chose "five or six times." This indicates that, although there was a statistically significant difference between the two groups, participants did not accurately remember how many times the child said "I don't know," particularly in the high "IDK' response condition.

Means and standard deviations were also calculated across all conditions (see Table 1). A 2 (child age: 4 vs. 10) x 2 ("I don't know" condition: high vs. low) x 2 (ground rules instruction: present vs. absent) ANOVA was conducted to determine main effects and interactions of the other manipulations on the amount of "I don't know" responses detected. Child age had a significant main effect [F (1, 694) = 44.2, p<.001] such that the number of "I don't know" responses detected was higher for the 4-year-old. Child age also interacted with the "I don't know" response condition [F (1, 694) = 6.88, p=.01]; the number of "I don't know" responses detected increased more for the 4-year-old from the low "I don't know" condition to the high "I don't know" condition than it did for the 10-year-old. In other words, the 4-year-old's "I don't know" responses were more noticeable than they were for the 10-year-old in the high "I don't know" condition. There was an interaction between "I don't know" condition and the ground rules instruction condition that approached significance (p=.05). In the low "I don't know" condition," there were slightly more "I don't know" answers detected when the ground rules instruction was present than when absent, but in the high "I don't know" condition, more "I don't

know" answers were detected when the ground rules instruction was absent than when they were present. While this was not statistically significant, this suggests the ground rules instruction may have somewhat influenced mock jurors' attention to the "I don't know" responses.

Table 1 Mean Number of "I don't know" Responses Detected (and SDs) Across Conditions

		Child Age Condition							
		4-Year-Old				10-Year-Old			
IDK condition:		Low "IDK"		High "IDK"		Low "IDK"		High "IDK"	
Ground Rules Condition:		+	-	+	-	+	-	+	-
# of "I don't know" responses detected	M	3.19	3.16	4.36	4.58	2.86	2.75	3.44	3.80
	SD	*1.22*	*1.29*	*1.36*	*1.28*	*1.01*	*1.03*	*1.17*	*1.31*

Verdict Judgements

Effects of Manipulations

A logistic regression was used to measure the effect of the three independent variables (child age, "I don't know" responses, and ground rules instruction) on verdict decision. Verdict was measured using the question *"Based on what you have read about this case, what would your verdict be? Would you find the defendant, Anthony Smith, guilty or not guilty?"*. Entered in the logistic regression model were child age (4 vs 10), 'IDK' condition (high vs low), and ground rules instruction (absent vs. present). None of the variables entered were found to be significant predictors of guilty verdicts, although child age was the closest to significance (p=.08). There were also no significant interactions between the variables. Chi-square analyses revealed that

most participants (79%, N=553) chose ‘guilty’ as their verdict, with only a small portion choosing ‘not guilty’ (21%, N=149). See Table 2 for a breakdown of guilty verdicts by condition.

Although none of the manipulations were statistically significant, there is slight variation in the proportion of verdicts between groups. Specifically, for the 4-year-old, high ‘IDK’ and low ‘IDK’ groups as well as the 10-year-old high ‘IDK’ group, there is a higher proportion of guilty verdicts when the ground rules instruction is present than when it is absent. However, this is not the case for the 10-year-old, low ‘IDK’ group. In fact, there are actually fewer guilty verdicts when the ground rules instruction is present than when it is absent. This suggests that the ground rules instruction could have had an unexpected, negative effect on mock jurors’ perceptions of the child. This effect may not have been detected due to a ceiling effect, as the large majority of participants chose ‘guilty.’

Table 2 Percentage of Guilty Verdicts by Condition

Child Age	"IDK" Condition	Ground Rules Instruction	Guilty
4-year-old	High	Absent	72.8% (N=67)
		Present	82.4% (N=70)
	Low	Absent	71.9% (N=64)
		Present	78.2% (N=79)
10-year-old	High	Absent	79.8% (N=67)
		Present	83.9% (N=73)
	Low	Absent	83.9% (N=73)
		Present	77.9% (N=60)

Due to the discrepancy between IDK condition and number of IDK responses recalled, a logistic regression was then conducted to assess the number of "I don't know" responses detected as a predictor of verdict, along with the age condition and ground rules instruction condition to examine any interactions. The analysis revealed a significant main effect of amount of "I don't know" responses detected (Wald $\chi 2=4.77$, $p=.03$). More "I don't know" responses detected was associated with more 'not guilty' verdicts. There were no significant interactions between amount of "I don't know" responses and the other independent variables (age condition and ground rules instruction condition).

Child Credibility Scale Scores as Predictors

A logistic regression analyses examined each of the credibility subscales (honesty, cognitive ability, and suggestibility) as predictors of verdict. Honesty (Wald $\chi 2=65.3$, $p<.001$), cognitive ability (Wald $\chi 2=54.42$, $p<.001$), and suggestibility (Wald $\chi 2=8.63$, $p=.003$) were all significant predictors of verdict. Higher honesty and cognitive ability scores predicted more 'guilty' verdicts, and higher suggestibility ratings predicted more 'not guilty' verdicts. The manipulations were then included in the model to determine if they moderated any of the credibility scores' effects on verdict. None of the manipulations moderated the relationship between the credibility ratings and verdict.

Demographic Variables as Predictors of Verdicts

Demographic variables were assessed using a logistic regression to determine if they were predictors of verdict. Demographic factors included in the analysis were age, gender, and experience with child sexual assault. Of the demographic variables, age (Wald $\chi 2=5.71$, $p=.02$) and experience with child sexual assault (Wald $\chi 2=4.24$, $p=.04$) were revealed to be significant predictors of verdict. Higher participant age was associated with more 'not guilty' verdicts, and higher experience with child sexual assault was associated with more 'guilty' verdicts.

Qualitative Analysis

A preliminary analysis was conducted for the open-ended question *"Please list three reasons that you chose this verdict decision"* using a short 5-code coding scheme to determine some common themes in participants' responses (see Appendix L for code list). These themes were analyzed by verdict. The most common themes for participants who voted guilty were that

Lauren's testimony was consistent (38%, N=212), and the defense attorney was being manipulative (12%, N=66). For participants who voted not guilty, the most common themes were that Lauren's testimony was inconsistent (36.2%, N=54) and she seemed confused (15%, N=22), suggesting that inconsistencies in Lauren's testimony and her seeming confused may have been a primary reason for voting not guilty.

Credibility Ratings

Effects of IV's on Honesty, Suggestibility, and Cognitive Ability

A series of 2 (child age: 4 vs. 10) x 2 ("I don't know" condition: high vs. low) x 2 (ground rules instruction: absent vs. present) ANOVAs were conducted to examine differences in participants' ratings of the child's honesty, suggestibility and cognitive ability. Mean scale scores were created for all participants for all three subscales: honesty, suggestibility, and cognitive ability. These analyses address all three groups of hypotheses.

Honesty

Of the four honesty subscale items, three were reverse coded so that higher scores would indicate perceptions of more honesty in the child. A reliability analysis revealed high internal consistency for the honesty subscale (α=.92). There were no significant main effects or interactions found for any of the independent variables. In general, participants found Lauren to be relatively high in honesty (*M*=5.57, *SD*=1.34) regardless of condition. Contrary to prediction (H1b), when the ground rules instruction was absent, participants rated the 10-year-old slightly more honest than the 4-year-old, though it was not statistically significant. Although it was

predicted that the 10-year-old in the high "IDK" condition would be rated more honest when the ground rules instruction was present than when they were absent (H3c), the mean score was only slightly higher when the ground rules instruction was present, but it was not significant. The effect was similar in the 4-year-old condition (i.e., somewhat higher in the high 'IDK' condition than the low 'IDK' condition when the ground rules instruction was present), in contrast to predictions (H3c).

Suggestibility

Higher scale scores on the suggestibility subscale indicated perceptions of the child being more suggestible. The suggestibility subscale also achieved high internal consistency (α=.78). A main effect of child age on ratings of suggestibility was found [$F(1, 694) = 4.8$, $p = 0.03$]. Participants in the 4-year-old condition (M=4.04, SD=1.35) rated the child as significantly more suggestible than participants in the 10-year-old condition (M=3.82, SD=1.31), as expected (H1c). However, there were no significant main effects of 'IDK' responses or ground rules instruction.

