

The Impact of Interview Techniques and Their Contextual Application on the Reliability of Children's Testimony

Shuning Zhang^{1,a,*}, Junyao Hou^{2,b}

¹University of California, San Diego, United States

²Beijing National Day School, Beijing, China

a. shz062@ucsd.edu, b. houjunyaoannah@sina.com

*corresponding author

Abstract: Throughout history, the authenticity and credibility of children's eyewitness testimony have been subjects of ongoing debate among researchers. Our study examines previous research on factors affecting the accuracy and reliability of children's testimony, highlighting how external factors, particularly interview elements, significantly contribute to children's false reports without dismissing their testimony solely based on age. These factors include question types, interviewer's attitudes, and specific interview protocols. These findings are crucial for the legal system, highlighting how external factors significantly contribute to children's false reports without dismissing their testimony solely due to age. Finally, most studies have been conducted in Western country's contexts and might have been arguably affected by Western cultural norms. This paper also pointed out the lack of studies on cultural differences between Western and non-Western countries. Addressing this gap could provide new research directions for future scholars. Overall, we emphasize the need for meticulous interviewing techniques tailored to different contexts to increase the accuracy and trustworthiness of children's statements.

Keywords: children's testimony, interview questions, interviewer's attitudes, reliability

1. Introduction

About 66% of children are victims of violence or experience violence [1]. Additionally, between 20% and 48% of children in the United States have experienced multiple types of traumatic events, including being a victim or eyewitness to various assaults or crime scenes [2]. These findings underscore the critical role that children play in the context of crime, as their testimony can be pivotal in legal proceedings, whether they are victims or eyewitnesses. Effectively gathering and interpreting their testimony not only aids in solving crimes but also ensures the legal system can make well-informed decisions, leading to fairer outcomes for everyone involved.

Historically, researchers have doubted the reliability of children's eyewitness testimony and considered their words invalid in court due to concerns of false memory and vulnerability to provide problematic information in interviews [3,4]. However, when children are the sole witnesses and the available evidence is limited, reconsidering their testimony can be particularly valuable. Despite increased scrutiny and suspicion compared to adults due to the immaturity of their memory development and age, research shows that children can recall salient events from early childhood with accuracy [5-7], countering the notion that children cannot provide reliable memories.

This article explores the application of various interview techniques tailored to different contexts, aiming to optimize the reliability, credibility, and accuracy of children's reports. We focus on evaluating the effects of different questioning methods, particularly comparing leading and open-ended questions. Open-ended questions are preferred, as they evoke more detailed, less biased responses, but it is important to take into account individual differences and cultural differences in determining what is the best questioning method. In child interviews, making the environment calm, warm, friendly, and non-threatening is of utmost importance. Interviewers need to be aware of and check their own negative attitudes or biases so the children's responses are unaffected by pressure from interviewers. Interviewing methodology needs to be very carefully chosen and applied; for example, there are two well-documented interviewing protocols. One is called the National Institute of Child Health and Human Development (NICHD) protocol, and the other, the Cognitive Interview (CI) technique eyewitness testimony, be trusted and what is the best interviewing practice.

By reviewing and analyzing various studies on children's eyewitness testimony, this paper dealt with trying to exploit knowledge in relation to children's eyewitness testimony so that the legal system's ability to convict the right perpetrator of any crime is optimized and the risk of convicting an innocent, which can carry a very heavy price, is minimized. Rigorous and validated modes of interviewing children hold great promise for improving the justice system, for allowing children's voices to be both reliable and ethically acquired.

2. External Factors Affecting Reliability

External factors significantly influence the reliability of children's reports in legal contexts, including interview styles, leading questions, and repeated interviews. Consequently, when interviewing children who are victims or witnesses of abuse, interviewers must carefully apply strategies to encourage accurate and reliable descriptions of events for use in the justice system.

2.1. Question Styles

2.1.1. Leading Questions

A leading question includes specific details or suggests a particular answer. Interviewers often use "yes or no" questions to confirm facts [8]. For example, in cases of child sexual abuse, they might ask, "Did the suspect take off your clothes?" instead of, "How did the suspect treat you?". While leading questions can narrow the scope of memory retrieval, they also carry the risk of suggestibility, which can negatively impact children's reports [4, 9-11].

