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Children's Memory for Their Mother's Murder: Accuracy, Suggestibility, and Resistance to Suggestion

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Children's Memory for Their Mother's Murder: Accuracy, Suggestibility, and Resistance to Suggestion

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From its inception, child eyewitness memory research has been guided by dramatic legal cases that turn on the testimony of children. Decades of scientific research reveal that, under many conditions, children can provide veracious accounts of traumatic experiences. Scientific studies also document factors that lead children to make false statements. In this paper we describe a legal case in which children testified about their mother's murder. We discuss factors that may have influenced the accuracy of the children's eyewitness memory. Children's suggestibility and resistance to suggestion are illustrated. Expert testimony, based on scientific research, can aid the trier of fact when children provide crucial evidence in criminal investigations and courtroom trials about tragic events.

Keywords: Memory; Children; Accuracy; Suggestibility; Law.

"Well, first she was screaming our names, and then I came running out of bed and I started crying and screaming."

These words were spoken by 9-year-old Jacob Reynolds[1] in a police interview following the murder of his mother, Tracy Reynolds. Mrs Reynolds was stabbed to death in her home on 22 July 2006. The Reynolds children, 9-year-old Jacob, 7-year-old William, and 1-year-old Isabella, were all present in the home at the time of the murder. Jacob and William were both interviewed by investigators following the crime (e.g., on the day of their mother's murder and then again the next day) and testified in court as witnesses for the prosecution.

Research on children's eyewitness memory for traumatic events is crucial in tragic circumstances such as these where children are the main witnesses. This is a field founded on dramatic cases of childhood trauma, such as domestic violence, child sexual abuse, kidnapping, and murder; the resulting research is imbued with practical as well as theoretical significance. As developmental psychologists we study children's eyewitness memory and suggestibility for such crimes, as well as in analogue studies in the field and the laboratory. We have been concerned with children's true reports as well as with children's false reports. Only one of us (Goodman) has actually testified in hearings and trials, although another of us (McWilliams) has consulted on several legal cases. All of us have been engaged in projects pertaining to children, law, and/or related topics.

Our goal here is to describe how a developmental psychologist who studies children's memory might analyse a legal case in which children's testimony played a crucial role. We also provide insights about serving as an expert witness.

[1] Names have been changed to protect the children's identity.

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We begin by summarising the Reynolds case in which Goodman testified. We identify memory issues involved in the case in relation to relevant scientific research.

THE REYNOLDS CASE

What follows is the boys' account of the events that took place in the Reynolds family home in the early morning hours of 22 July 2006.

"I was sleeping, my mom screamed my name, me and my brother's. She was screaming Jacob and William!" recalled 9-year-old Jacob. William Reynolds, only 7 years old, reported, "My mom was screaming but then the screaming stopped. And then I hear something fall off the bed... a big something fall off the bed." Following the initial screams the older boy, Jacob, ran to his parents' bedroom while his younger brother William remained in his bed ("I stayed in my room for a while, I was scared to go out"). Jacob stated that he saw his father, Michael Reynolds, standing over his mother, holding her down on the bed. "She was like kind of scared," Jacob recalled. Michael Reynolds instructed his son to "Go back to your room." Moments later, according to the oldest son, the father Michael "came out from the room and shut the door" and told his sons, "Come on let's go." The father and young children then fled from the scene. Jacob, William, and Isabella were brought to their cousins' house. Isabella, the baby, fortunately slept through the morning's events.

The father, Michael Reynolds, had a long history of domestic violence and other criminal activity. After dropping off his children at the cousins' house, Michael took refuge in the home of one of his mistresses where, weeks later, she requested him to leave. He was then apprehended at a bus stop by law enforcement and charged with the murder.

The father's defence in the case was that he came home to find his wife already dead, murdered by an intruder; he implicated one of his other girlfriends. Upon discovering his wife's dead body, rather than calling 911 or the police, Michael Reynolds said he fled with his children because he feared the authorities would accuse him of the crime, given his past criminal record. He further claimed that his sons were misremembering what occurred and were influenced (e.g., interviewed with leading questions) by relatives and the police.

During the murder trial of Michael Reynolds in 2008 the testimony of the two boys, Jacob and William Reynolds (then 11 and 9 years old) comprised a large part of the state's evidence against their father; however, the boys were only elementary school students. There are many issues to consider when determining whether or not to put young children on the witness stand. Having to testify can be an emotionally charged and confusing experience for anyone, let alone children: Having to testify in open court against your own father for murdering your mother would likely be particularly distressing. One must consider not only if this environment is harmful for children, but whether or not children are able to reliably recount their memories under such trying circumstances. People may wonder whether children as young as Jacob and William have the cognitive, social, and emotional capabilities that are necessary for testifying in a criminal case, including accurately describing what happened and being subjected to cross examination (Zajac & Hayne, 2003). These issues can be addressed by an expert witness in the field of children's eyewitness testimony.

When expert witnesses are called to testify in cases like the Reynolds one, fact finders (e.g., judge or jury) want to know if young children can accurately and reliably recall a stressful experience. The answer to this question is complex. Memory is multifaceted, and there are numerous forces that affect performance. Fortunately scientists have spent decades uncovering influences on children's accuracy; below we discuss some of the key influences relevant to the Reynolds case.