Though no interactions between the independent variables were statistically significant, child age by ground rules instruction approached significance (p=.06). When the ground rules instruction was absent, participants rated the 4-year-old (M=4.14, SD=1.25) higher on suggestibility than the 10-year-old (M=3.73, SD=1.27). However, when the ground rules instruction was present, ratings of suggestibility for the 4-year-old (M=3.95, SD=1.43) went down (which would partially support hypothesis H3a if significant) but ratings for the 10-year-old (M=3.91, SD=1.36) went up. Contrary to expectation, this effect was equally strong for both the 4-year-old and the 10-year-old. When ground rules instructions were presented, participants

felt the 4-year-old was slightly less suggestible and felt the 10-year-old was slightly more suggestible, although this was not statistically significant.

Cognitive Ability

Higher scores on the cognitive ability subscale indicated participants perceived the child to have higher cognitive ability. High internal reliability was achieved for the cognitive ability subscale (α=.95). Child age had a significant main effect on cognitive ability scores [F (1, 694) = 20.58, p<.001]. Participants in the 4-year-old condition (M=4.87, SD=1.35) rated the child's cognitive ability significantly lower than did participants in the 10-year-old condition (M=5.31, SD=1.17). As predicted, the 10-year-old was viewed as being more cognitively competent than the 4-year-old (H1a). A main effect of the ground rules condition approached significance (p=.06); when the ground rules were present (M=5.17, SD=1.25), cognitive ability ratings were slightly higher than when the ground rules were absent (M=4.99, SD=1.31). No significant interactions were found, which does not support my hypothesis (H2b, H3b).

Table 3 Mean CCAS Subscale Scores (and SDs) by Condition

		Child Age Condition							
		4-Year-Old				10-Year-Old			
IDK condition:		Low "IDK"		High "IDK"		Low "IDK"		High "IDK"	
Ground Rules Condition:		+	-	+	-	+	-	+	-
Subscale:									
Honesty	M	5.59	5.43	5.66	5.41	5.49	5.62	5.73	5.66
	SD	*1.30*	*1.41*	*1.23*	*1.40*	*1.27*	*1.41*	*1.39*	*1.31*
Cognitive Ability	M	5.08	4.70	4.97	4.72	5.19	5.31	5.45	5.25
	SD	*1.31*	*1.31*	*1.31*	*1.44*	*1.21*	*1.18*	*1.12*	*1.18*
Suggestibility	M	3.97	4.08	3.92	4.19	4.02	3.88	3.81	3.57
	SD	*1.51*	*1.17*	*1.34*	*1.32*	*1.22*	*1.35*	*1.47*	*1.15*

Effects of Number of "I don't know" Responses Detected

Because of the discrepancy between 'IDK' response condition and the amount of "I don't know" responses participants actually detected, further analyses were conducted to examine this variable as a potential moderator. An ANCOVA was conducted with the age and ground rules instruction conditions as fixed factors and amount of "I don't know" responses detected as a covariate. The 'IDK' response condition was removed from the model. While the initial analyses using the "IDK" response condition as an independent variable showed no significant main effects or interactions, this analysis revealed that the "I don't know" responses did affect participants' perceptions in some cases.

For honesty, there was a significant interaction between the ground rules instruction and amount of "I don't know" responses detected [F (1, 694) = 4.95, p= .03]. The ground rules

instruction moderated the extent to which honesty was affected by the amount of "I don't know" responses detected. When the ground rules instruction was absent, more "I don't know" responses detected was associated with lower honesty ratings. When it was present, the amount of "I don't know" responses detected was no longer strongly associated with honesty ratings. It was expected that this relationship would be moderated as well by child age (H3c); however, this was not the case.

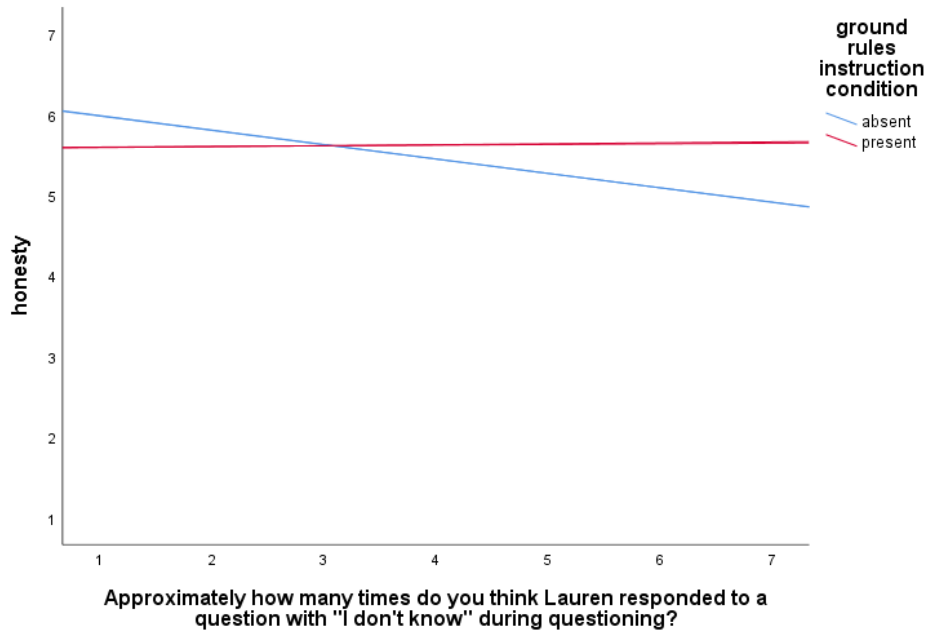

Figure 1 The Effect of the Number of "I don't know" Responses Detected on Honesty Ratings with Ground Rules Instruction Moderation

There was a significant main effect of amount of "I don't know" responses detected on cognitive ability [F (1, 694) = 15.57, p<.001]. Participants who detected more "I don't know" responses were more likely to rate the child lower on cognitive ability. There was also a significant interaction between the age condition and amount of "I don't know" responses

detected [F (1, 694) = 4.48, p=.04]. The child's age moderated the relationship between amount of "I don't know" responses detected and cognitive ability ratings. The 4-year-old was viewed as much less cognitively competent when more "I don't know" responses were detected. This effect was weaker for the 10-year-old, who was not penalized as much for saying "I don't know" more often. While I predicted an age by 'IDK' response interaction such that age would moderate the strength of the relationship between "I don't know" responses and cognitive ability, this does not support my hypothesis, as I predicted the effect to be strong for the 10-year-old and weaker for the 4-year-old (H2a).

No significant main effects or interactions were found for suggestibility revolving around "I don't know" responses, which does not support my hypothesis (H3a).

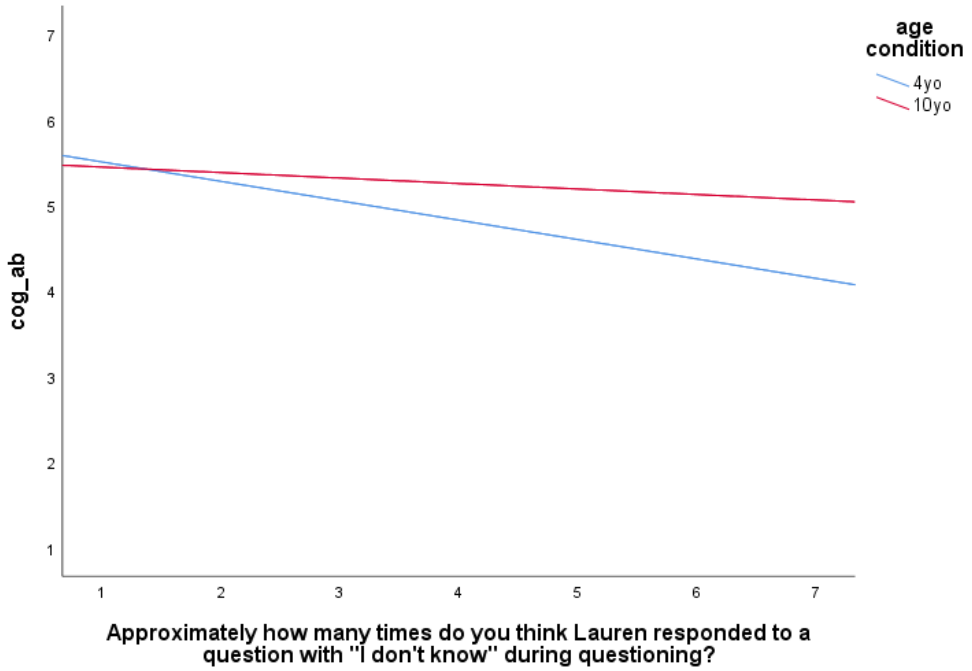

Figure 2 The Effect of Number of "I don't know" Responses Detected on Cognitive Ability Ratings with Age Moderation