Suggestibility in leading questions can either enhance children's recall or implant false information. A well-known example of wrongful conviction is the McMartin Preschool trial and the suggestibility in interviewing misguided children to play an important role in providing false reports [12]. Through a systematic review of the effect of suggestibility on children, Goodman and Schaaf found that leading questions could result in false allegations due to their specificity, as they are suggestible or contain misinformation [4]. For example, questions formatted with incorrect facts can deteriorate children's memory by inserting false information, contributing to memory fabrication. This can potentially obscure the truth either for a short period or indefinitely. Therefore, the reliability of children's testimony can be significantly affected by the elements present in the questioning process.

Building on previous research on the suggestibility of leading questions in children's interviews, a comprehensive analysis of previous studies indicates the negative effect of leading questions associated with repetition [9]. Repeated questions assist with memory rehearsal, enabling children to recall events with higher accuracy and details [4]. Nevertheless, the technique of repetition can improve the reliability of children's testimony but can also undermine their accuracy of memory when relying on leading or specific questions [9]. This study also found that leading questions, which

include specific cues or prompt binary responses, can limit memory retrieval by shortening the recall range, induce suggestibility, and lead to guesses when hesitation occurs. As a result, repeated interviews with leading questions can cause children to consolidate the erroneous information in their memory and fabricate additional inaccurate details to ensure the completeness and coherence of their recollections, which can degrade the reliability of children's accounts in the legal system.

Listed studies advocate reducing the use of leading questions, as their inherent specificity can mislead children and compromise the reliability of their statements. However, leading questions should not be entirely dismissed, because when the specificity in the question is based on established facts, they can help activate the recall of particular information. This process is supported by the concept of spreading activation, which refers to a memory retrieval process where information is interconnected like nodes in a web [13]. Moreover, the specificity of the question style influences the specificity of children's reports [14]. Transcripts from children's interviews show that children tend to provide more generic information if the wording of the question is generic. Conversely, their responses are more specific if the wording of the question is specific. Therefore, interviewers should not reject the use of specific questions when collecting children's testimony. Instead, they should wisely incorporate facts to facilitate children's memory in specific scenarios, particularly when open-ended questions fail to elicit crucial information and a more detailed description is needed for the legal system.

2.1.2. Open-ended Questions

An open-ended question excludes specific cues or guidance and exhibits responses with "yes or no" [15]. Interviewers encourage respondents to free-recall and disclose whatever information comes to mind rather than limiting their responses to specifics related to the wording of the question. Through a comprehensive analysis of previous experiments and studies, Raheebah and Blades indicated children demonstrate significantly higher accuracy with open-ended questions [9]. Additionally, because free recall allows for a wider range of memory retrieval, children can recollect details of the incident more effectively. Children are also more likely to express their uncertainty when faced with open-ended questions. Unlike binary questions ("Yes or No"), open-ended questions do not force children to choose between fixed options when they feel hesitant, allowing them to express their uncertainty. Regarding the effect of repeated interviews on the style of questioning, this study shows that repeated open-ended interviews enhance children's recall, which improves the accuracy and reliability of children's autobiographical reports.

To verify the effect of question type and find ways to enhance the retrieval of accurate details, a study investigated 34 children's eyewitness interviews conducted by police [11]. The study counted the total number of questions in each interview and categorized them into open-ended or specific questions. Within the open-ended question category, questions were further classified into different subtypes. The evaluation of preferred question types was based on the total number, ratio, and mean of story grammar elements in each category. "Story grammar" refers to the ability to report facts of an event ("setting," "initiation event," "internal response," "plan," "attempt," "direct consequence," and "resolution"). The results of the experiment showed a significant difference between open-ended and specific questions. The total number, ratio, and mean of story grammar elements were higher in open-ended interviews. Additionally, there were significant differences among the subtypes of open-ended questions ("Broad invitations," "Breadth questions," "Depth questions," "Clarification questions," and "Anything else questions") and types of story grammar. The effectiveness of each subtype varied for different types of story grammar. Specifically, "Broad invitations" elicited more reliable disclosures in story grammar than "Clarification questions" or "Anything else?". Also, there is a significant difference between applying questions on "initiating event details," "attempt details," and "direct consequences."

Although numerous studies suggest that open-ended questions benefit children's interviews, Gustafsson and colleagues used Meaning Construction Analysis (MCA) to evaluate Chinese people's responses to open-ended questions across four projects [16]. In the third project, "Children and Their Cultural Vision", 15 children were asked to draw two pictures three times. When asked to explain their drawings, they focused on descriptive details rather than expressing subjectivity. In the Chinese education system, children are typically presented with questions that have standard answers. Therefore, when children encounter open-ended questions, such as describing their drawings, they may feel uncomfortable. They worry that their ideas might not be correct and, as a result, focus on the descriptive details of their drawings. This suggests that open-ended questions may not be a useful tool for children to disclose details of abuse.

Due to cultural differences, open-ended questions may not be beneficial in children's testimony interviews. Interviewers should consider children's cultural backgrounds when formulating question types. This is important because much of the research is conducted in Western cultures, but in China, open-ended questions have not proven to be as effective in children's interviews. Chinese children are not accustomed to answering without specificity or expressing largely subjective views.

2.2. Interview Contexts

Interview context refers to various elements used in children's interviews. This section reviews studies on interviewers' attitudes and common strategies, which can influence children's memory retrieval, interaction dynamics, and report accuracy during the interview. Consequently, these factors affect the evaluation of the reliability of children's testimony in the justice system.

2.2.1. Interviewer's Attitude

When interacting with others, people decide their next words or actions based on the feedback they receive. Feedback has different types, including verbal, facial expressions, gestures, etc. These can represent the attitude of the interacting person. When interviewing children for evidence accumulation, the interviewer's attitudes can affect how much truth disclosure and accuracy of reports [4, 9, 10].

Continuing in their study, Goodman and Schaaf found that accusatory-type questions can be excessively suggestive and lead to inaccuracies in children's reports, especially when there is a long-time lapse between the incident and the interview [4]. Generally, accusatory-type questions signal suspicion and unfriendly attitudes. When children perceive this negative stance from interviewers, they may feel stressed and defensive. Children's ability to resist stress varies with their development. If they cannot handle the stress, the accuracy and amount of their disclosures may be negatively affected. In line with the goal of avoiding intimidation in questions, Greenbul and Blades emphasized that children are more likely to provide accurate information when the interview atmosphere is supportive and trustworthy [9].

To maintain objectivity and avoid interviewer attitudes that either exaggerate or underestimate the reliability of children's responses, it is essential to control for confirmation bias [10]. Confirmation bias refers to the tendency to filter incoming information based on preexisting beliefs, leading individuals to focus on information that supports their views while neglecting contrary evidence. This bias can significantly affect the evaluation of children's reports. For instance, if an interviewer believes that children are unable to recall events accurately and are easily influenced by suggestions, their attitude toward the children can become dismissive or biased. This results in the degradation of the value of the children's testimony in court due to subjective judgment rather than a careful evaluation of their responses to the incident. Therefore, interviewers should maintain impartiality to prevent confirmation bias from influencing their judgment of testimony.

The interviewer's attitude should be kept as neutral as possible, avoiding subjective assumptions in the questioning style and content that could influence the children's answers. This neutrality prevents children from altering their original responses based on their interpretation of the interviewer's attitude. Maintaining a neutral attitude does not conflict with creating a supportive atmosphere; instead, they facilitate each other. A supportive atmosphere is achieved by avoiding negative attitudes toward the children and providing them with encouragement and empathy. The interviewer's neutrality and supportiveness help build a trusting relationship, which enhances the likelihood of more accurate and detailed disclosures.

3. Applications in Testimony

Research on children's memory has influenced the methods used for taking testimony by utilizing different types of interviews.

3.1. Cognitive Interview

One of the early developed protocols is the Cognitive Interview (CI). It is a successful protocol that combines memory recalling and inter-communication techniques to greatly improve both information accuracy and the amount of details [17]. There are three types of CI used including CI, enhanced CI (ECI), and modified CI (MCI). Those CIs mainly follow four techniques which are context reinstatement, reporting everything, changing perspective, and changing the temporal order. The first technique is context reinstatement, where the interviewee is prompted to mentally recreate the physical environment and personal circumstances present during the event. The second is to let the interviewee report everything that comes to their mind, whether it's complete or not. The third approach is that eyewitnesses are guided to recall the event from multiple viewpoints, including their perspective and that of other individuals involved. Ultimately, changing temporal order means that the witnesses make additional attempts to recall the event in various chronological sequences—beginning from the start, working backward from the end, starting from the middle, or any other significant moment for them. Among those three types of CI, MCI mainly applies to children due to the consideration of children's capabilities. It has extensive applications since it remains the main part of the protocols but omits the changing perspective and temporal order parts to ensure children can understand. Additionally, some versions of MCI added an extra prompt to go through the event one more time. Since children's language skills, comprehension, and expression abilities have not fully developed, these changes appeared to make the question easier for the children to understand and release their stress while interviewing. The most visible influence of MCI is that it can significantly increase the amount of correct details in the interview but also slightly enhance the number of error information.