Perceptions of Attorney Performance

Predictors of Credibility Ratings

A series of multiple regressions was conducted to assess perceptions of the prosecutor's and defense attorney's performance in the transcript as predictors of honesty, suggestibility, and cognitive ability ratings of the child. Each set of attorney performance questions (4 for the prosecutor, 4 for the defense attorney) were averaged to create an overall prosecutor performance score and a defense attorney performance score for each participant. Two questions (*How suggestive or leading was the prosecutor/defense attorney's during questioning?* and *"How complex were the prosecutor's/defense attorney's questions to Lauren?"* were reverse-coded for both the prosecutor and defense attorney version so that higher scores indicated more favorable perceptions of the attorney's performance. Both prosecutor performance (β=0.24, p= 0.003) and defense attorney performance (β=-0.44, p< 0.001) were significant predictors of honesty. Participants who viewed the prosecutor more favorably also viewed Lauren as more honest, and participants who viewed the defense attorney less favorably viewed Lauren as more honest. For suggestibility, only defense attorney performance was a significant predictor, (β=0.42, p<.001). When participants viewed the defense attorney more favorably, they also viewed Lauren as more suggestible. Their perceptions of the prosecutor's performance were not predictive of their suggestibility ratings. Finally, both prosecutor performance (β=0.42, p<.001) and defense attorney performance (β=-0.23, p= 0.003) were significant predictors of cognitive ability. Participants who viewed the prosecutor more favorably also tended to rate Lauren higher on cognitive ability, while participants who viewed the defense attorney more favorably tended to view Lauren as less cognitively competent. These analyses suggest that their ratings of Lauren

were, at times, dependent upon their views of the attorneys, particularly for honesty and cognitive ability.

Effects of Manipulations

A series of 2 (child age: 4 vs. 10) x 2 (ground rules instruction: present vs. absent) ANCOVAs, with amount of "I don't know" responses detected as a covariate, were conducted to analyse the manipulations' effects on the prosecutor and defense attorney ratings. First, they were analyzed by the average scores for the prosecutor and defense attorney. Ground rules instruction was found to have a main effect on the overall prosecutor score, F (1, 694) = 5.88, p=.02. Participants who read the ground rules instruction rated the prosecutor less favorably than those who did not read the ground rules instruction. There was no main effect of ground rules instruction on ratings of the defense attorney, who was rated generally low regardless; however, there was a significant main effect of amount of "I don't know" responses detected, F (1, 694) = 5.02, p=.03. The more "I don't know" responses participants detected from the child, the lower their ratings of the defense attorney tended to be. There was no effect of "I don't know" responses on ratings of the prosecutor.

More specific questions about each of the attorneys were also assessed using the same ANCOVA model. When examining the questions *How suggestive or leading was the prosecutor/defense attorney during questioning?*, participants who detected more "I don't know" responses rated the defense attorney as more suggestive, which is unsuprising considering the defense attorney asked more suggestive questions than the prosecutor. However, this was not statistically significant (p=.05). Analyses of the questions "*How complex were the prosecutor's/defense attorney's questions to Lauren?*" revealed a main effect of the ground rules

instruction condition for the prosecutor, F (1, 690) = 5.34, p=.02. Unexpectedly, participants rated the prosecutor as more complex if they read the ground rules instruction compared to if they did not, suggesting the ground rules instruction negatively impacted perceptions of the prosecutor's questions. There was no influence of ground rules instruction on defense attorney ratings. However, there was a main effect of age on ratings of the defense attorney's complexity, F (1, 688) = 6.27, p= .01, such that ratings of complexity were higher for the 4-year-old (M=4.45, SD=1.57) than they were for the 10-year-old (M=4.07, SD=1.62). Participants thus tended to see the defense attorney's questions as especially developmentally inappropriate for the 4-year-old.

Child Witness Beliefs

Predictor of Credibility Ratings

Scores were created for each participant to indicate how many of the statements from the Beliefs about Child Witnessess questions they answered correctly according to the scoring rules used by Quas and colleagues (2005). Some of the statements are "true" and some of them are "false." For statements that are "true," participants who agreed with the statements (coded as 5, 6, and 7 on the Likert scale) were coded with a 1. Participants whose responses were neither agree nor disagree (4) were coded as 0. Participants who disagreed with the statements (coded as 1, 2, or 3 on the Likert scale) were coded as -1. For statements that were false, 5, 6, and 7 were coded as -1, while 1, 2, and 3 were coded as 1. Their scores for all seven statements were added to create an overall score, such that higher scores indicated more correct answers.

Linear regressions were conducted to assess the effect of overall beliefs score on honesty, suggestibility, and cognitive ability ratings. Beliefs score was a significant predictor of honesty (β=-0.14, p<.001), suggestibility (β=0.13, p<.001), and cognitive ability (β=-0.16, p<.001). Higher beliefs scores predicted lower honesty and cognitive ability ratings and higher suggestibility ratings. Not surprisingly, participants who were more aware of children's vulnerability to suggestion tended to rate the child as more suggestible. However, they also tended to rate her as less honest and less cognitively competent.

Manipulations as Moderators

Analyses were also conducted to determine if the "I don't know" response or ground rules instruction conditions moderated the relationship between participants' Child Witness Beliefs scores and their honesty, suggestibility, and cognitive ability ratings. Neither of the independent variables were significant moderators.

Questions from the Child Witness Beliefs questionnaire were also assessed individually to gain a more nuanced understanding of how the independent variables may have influenced participants' answers to these items. While these items were intended to measure their existing knowledge about child witnesses, their responses could have also been influenced by the materials they read. Specifically, I wanted to examine if the ground rules instruction had an effect on their beliefs. A binary logistic regression was conducted to determine if any of the manipulations had an effect on the likelihood of answering each of the statements correctly (i.e., indicating agreement when true or indicating disagreement when false). The independent variables used were the age condition, ground rules instruction condition, and the amount of "I

don't know" responses detected. For the purpose of these analyses, participants who indicated "neither agree nor disagree" were excluded.

For the statement *"Children are no more influenced by leading questions than are adults", there was a* significant main effect of the amount of "I don't know" responses detected, (Wald $\chi 2=11.68$, $p=.001$). Detecting more "I don't know" responses was associated with more correct responses to this statement (in this case, correct responses were disagreement). There was also a significant interaction between amount of "I don't know" responses detected and the ground rules instruction condition, (Wald $\chi 2=8.00$, $p=.005$). Participants who received the ground rules instruction were much more likely to disagree with the statement when they recalled more "I don't know" responses. If they did not receive the ground rules instruction, the relationship between "I don't know" responses and their answer to the statement was much weaker.

There was a significant interaction between ground rules instruction and amount of "I don't know" responses detected (Wald $\chi 2=5.3$, $p=.02$) for the statement *"Inconsistencies in a child's report of sexual abuse indicate that the report is false."* When participants did not receive the ground rules instruction, more "I don't know" responses detected was associated with more incorrect responses (i.e., indicating agreement) to this statement. However, when participants *did* receive the ground rules instruction, more "I don't know" responses detected was associated with more correct responses (i.e., indicating disagreement). In addition, there was a significant interaction between child age and number of "I don't know" responses detected for this statement, (Wald $\chi 2=7.98$, $p=.005$). In the 4-year-old condition, more "I don't know" responses detected was associated with more incorrect responses, while this effect was reversed for the 10-

year-old, and more "I don't know" responses detected was associated with more correct responses.

For the next statement, *"Most children who are sexually abused tell someone right away"*, there was an interaction between number of "I don't know" responses detected and the ground rules instruction condition that approached significance (p=.05). In the ground rules instruction present condition, participants who detected more "I don't know" responses were more likely to answer this statement correctly (i.e., indicating disagreement). However, those who did not receive the ground rules instruction were slightly less likely to answer correctly the more "I don't know" responses they detected.

There was a main effect of number of "I don't know" responses detected for the statement *"Children are sometimes led by an adult into reporting that they have been sexually abused when they have not."* (Wald $\chi 2$=11.67, p=.001). The more "I don't know" statements that were detected, the more likely the participant would answer correctly (i.e. indicating agreement).

There was also a main effect of number of "I don't know" responses detected for the statement *"Children sometimes come to believe that they were sexually abused when they really were not,"* (Wald $\chi 2$=12.04, p=.001). The more "I don't know" responses participants detected, the more likely they were to answer this statement correctly (i.e., indicating agreement).

For the last statement, *"Most children can be manipulated into making a false claim about sexual abuse,"* there was a significant main effect of amount of "I don't know" responses detected, (Wald $\chi 2$=14.63, p<.001). More "I don't know" responses detected was associated with more correct responses (i.e., indicating agreement).

Other Characteristics of the Child as Predictors of Credibility

Participants were asked to rate Lauren on several other characteristics, including language ability and intelligence. To determine if the age condition, ground rules instruction condition, and number of "I don't know" responses detected affected participants' ratings on these two characteristics, a 2 x 2 ANCOVA was conducted. The amount of "I don't know" responses detected had a significant main effect on participants' ratings of Lauren's language ability, F (1, 693) = 9.38, p=.002. Participants rated Lauren lower on language ability the more times they recalled her saying "I don't know." There were no other main effects or interactions. When examining intelligence as a dependent variable, the number of "I don't know" responses detected also had a main effect, F (1, 692) = 9.92, p=.002. Their ratings of Lauren's intelligence were lower when they detected more "I don't know" responses. No other main effects or interactions were significant. These results indicate that saying "I don't know" more frequently could negatively impact jurors' perceptions of a child's language ability and intelligence.

Participants rated how likely they felt Lauren understood the questions being asked. Using a second 2 x 2 ANCOVA, child age and number of "I don't know" responses detected had a significant interaction effect on this rating, F (1, 691) = 4.69, p=.03. For the 4-year-old, when participants detected more "I don't know" responses, they felt she was less likely to understand the questions [M (-1 SD) = 5.46; M (+1 SD) = 4.91]. However, for the 10-year-old, participants felt she was likely to understand the questions regardless of the number of "I don't know" responses they detected (M = 5.53). This suggests participants do not associate "I don't know" responses with a lack of understanding of the questions as much for the 10-year-old as they do for the 4-year-old.

Demographic Variables as Predictors of Credibility

A series of multiple regressions were conducted to assess demographic factors as possible predictors of honesty, cognitive ability, and suggestibility ratings. Demographic variables included in the model were age, gender, ethnicity, parent status, and experience with child sexual abuse. For the purpose of the analysis, participants who indicated "other" on the gender question were excluded from the analysis due to the small sample size of this group (N=3). Education level was recoded into four categories (less than high school, high school graduate, some/completed college, graduate degree). Gender (β=0.25, p=.02) and amount of personal experience with child sexual abuse (β=0.05, p=.03) were significant predictors of honesty rating. Participants who identified as female tended to rate Lauren as more honest than those who identified as male. Additionally, those who indicated having more personal experience with child sexual abuse were more likely to rate Lauren as more honest. No demographic variables were significant predictors of suggestibility ratings. Education level was a significant predictor of cognitive ability rating, (β=-0.18, p=.04). Participants who achieved higher education were more likely to rate Lauren lower on cognitive ability.

A moderation analysis was conducted to determine if the conditions moderated the relationship between significant demographic factors and credibility ratings. An ANCOVA was used to assess interactions between significant independent variables and significant demographic variables and covariates on the dependent variables. The analysis revealed that age condition moderated the relationship between education level and cognitive ability rating [F (2, 696) = 12.35, p<.001]. The strongest relationship between age condition and cognitive ability rating was for participants with a high school diploma. Participants with a high school diploma, some college/completed college, or a graduate degree tended to view the 10-year-old as more

cognitively competent than the 4-year-old. Participants with some high school actually viewed the 10-year-old as less cognitively competent than the 4-year-old; however, because of the small sample size of this group (N=7), this result should be interpreted with caution. There were no other significant moderators for honesty, suggestibility, or cognitive ability.

CHAPTER IV

DISCUSSION

The primary objective of this study was to explore how child witnesses are viewed by mock jurors when they use the "I don't know" ground rule and to determine if a ground rule instruction changed their perceptions. Children who use ground rules appropriately while being interviewed are more accurate in their statements and are less vulnerable to suggestion (Brubacher et al., 2015) which is invaluable when they must give a testimony as a key witness with no corroborating evidence. It is equally important to understand how using ground rules when being questioned during a trial can affect jurors' perceptions of the child's credibility to ensure that children's testimonies are both truthful and believable. In cases of alleged child sexual abuse, it is particulary important that the child is protected from any suggestion and presents truthful and credible testimony to the jurors to ensure a just outcome.

The current study aimed to address three main research questions. First, I wanted to know how mock jurors would perceive a child who says "I don't know" when asked difficult or confusing questions and if this differed based on the child's age. I predicted that the older child would be penalized by mock jurors in terms of perceived honesty and cognitive ability if they said "I don't know" more often, and the younger child would not be as penalized to the same extent. Lastly, I wanted to examine if the presence of a ground rules instruction from a judge would change mock jurors' credibility ratings on top of the child's age and "I don't know" responses. I predicted that the older child's honesty and cognitive ability ratings would actually

go up when using “I don’t know” more frequently if the ground instruction is presented and that the younger child’s suggestibility ratings would go down when using more “I don’t know” responses when the ground rules instruction was present. Thus, the ground rules instruction would affect perceptions of the children who used more “I don’t know” responses in different ways depending on their age.

While the amount of times the child actually said “I don’t know” did not have a direct effect on mock jurors’ credibility perceptions, the amount of times they thought the child said “I don’t know” did. When mock jurors did not receive the ground rules instruction, they tended to view the child as less honest the more times they remembered her saying “I don’t know,” regardless of the child’s age. While I predicted that this would be true for the older child but not for the younger child, it was actually true for both ages. Results also showed that cognitive ability ratings decreased the more mock jurors remembered the child saying, “I don’t know.” While this was more so the case for the 4-year-old than for the 10-year-old, more “I don’t know” responses did negatively impact their cognitive ability ratings regardless. This could be problematic for children who do use the “I don’t know” rule in response to lawyers’ questions. Saying “I don’t know” to a lawyer’s question does not necessarily indicate they do not know the answer but rather they did not understand the question because it was confusing. Mock jurors in this study may have misinterpreted the child’s “I don’t know” responses as indications of dishonesty or poor memory.

The ground rules instruction was included in this study as a potential tool that could be used to clear up misunderstandings regarding a child’s uncertain responses during questioning, as other types of jury instruction have been found to do in previous research (Goodman-Delahunty et al., 2011). Results showed that the ground rules instruction primarily impacted

mock jurors' perceptions of the child's honesty. Honesty ratings tended to decrease the more times the participant thought the child said "I don't know" when there was no ground rules instruction, but honesty ratings remained relatively high regardless of "I don't know" responses when the ground rules instruction was present. Contrary to prediction, the presence of the ground rules instruction did not affect suggestibility or cognitive ability ratings, nor did it affect any ratings differently based on the child's age. This pattern of results suggests that the ground rules instruction could be effective in eliminating the misconception that more uncertain responses are an indication of lying. However, it may not improve jurors' views of the child's cognitive ability when the child witness answers, "I don't know" frequently. I had predicted that the ground rules instruction would make mock jurors more aware of the complex and confusing nature of lawyer questions and would lead them to attribute the child's "I don't know" responses to the difficulty of the question itself rather than the child's cognitive shortcomings. The ground rules instruction does emphasize that the child should say "I don't know" to confusing questions, introducing to mock jurors' the idea that lawyers' questions can be confusing and can often be difficult for young children to answer. However, this could inadvertently reinforce the idea that children who find the questions confusing are less cognitively competent, when the actual reason that the question is confusing for the child is because it is a highly complex question that even adults can struggle to answer appropriately.