3.2. National Institute of Child Health and Human Development (NICHD)

Another investigated protocol aimed to promote information gaining and enhance accuracy is the National Institute of Child Health and Human Development (NICHD) investigative protocol [18]. This protocol can enhance the quality of interviews and the accuracy of information obtained through the use of systematic open-ended questions and non-leading questioning. In the research, a total of 105 forensic interviews were selected, of which 55 were conducted using the NICHD structured protocol, and 50 did not employ the protocol. Prior to the commencement of the interviews, the interviewer elucidated the regulations governing the interview, established communication with the children, and conducted preliminary activities to assuage the children's apprehension before initiating the formal interview. The number of open-ended questions utilized in interviews conducted with the NICHD protocol was markedly higher than in those conducted without the protocol, while the number

of closed-ended and suggestive questions was significantly lower. Although there was no significant difference between the two groups in the total amount of detailed information obtained, the use of open-ended questions in interviews conducted using the protocol resulted in the acquisition of more information with greater accuracy. Implementation of the NICHD structured interview protocol significantly improved the quality of forensic interviews, allowing interviewers to more effectively obtain detailed and accurate information from children during the preparatory and substantive phases. These suggest that the NICHD protocol is suitable for children's eyewitness testimony and can be widely used in the legal system.

3.3. Comparison between CI and NICHD

The CI and the NICHD protocol both provide guidelines for research on how external factors can influence children's eyewitness testimony. Consequently, they share many similar ideas and approaches. Both strategies emphasize building rapport with interviewees to create a supportive environment. These protocols aim to improve the accuracy and detail of children's eyewitness testimony. To gather more information while avoiding suggestive implications, both protocols also focus on using open-ended questions to facilitate memory recall. The biggest difference between them is that the NICHD was specifically designed for interviewing child eyewitnesses, whereas the CI was developed without a particular focus on any group. Although the MCI was later adapted to include elements suitable for children, it is still less appropriate for children than the NICHD. Unfortunately, limited studies have experimented to compare and contrast these two protocols or find out which one is better. Therefore, we should decide on the use of both protocols based on the child's situation and the ultimate goal of the interview, or we can combine the two for a greater effect based on more experimental results.

4. Conclusion

Interview techniques, as an external factor, significantly contribute to the reliability and accuracy of children's testimony. Improper interview techniques can impact the reliability of children's eyewitness testimony, underscoring the need for meticulous interviewing techniques to obtain accurate and trustworthy statements from child witnesses. As discussed above, most research indicates that open-ended questions can enhance accuracy and elicit memory recall better than leading questions. However, interviewers should consider children's cultural backgrounds and the quality of established facts when forming questions. They should maintain a neutral stance while fostering a supportive environment to encourage children's disclosure. Additionally, interviewers should choose the appropriate interview method based on individual differences. These findings are crucial for the legal system, as they highlight how interview-related factors can significantly contribute to children's false reports without dismissing their reports as invalid evidence solely because they are too young.

Through this literature review, we identify several limitations. Firstly, most studies were conducted in the West, meaning the dataset of articles and experimental subjects predominantly represent Western cultural contexts. This raises questions about the generalizability of findings to non-Western populations. Specifically, there is uncertainty about whether question styles or wording in different languages significantly differ between cultures. Additionally, research on the application of discussed interview techniques is limited to Western legal systems. Each country may have different evaluations and policies for interviewing children, making these applications potentially unacceptable due to these differences. Additionally, since children may experience various types of abuse, different interview techniques may function differently during the interview process. However, the reviewed articles do not specifically categorize the types of abuse the children have suffered. Different experiences may lead to varying sensitivities to different interview techniques.

Regarding the observations and limitations of current studies, we suggest two future directions. First, there is a need to examine different languages and cross-cultural contexts to understand their impact on children's testimony under various interview protocols. It is particularly important to identify which interview techniques facilitate accurate disclosure by children about their experiences of victimization or witnessing abuse in non-Western cultures. By highlighting the commonalities and differences in interview techniques across cultural contexts, we can develop universally effective methods for interviewing child witnesses. Second, future studies should focus on classifying types of abuse and evaluating which interview techniques yield the most information and highest accuracy in children's reports for each type. This targeted approach will help maximize the effectiveness of different methods by tailoring them to specific types of abuse.

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