Mock jurors' verdicts were predicted by their ratings of the child's honesty, cognitive ability, and suggestibility. When they saw the child as being more honest, more cognitively competent, and/or less suggestible, they were more likely to vote 'guilty.' Because mock jurors only received the child's testimony as evidence to the case and did not hear from any other witnesses or the defendant, their verdict could be primarily influenced by their perceptions of the

child's credibility. However, because child witness testimony is often the only evidence available in child sexual assault cases (Tabak & Klettke, 2014), actual child sexual assault trials may also rely heavily on the child's credibility to influence the outcome of the case. The present study indicates that participants may not choose to convict if they have reason to doubt the child's credibility. Perhaps more importantly, the more times mock jurors thought the child said, "I don't know" increased the likelihood that they voted 'not guilty.' Therefore, she may have been viewed as an unreliable witness if jurors thought she said "I don't know" frequently in her testimony. The presence of the ground rules instruction did not change this pattern, which raises a concern that such instructions may not reduce the negative impact that "I don't know" responses may have on the child's believability.

A previous study by Mugno and colleagues (2016) found that mock jurors' perceptions of the child may be influenced by the lawyer that questions them, such that a child can be viewed as less credible when questioned by a lawyer who asks more suggestive questions (e.g., a defense attorney during cross-examination). In the present study, participants rated the prosecutor and defense attorney separately in terms of how suggestive, understandable, complex, and convincing they were. Mock jurors tended to view the child as more honest, more cognitively competent, and less suggestible when they were less favorable of the defense attorney. In Mugno and colleagues' (2016) study, the child was viewed as less credible when they read only a cross-examination with a defense attorney questioning the child witness, suggesting that the child may have been seen as more suggestible because they were being asked more suggestive questions. The findings of the current study do not support this idea, as the child received better ratings when the defense attorney was rated less favorably. These findings may be more representative of how jurors' perceptions would change towards the child in an actual trial because they read

both the direct-examination and cross-examination in the present study as opposed to only one or the other. Therefore, seeing the child answer the less leading questions from the prosecutor first may have primed them to view the child as a more credible witness before reading the cross-examination.

The ground rules instruction affected how mock jurors viewed the prosecutor's question complexity. When they received the ground rules instruction, they viewed the prosecutor's questions as more complex than if they did not, but this was not the case for the defense attorney. Age had a greater effect on participants' perceptions of the defense attorney's question complexity; they were rated as more complex for the younger child than for the older. Thus, participants were aware that complex questions are developmentally inappropriate particularly for younger child witnesses.

I also examined how mock jurors' general beliefs about child witnesses could impact their views of the child depicted in the study. Mock jurors who demonstrated more "correct" knowledge about child witnesses' suggestibility tended to view the child as less honest, less cognitively competent, and more suggestible. Neither the amount of "I don't know" responses they detected nor the ground rules instruction affected these ratings. When examining specific responses, participants who detected more "I don't know" responses had more correct responses on the items regarding suggestibility. These participants may have been more aware of children's vulnerability to leading questions and coaching and were more attentive to the child's responses to these questions. The presence of the ground rules instruction was also found to affect participants' response to the statement, *"Inconsistencies in a child's report of sexual abuse indicate that the report is false,"* depending on the amount of "I don't know" responses they detected. Mock jurors tended to agree with this statement if they did not have the ground rules

instruction and detected more “I don’t know” responses, but those who did read the ground rules instruction tended to disagree with this statement. Therefore, the ground rules instruction may be informing participants of other reasons why a child’s report would be inconsistent, such as the confusing nature of lawyer questions.

Finally, the results of this study replicated those of other studies in terms of demographic effects on credibility perceptions and verdicts. The “I don’t know” response and ground rules instruction manipulations did not have additional effects.

Limitations

There are several limitations of the design of the present study. First, participants only read testimony from the child victim; in actual sexual assault trials, jurors would receive much more information before making verdict judgements, including defendant testimony, testimony from other witnesses, expert witnesses, and even jury instructions. This could explain the high number of guilty verdicts, as participants only heard the child’s side of the story. Actual jurors would also be expected to deliberate with other people before making a verdict decision, which could lead some people to change their perceptions. Jury deliberation has sometimes been shown to induce leniency bias, with more not guilty verdicts after deliberation than before (MacCoun & Kerr, 1988). In terms of validity, mock jury studies similar to this one have been shown to accurately represent behavior from real juries (Bornstein, 1999), so the lack of jury deliberation, as well as, the presentation of materials in written form can still be useful as a tool to predict behavior in real juries.

Secondly, participants only received written material, so they were not able to see emotions from the child or lawyers. Jurors in actual child sexual assault cases would have much

more information to utilize in order to make both credibility judgements as well as verdict judgements. Visual information may have also been more useful for participants to gauge the child's uncertainty or confusion and could change their views of the witness (Fishfader, Howells, Katz, & Teresi, 1996). Long pauses, facial expressions, or non-verbal sounds may have made the child's confusion or uncertainty during questioning more salient to participants rather than just the child's verbal "I don't know" responses.

Third, because it would be unethical to use a real trial transcript from a child sexual assault trial and potentially cause harm to the individuals depicted in those transcripts, the study used a fabricated scenario in which a child is questioned by attorneys. While two actual transcripts from sexual assault trials and previous studies on common types of lawyer questions were used to guide the development of the transcripts used in the study to increase ecological validity, they may not be fully representative of a real trial. Both actual transcripts were from cases in which the children testifying were both around the age of 10, so the questioning may have differed for a younger child. Therefore, the transcripts used in the study may not accurately represent how lawyers would question a 4-year-old. Thus, it is unknown whether the results of this study can be generalized to other instances of children being questioned during trial.

Another limitation is that the "I don't know" response manipulation did not seem to be as effective as intended. Participants in the high "I don't know" condition did not pick up on how many times the child said "I don't know," so causal inferences could not be made for many of the findings, as the amount of times the participants thought the child said "I don't know" could have been based on other factors outside of the materials provided. For example, participants who already felt children in general struggle to answer confusing or complex questions may have assumed the child said "I don't know" much more frequently, regardless of how many times she

actually did. However, many important conclusions can be made by examining how their perceptions of the child's credibility change as a function of the number of times they thought the child said "I don't know," which was one of the main objectives of this study. In addition, the age manipulation was not as strong of a moderator in this study as was expected. This could have been because the 4- and/or 10-year-old did not act like some participants would expect them to act. In other words, even though they knew the child's actual age, the child did not reflect their view of the "typical" 4- or 10-year-old.

Last, this study would have benefited from having a larger sample size. Due to the number of manipulations and estimated effect sizes for the analyses, a larger sample would have provided the study with greater power in order to more accurately test interactions between the independent variables. According to an a priori power analysis, I needed a sample of 1000 participants to find a small effect size, but I was not able to collect all 1000 due to budget limitations. On the other hand, any unique statistical significance that may be achieved only with 1000 participants may be less practically significant in application to actual trials.

Implications

While there are limitations to this study, it contributed new knowledge towards the area of research surrounding child credibility perceptions. To my knowledge, this is the first study to analyze the effect of "I don't know" responses and on mock jurors' child credibility judgements, as well as examine how a ground rules instruction can change their perceptions as a function of the child's "I don't know" responses. The present findings suggest that children who use the "I don't know" rule by saying "I don't know" to difficult lawyer questions are viewed as less honest and having poorer memory. Thus, jurors may be less likely to believe children's

testimony when they say “I don’t know” more frequently. However, the presence of the ground rules instruction influenced mock jurors’ honesty ratings. Rather than viewing the child as less honest when they thought the child said “I don’t know” more, they actually viewed the child as more honest when the ground rules instruction was present. This provides evidence that ground rules instructions may help to decrease negative perceptions as a result of the child saying, “I don’t know.” The ground rules instruction seemed to lead mock jurors to think the prosecutor’s questions were more complex, so they also had an unintended negative effect for the prosecutor. In actual trials, the prosecution may need to be more aware of the types of questions they ask so they avoid being penalized by the jury.

Future Directions

Because this is the only study that has examined “I don’t know” responses with mock jurors’ credibility perceptions, additional research should be conducted to determine if these findings can be replicated as well as generalized to other types of child abuse cases. More studies should be conducted using different sexual abuse cases to determine if these results can generalize to other cases besides the specific scenario used in the present study. Because adults’ perceptions of children can differ depending on the type of case (sexual assault vs. other types of maltreatment) (Nunez et al., 2011), future studies should also be conducted using cases where the child experiences a different of maltreatment other than sexual abuse.

To increase ecological validity, future studies could also include testimony from the defendant. Mock jurors may have been skewed towards believing the child because they only read her testimony, so including a defendant testimony could change the verdict outcome. In addition, expert witness testimony could also be included to combat misperceptions about

children's ability to witness, which has shown to affect mock jurors' views of the child in past research (Crowley et al., 1994).

Another option for the child would be to use another one of the ground rules, which instead encourages children to ask for clarification or say "I don't understand" to complex questions (Lamb & Brown, 2006). When the child asks for clarification to a complex question rather than just saying "I don't know," it may be clearer to the jury that their uncertainty is a result of the question being too complex rather than dishonesty or memory failure. However, there is surprisingly little research on how well children are able to use this ground rule, so future studies could examine both how well children can be taught to use this rule and how it affects mock jurors' perceptions.

Conclusion

Much of the research regarding child witnesses has focused on increasing children's accuracy in reporting witnessed or experienced events. The 'ground rules' that have been developed as a result have been shown to effectively reduce errors and protect the child against suggestion when used correctly. Therefore, it is important that these ground rules be used during trial to reduce errors and inconsistencies as a result of suggestive and difficult lawyer questions. However, using the "I don't know" rule could negatively impact jurors' perceptions of the child by making them seem less honest or cognitively competent. The presence of the ground rules instruction, on the other hand, could be used to combat this negative effect, specifically by suggesting to jurors that "I don't know" responses can be attributed to the difficult questions from the lawyer rather than the child being dishonest. These findings are important because they

provide evidence that ground rules instructions should be given when children testify so they can use the “I don’t know” rule to protect themselves from suggestion during cross-examination.

The findings from this study have important implications on procedures that should be used when children are involved in criminal court. The current study demonstrated how jurors can negatively judge a child’s credibility when they struggle to answer lawyers’ questions, which could lead to an increased risk of wrongful acquittals and a failure of justice for children who have actually been sexually abused. Therefore, it is important that ground rules instructions be present when children testify in court to minimize this risk.

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APPENDIX A

IRB APPROVAL LETTER

THE UNIVERSITY OF TENNESSEE CHATTANOOGA

Institutional Review Board
Dept 4915
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Chattanooga, TN 37403
Phone: (423) 425-5867
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TO: Leanza Greenlee **IRB # 20-056**
Dr. Amye Warren

FROM: Lindsay Pardue, Director of Research Integrity
Dr. Susan Davidson, IRB Committee Chair

DATE: 3/30/2020

SUBJECT: IRB #20-056: Mock Jurors' Perceptions of "I don't know" Answers in Child Testimony

Thank you for submitting your application for research involving human subjects to The University of Tennessee at Chattanooga Institutional Review Board. Your proposal was evaluated in light of the federal regulations that govern the protection of human subjects and approved via the expedited review procedure authorized by 45 CFR 46.110 and 21 CFR 56.110.

You must include the following approval statement on research materials seen by participants and used in research reports:

***The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project #* 20-056.**

Please keep in mind that all research must be conducted according to the proposal submitted to the UTC IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an Application for Changes, Annual Review, or Project Termination/Completion form to the UTC IRB. Please bear in mind that significant changes could result in having to develop a new application for submission and approval. Your protocol will be automatically closed at the end of the proposed research period unless a change request application is submitted. No research may take place under a closed or expired protocol.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the UTC IRB as soon as possible. Once notified, we will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event.

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval.

For additional information, please consult our web page http://www.utc.edu/irb or email instrb@utc.edu.

Best wishes for a successful research project.

The University of Tennessee at Chattanooga is a comprehensive, community-engaged campus of the University of Tennessee System.

APPENDIX B

CASE BACKGROUND VIGNETTE

On March 23rd, 2012, a referral was made to the Child Protective Services (CPS) regarding 4/10-year-old Lauren Smith. The referral was made by Lauren's teacher, who reported that Lauren told her she didn't like being at home and was afraid of her step-father, Anthony Smith. When her teacher asked her why, Lauren started to cry and reported that Anthony had touched her genitals. The teacher then contacted CPS.

On March 24th, 2012, a CPS worker came to Lauren's school to interview her. She reported that Anthony had abused her multiple times within the past year. Lauren's mother, Jennifer Smith; biological brother, Sam Smith; and biological father, Troy Stevens; were also interviewed. Neither Jennifer nor Sam reported witnessing the assault. Troy, who was divorced from Jennifer and who did not live with Lauren at the time, reported that he felt he should have been given custody of Lauren and did not want her to live with Jennifer and Anthony.

Jennifer (Lauren's mother), reported that the four of them (herself, Lauren, Anthony, and Sam) used to live at an apartment on 11th street. During this time, she worked night shift at a local hospital while Anthony worked during the day, and he looked after Lauren and her older brother Sam, who is 14-years-old, from the time they came home from school until they went to bed. However, in September 2011, the family moved to a house on Commons Street and Jennifer began to work day shifts. Lauren claims that the sexual abuse occurred at both residences. At the apartment, she reported that the abuse took place at night when Jennifer was at work. At the house, she reported that the abuse took place between the time that she came home from school and the time that Jennifer returned home from work in the evening.

Lauren’s case went to trial, and on July/January 13th, 2012, she testified in court against her stepfather.

APPENDIX C

CASE ARGUMENT SUMMARY

Prosecution: The prosecution's argument for the trial is that Lauren's stepfather, Anthony, sexually abused her on multiple occasions between the months of June 2011 and March 2012. The main evidence on the side of the prosecution is eyewitness testimony from Lauren, who testifies that her stepfather touched her genitals on many different occasions.

Defense: The defense's argument for the trial is that Lauren's stepfather has never sexually abused her, and instead Lauren was coached to make the accusation by her father, Troy. The defense suggests Troy wanted Lauren to make the accusation because he was unhappy that Jennifer, his ex-wife, had gotten married to Anthony and wanted to gain full custody of their two children.

APPENDIX D

TRIAL TRANSCRIPT EXCERPTS

Excerpts from the 4-Year-Old, High "I don't know," Ground Rules Absent Version

JUDGE: Okay Lauren, Mr. Johnson is going to ask you some questions now. You need to answer his questions with only the truth about what you remember.
LAUREN: Okay.

JOHNSON: Did your stepdad move in at the same time you all did? Or did he move in later?
LAUREN: I don't know.
JOHNSON: Did he move in in the winter? Or was it summer?
LAUREN: Summer.

JOHNSON: Okay. So he was usually home at night. And now that we know where you slept and where your stepdad slept, I want to talk about what you said, you said something happened. Could you explain to the jury what happened when you were 3 years old, when it was that something happened between you and your stepdad for the first time?
LAUREN: I don't know.
JOHNSON: Do you recall an incident where your stepfather touched you in a bad place?
LAUREN: Yes.

JOHNSON: Alright. So when you were still living in that apartment, do you remember anything like what you just described happening again?
LAUREN: I don't know.
JOHNSON: Did he touch you just this one time or did he do it more than one time?
LAUREN: More than one.

JOHNSON: Okay, Lauren, so when you were still living at the apartment, and your mom was still working at night, do you remember how many times that same thing that you described earlier happened?
LAUREN: I don't know.
JOHNSON: Was it just once, or did it happen a couple times?
LAUREN: A couple times.

WILLIAMS: And was it at night that the defendant first abused you in his bedroom?
LAUREN: Uh…I don't know.
WILLIAMS: You don't know if it was at night or during the day? I'm just trying to make sure I understand what you're saying, Lauren, so I don't get anything wrong. So you're saying you don't know if it was at night or during the day when this happened, is that right?
LAUREN: Yeah.

WILLIAMS: Don't you think, with such a small, quiet apartment, when the TV is suddenly turned on in the middle of the night, don't you think that might wake other people up?
LAUREN: I don't know.
WILLIAMS: You don't think the TV would ever have woken your brother up?
LAUREN: Yeah.
WILLIAMS: So you are telling us that your brother was always asleep on any of the nights where your stepfather would've done this?
LAUREN: Yeah.

WILLIAMS: Is it possible, Lauren, he brought you to the couch at night to try and help you sleep?
LAUREN: I don't know.

WILLIAMS: And you say that the defendant abused you in your room, right?
LAUREN: Um…I don't know.
WILLIAMS: You don't know if he abused you?
LAUREN: Yeah.
WILLIAMS: So you're saying he did abuse you? I'm a little confused here.
LAUREN: Yes.

WILLIAMS: Lauren, do you think it's possible he may have said something to you about your stepdad doing something to you? Something kind of like the incidents you've described?
LAUREN: I don't know.
WILLIAMS: You said your dad didn't like your stepdad very much, right?
LAUREN: Yeah.

JOHNSON: Okay thank you. I just need you to clarify one more thing. Can you explain the conversation you had with your father—your biological father, not your stepdad—what was talked about when you discussed your stepdad? You said you had a conversation with your dad about your stepdad, right?
LAUREN: I don't know.
JOHNSON: Let me clarify. Did you talk to your dad about your stepdad at any point?
LAUREN: Yes.

Excerpts from the 4-Year-Old, Low "I don't know," Ground Rules Instruction Present Version

JUDGE: Okay Lauren, Mr. Johnson is going to ask you some questions now. You need to answer

his questions with only the truth about what you remember. If he asks you a question that you don't understand, I want you to say, I don't know, okay?
LAUREN: Okay.

JOHNSON: Did your stepdad move in at the same time you all did? Or did he move in later?
LAUREN: I don't know.
JOHNSON: Did he move in in the winter? Or was it summer?
LAUREN: Summer.

JOHNSON: Okay. So he was usually home at night. And now that we know where you slept and where your stepdad slept, I want to talk about what you said, you said something happened. Could you explain to the jury what happened when you were 3 years old, when it was that something happened between you and your stepdad for the first time?
LAUREN: Yeah.

JOHNSON: Alright. So when you were still living in that apartment, do you remember anything like what you just described happening again?
LAUREN: Yeah.

JOHNSON: Okay, Lauren, so when you were still living at the apartment, and your mom was still working at night, do you remember how many times that same thing that you described earlier happened?
LAUREN: I don't know.
JOHNSON: Was it just once, or did it happen a couple times?
LAUREN: A couple times.

JUDGE: Okay Lauren, now Mr. Williams is going to ask you some questions. Again, you need to answer his questions with only the truth about what you remember. If he asks you a question that you don't understand, I want you to say, I don't know, okay?
LAUREN: (nods head)

WILLIAMS: And was it at night that the defendant first abused you in his bedroom?
LAUREN: Yeah.
WILLIAMS: You're saying he abused you in his room at night?
LAUREN: Yeah.

WILLIAMS: Don't you think, with such a small, quiet apartment, when the TV is suddenly turned on in the middle of the night, don't you think that might wake other people up?
LAUREN: Yeah.

WILLIAMS: But you don't think your brother woke up on any of those nights where your stepfather would've done this?
LAUREN: No.

WILLIAMS: Is it possible, Lauren, he brought you to the couch at night to try and help you sleep?
LAUREN: Uh-huh (nods head).

WILLIAMS: And you say that the defendant abused you in your room, right?
LAUREN: Yeah.
WILLIAMS: Sorry, was it your bedroom or his bedroom? Earlier you said it was his bedroom?
LAUREN: Yes, his bedroom.

WILLIAMS: Lauren, do you think it's possible he may have said something to you about your stepdad doing something to you? Something kind of like the incidents you've described?
LAUREN: I don't know.
WILLIAMS: You said your dad didn't like your stepdad very much, right?
LAUREN: Yeah.

JOHNSON: Okay thank you. I just need you to clarify one more thing. Can you explain the conversation you had with your father—your biological father, not your stepdad—what was talked about when you discussed your stepdad? You said you had a conversation with your dad about your stepdad, right?
LAUREN: Uh-huh.

Excerpts from the 10-Year-Old, High "I don't know," Ground Rules Instruction Absent Version

JUDGE: Okay Lauren, Mr. Johnson is going to ask you some questions now. You need to answer his questions with only the truth about what you remember.
LAUREN: Okay.

JOHNSON: Did your stepdad move in at the same time you all did? Or did he move in later?
LAUREN: He moved in later.
JOHNSON: When exactly was it that he moved in? What month?
LAUREN: I don't really know exactly.
JOHNSON: Was it in the winter? Or was it summer?

LAUREN: I think summer.

JOHNSON: Okay. So he was usually home at night. And now that we know where you slept and where your stepdad slept, I want to talk about what you said, you said something happened. Could you explain to the jury what happened when you were 8 years old, when it was that something happened between you and your stepdad for the first time?
LAUREN: I don't know.

JOHNSON: Alright. So when you were still living in that apartment, do you remember anything like what you just described happening again?
LAUREN: I don't know.
JOHNSON: Did he touch you just this one time or did he do it more than one time.
LAUREN: It was more than one time.

JOHNSON: Okay, Lauren, so when you were still living at the 11th street apartment, and your mom was still working at night, do you remember how many times that same thing that you described earlier happened?
LAUREN: I don't know.
JOHNSON: Was it just once, or did it happen several times?
LAUREN: It happened many times.

WILLIAMS: And was it at night that the defendant first abused you in his bedroom?
LAUREN: Uh…I don't know.

WILLIAMS: Don't you think, with such a small, quiet apartment, when the TV is suddenly turned on in the middle of the night, don't you think that might wake other people up?
LAUREN: I don't know.
WILLIAMS: You don't think the TV would ever have woken your brother up?
LAUREN: It was quiet.

WILLIAMS: Is it possible, Lauren, he brought you to the couch at night to try and help you sleep?
LAUREN: I don't know.
WILLIAMS: You said whenever he was on the couch with you, he was rubbing you under the blanket, right?
LAUREN: Yes.

WILLIAMS: And you say that the defendant abused you in your room, right?
LAUREN: Um…I don't know.
WILLIAMS: You don't know if he abused you?
LAUREN: Yes. He touched me.

WILLIAMS: Lauren, do you think it's possible he may have said something to you about your stepdad doing something to you? Something kind of like the incidents you've described?
LAUREN: I don't know.
WILLIAMS: You said your dad didn't like your stepdad very much, right?
LAUREN: Yeah.

JOHNSON: Okay thank you. I just need you to clarify one more thing. Can you explain the conversation you had with your father—your biological father, not your stepdad—what was talked about when you discussed your stepdad? You said you had a conversation with your dad about your stepdad, right?
LAUREN: I don't know.

Excerpts from the 10-Year-Old, Low "I don't know," Ground Rules Instruction Present Version

JUDGE: Okay Lauren, Mr. Johnson is going to ask you some questions now. You need to answer his questions with only the truth about what you remember. If he asks you a question that you don't understand, I want you to say, I don't know, okay?
LAUREN: Okay.

JOHNSON: Did your stepdad move in at the same time you all did? Or did he move in later?
LAUREN: He moved in later.
JOHNSON: When exactly was it that he moved in? What month?
LAUREN: I don't really know exactly.
JOHNSON: Was it in the winter? Or was it summer?
LAUREN: I think summer.

JOHNSON: Okay. So he was usually home at night. And now that we know where you slept and where your stepdad slept, I want to talk about what you said, you said something happened. Could you explain to the jury what happened when you were 8 years old, when it was that something happened between you and your stepdad for the first time?

LAUREN: Yes.

JOHNSON: Alright. So when you were still living in that apartment, do you remember anything like what you just described happening again?
LAUREN: Yes.

JOHNSON: Okay, Lauren, so when you were still living at the 11th street apartment, and your mom was still working at night, do you remember how many times that same thing that you described earlier happened?
LAUREN: I don't know.
JOHNSON: Was it just once, or did it happen several times?
LAUREN: It happened many times.

JUDGE: Okay Lauren, now Mr. Williams is going to ask you some questions. Again, you need to answer his questions with only the truth about what you remember. If he asks you a question that you don't understand, I want you to say, I don't know, okay?
LAUREN: Okay.

WILLIAMS: And was it at night that the defendant first abused you in his bedroom?
LAUREN: Yes.
WILLIAMS: You're saying he abused you in his room at night?
LAUREN: Yes.
WILLIAMS: Okay this is where I'm a little confused. Earlier you said it happened in his bedroom during the day, is that not right?
LAUREN: Sorry, it was during the day.

WILLIAMS: Don't you think, with such a small, quiet apartment, when the TV is suddenly turned on in the middle of the night, don't you think that might wake other people up?
LAUREN: I guess.

WILLIAMS: Is it possible, Lauren, he brought you to the couch at night to try and help you sleep?

WILLIAMS: And you say that the defendant abused you in your room, right?
LAUREN: Yes.
WILLIAMS: Sorry, was it your bedroom or his bedroom? Earlier you said it was his bedroom.

LAUREN: Yes, it was his bedroom.
WILLIAMS: So you're saying he never abused you in your bedroom?
LAUREN: No.

WILLIAMS: Lauren, do you think it's possible he may have said something to you about your stepdad doing something to you? Something kind of like the incidents you've described?
LAUREN: I don't know.
WILLIAMS: You said your dad didn't like your stepdad very much, right?
LAUREN: Yeah.

JOHNSON: Okay thank you. I just need you to clarify one more thing. Can you explain the conversation you had with your father—your biological father, not your stepdad—what was talked about when you discussed your stepdad? You said you had a conversation with your dad about your stepdad, right?
LAUREN: Yes.

APPENDIX E

PERCEPTIONS QUESTIONNAIRE

Attention Checks:

1. What are the names of each of the family members (mother, biological father, stepfather, brother)?

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2. Who did Lauren live with at the time of the alleged abuse?

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3. Where does Lauren say the abuse occurred?

   ---

4. How many times does Lauren say the abuse occurred in the apartment?
   a. One time
   b. More than once
   c. Daily

5. How many times does Lauren say she was abused in the house?
   a. One time
   b. More than once
   c. Daily

6. Where does Lauren say the abuse occurred at the house?

   ---

7. Where does Lauren say Sam (her brother) was when she was being abused?

   ---

8. What does the defense attorney say about the TV?

   ---

9. Who does Lauren talk to about her stepdad?

   ---

10. What age was Lauren at the time of the trial?
    a. 2
    b. 4

c. 6
d. 8
e. 10
f. 12

Verdict Judgement

1. Based on what you have read about this case, what would your verdict be? Would you find the defendant, Anthony Smith, guilty or not guilty?
    a. Guilty
    b. Not Guilty

2. Please rate your confidence in your verdict:

Not at all			Neutral			Very Confident
1	2	3	4	5	6	7

3. Please list three reasons that you chose this verdict decision.

Child Credibility Assessment Scale (Kehn et al., 2014)

Honesty:

- H1: How would you rate the child's likelihood of lying?
- H2: How would you rate the child's likelihood of making up the event?
- H3: How would you rate the child's likelihood of reporting things that did not really happen?
- H4: How would you rate the child's honesty?

Suggestibility:

- S1: How would you rate the child's likelihood of being influenced by adult's questions?
- S2: How would you rate the child's likelihood of being misled by the adult asking questions?
- S3: How would you rate the child's likelihood that accuracy is affected by stress?
- S4: How would you rate the child's likelihood of forgetting to report things that really happened?

Cognitive Ability:

1. C1: How would you rate the child's ability to recall events?
2. C2: How would you rate the child's reliability of memory?
3. C3: How would you rate the child's ability to remember and answer questions?

- C4: How would you rate the child's adequacy in recounting events?
- C5: How would you rate the child's accuracy in describing and reporting events?
- C6: How would you rate the child's ability as a witness?
- C7: How would you rate the child's communication skills?

Additional Characteristics

1. How would you rate Lauren's:
   -language ability
   -sexual knowledge
   -ability to distinguish imagination from reality
   -emotional maturity
   -intelligence
   -knowledge of right and wrong

Low			Moderate			High
1	2	3	4	5	6	7

2. How confident was Lauren in answering the attorney's questions?

Not at all confident			Somewhat confident			Very confident
1	2	3	4	5	6	7

3. How likely is it that Lauren understood the questions being asked?

Extremely unlikely			neither likely nor unlikely			extremely likely
1	2	3	4	5	6	7

4. How likely is it that Lauren honestly believes she was sexually abused by her stepfather when she really was not?

Extremely unlikely			neither likely nor unlikely			extremely likely
1	2	3	4	5	6	7

5. How likely is it that an adult convinced Lauren to make a false report against her stepfather?

Extremely unlikely			neither likely nor unlikely			extremely likely
1	2	3	4	5	6	7

Attorney Performance Questions

6. How suggestive or leading was the prosecutor/defense attorney during questioning?

Not at all			moderately			very
1	2	3	4	5	6	7

7. How convincing was the prosecutor's/defense attorney's argument?

Not at all			moderately			very
1	2	3	4	5	6	7

8. How complex were the prosecutor's/defense attorney's questions to Lauren?

Not at all			moderately			very
1	2	3	4	5	6	7

9. How understandable were the prosecutor's/defense attorney's questions to Lauren?

Not at all			moderately			very
1	2	3	4	5	6	7

"I don't know" Manipulation Question

10. Approximately how many times do you think Lauren responded to a question with "I don't know" during questioning?
    a. Never
    b. Once or twice
    c. Three or four times
    d. Five or six times
    e. Seven or eight times
    f. Nine or ten times
    g. More than ten times

Child Witness Beliefs

Please rate each of the following statements about child witnesses.\

1. Children are no more influenced by leading questions than are adults.

Strongly disagree			neither agree nor disagree			strongly agree
1	2	3	4	5	6	7

2. Children are sometimes led by an adult into reporting that they have been sexually abused when they have not.

Strongly disagree			neither agree nor disagree			strongly agree
1	2	3	4	5	6	7

3. A child cannot describe sexual abuse unless he/she actually experienced it.

Strongly disagree			neither agree nor disagree			strongly agree
1	2	3	4	5	6	7

4. Children sometimes come to believe that they were sexually abused when they really were not.

Strongly disagree			neither agree nor disagree			strongly agree
1	2	3	4	5	6	7

5. Most children can be manipulated into making a false claim about sexual abuse.

Strongly disagree			neither agree nor disagree			strongly agree
1	2	3	4	5	6	7

6. Inconsistencies in a child's report of sexual abuse indicate that the report is false.

Strongly disagree			neither agree nor disagree			strongly agree
1	2	3	4	5	6	7

7. Most children who are sexually abused tell someone right away.

Strongly disagree			neither agree nor disagree			strongly agree
1	2	3	4	5	6	7

APPENDIX F

DEMOGRAPHICS QUESTIONNAIRE

Demographics

1. What is your age?
   _____

2. What is your gender?
   a. Female
   b. Male
   c. Other_____
   d. Prefer not to answer

3. Do you identify as Hispanic or Latino-A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race. Please select from the answers below.
   a. Hispanic Latino
   b. Not Hispanic Latino
   c. Other_____

4. Of the racial identities listed below, which best represents you?
   a. White (Not Hispanic Latino)- A person having origins of the original people of Europe, the Middle East, or North Africa.
   b. Black or African American (Not Hispanic Latino)- A person having origins in any of the black racial groups of Africa.
   c. American Indian or Alaska Native (not Hispanic Latino)- A person having origins in any of the original peoples of North and South America (including Central America), and who maintain tribal affiliation or community attachment.
   d. Asian (Not Hispanic Latino)- A person having origins in any of the original peoples of the Far East, Southeast Asia, or Indian subcontinent, including Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, and Vietnam.
   e. Native Hawaiian or Pacific Islander (Not Hispanic Latino)- A person having origins in any of the peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
   f. Two or more races (Not Hispanic Latino)- All person who identify with more than one of the above five races.
   g. Other_____

5. What is the highest degree or level of school you have completed? If currently enrolled, highest degree received.
   a. No high school
   b. Some high school, no diploma
   c. High school graduate, diploma or equivalent (GED)
   d. Some college credit, no degree
   e. Trade/ technical/ vocational training
   f. Associate's degree
   g. Bachelor's degree
   h. Master's degree

i. Professional degree
j. Doctoral degree

6. Do you have children?
    a. Yes
    b. No

7. If you answered yes, what is/are their age(s)?
    _____

8. Please rate your personal experience (self, family member, close friend, work) with child sexual abuse.

None			A moderate amount			a great deal
1	2	3	4	5	6	7

VITA

Leanza Gabrielle Greenlee was born in Morristown, TN, to Keith and Wilhemina Greenlee. She is one of three children, with one twin sister, Daria, and one older sister, Mallory. She attended Alpha Primary and continued to Morristown West High School in Morristown, TN. After graduating, Leanza attended the University of Tennessee Knoxville, where she studied Psychology and became interested in social psychology research. She completed her Bachelor of Arts degree in May 2017. After completing her Bachelors degree, Leanza accepted a graduate research assistantship at the University of Tennessee at Chattanooga in the Research Psychology Masters Program. During her graduate career, Leanza conducted research in the Psychology and Law Lab, taught undergraduate college courses (including Introduction to Psychology, Research Methods Lab, and Statistics Lab), and took on a position in the School of Education assisting with program evaluations and data management. Leanza graduated with a Master of Science degree in Psychology in August 2020.