CHILDREN'S EYEWITNESS MEMORY

One major element that affects children's reliability is the type of event witnessed or experienced. In general, distinctive events that are stressful or otherwise highly negative (high in arousal and negative in valence) are remembered better than mundane, everyday events (Howe, 2011). As shown by Goodman, Hirschman, Hepps, and Rudy (1991) in a study on children's reactions to inoculations, children who are most distressed during upsetting events are also the children who best remember the event later and are least suggestible, at least on average (see also Quas et al., 2010). In addition, information is stored and recalled particularly well when there is personal significance (Courage & Howe, 2010;

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Goodman, Rudy, Bottoms, & Aman, 1990). Familiarity with the people involved in the criminal event can also help guard against misremembering what occurred (Cordon, 2004). More prolonged events, rather than ones that take seconds, have a better chance of being accurately remembered (Goodman & Hahn, 1987).

In the case of Jacob and William, all of these variables were at play. Although both children reported that they had heard their parents arguing before (''all of the time, every couple of days'' according to the younger boy, William), having their mother screaming for them and witnessing the subsequent events that characterised the murder case were unique, distinctive additions. It was also clearly a stressful, negative experience, as evidenced by Jacob having broken into tears during the assault, and William having been too uncomfortable or fearful to want to leave his room when he heard his mom screaming for help. For children the high personal significance of having one's main caretaker (one's mother) murdered is likely beyond question. The boys were quite familiar with both of their parents. The event was not brief, as in seconds, but relatively prolonged—for example, it was long enough for Jacob to reach the bedroom, observe his parents, return to his room, and travel in the car with his father. Jacob and William's experiences of distress during a personally significant, extended episode that involved familiar people decreased their likelihood of misremembering or suggestibility.

Children's age also influences their eyewitness memory capabilities. As a general rule, accurate memory increases and suggestibility decreases with age (Eisen, Qin, Goodman, & Davis, 2002; Goodman & Reed, 1986). Children in the preschool years, for example, remember (or at least report) fewer details and are significantly more suggestible than older children about experienced events. However, as shown in studies such as those by Eisen, Goodman, Qin, Davis, and Crayton (2007) and Goodman and Reed (1986), by the time children are age 5 or 6 they tend to have admirable abilities to accurately report information, particularly central information, and to be significantly less suggestible than preschool-aged children. Still, there remains a developmental progression. These age differences in memory and suggestibility could be seen with Jacob and William. Jacob demonstrated less suggestibility than his younger brother William, and also provided a clearer, more straightforward memory for the details of the morning in question. Although both children were asked leading questions at various points during the investigation, Jacob resisted suggestion throughout the interviews, whereas William changed his story or waivered with regard to details, such as what clothing his father was wearing, whether or not his father had anything in his hand, and the locations of various people.

In the cases of both children, central information was remembered most consistently throughout their interviews. Both boys remained consistent when describing major events (e.g., Jacob was consistent in saying their mother screamed and their father was alone in the room on top of their mother). It is in the more peripheral details of the event that the boys waivered, although arguably no more so than would an adult. For example, Jacob was uncertain about how many places the car stopped between their home and their cousins' house:

Investigator: ''When you left in the car where did you go next?''
Jacob: ''Well when we left in the car he stopped by his friend's house, I think he went by four stops or three.''
Investigator: ''He went by what four places?
Jacob: ''Yeah. Four houses of his friends. Or three.''

William waivered about the colour of his dad's shirt:

Investigator: ''When you got to your cousin's house what color was the shirt he had on?''
William: ''White.''
Investigator: ''Okay, what was the color of the shirt he had in his hand folded up?''
William: ''White''
Investigator: ''White also?''
William: ''It was white and black, one was just plain white and the other one was like black and white''

However, in a subsequent interview William provided the following information:

Investigator: ''And when you woke up later and you saw him coming out of the bedroom what was he wearing?''
William: ''He wore pants and a blue shirt.''

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This is in line with findings that memory for central details is strengthened in times of stress, whereas memory for peripheral details suffers (Christianson, 1992; Eisen et al., 2007). However, there is variability in the literature as to how researchers classify information as central or peripheral (Peterson & Bell, 1996). For example, some researchers define centrality in terms of ''plot-relevance'' (Heuer & Reisberg, 1992), whereas others include as central information any element associated with a main theme or character (Christianson & Loftus, 1991). In any case, Jacob and William's memory reports were consistent regarding the central event (their mother's murder).

A crucial predictor of children's completeness and accuracy is the timing of interviews. Early interviewing can not only tap into children's memories when those memories are fresh, but can also inoculate against later misleading information and suggestibility (Goodman, Bottoms, Schwartz-Kenney, & Rudy, 1991; Quas et al., 2007). Both Jacob and William were interviewed on the day of their mother's murder, and then again the next day. Interviews like these, coming very quickly on the heels of the event, allow children to divulge information while memory is robust, which additionally reinforces the children's memory of what happened, making it more likely that their memories will remain strong and untainted later. Indeed, Jacob and William statements were remarkably consistent in terms of central details across the years between the initial event and the legal hearings.

Repeated questioning about an event has a complex relation to memory (Goodman & Quas, 2008). The effects of repeated questioning depend in part on the questioning style and any biases shown by interviewers. Repeated questioning can be negative and introduce suggestibility and inaccurate memories if the interviewers ask misleading questions and imply that the children's accurate memories are incorrect, especially if children's memory is weak or the children are particularly compliant. However, repeated interviewing can also be a good way to strengthen memory for events because it causes children to rehearse memories and keep them from fading (Quas et al., 2007). Taking this a step further, repeated questioning can also lead to hypermnesia, where new correct details are recalled after a delay (La Rooy, Pipe, & Murray, 2005; Payne, 1987). Because Jacob and William were interviewed so soon after the murder and thus likely had their memories for the events consolidated early on, repeated questioning could have helped them to retain their initial memories and to retrieve other details. However, there were sections of the boys' interviews where the questioning became potentially harmful. During one of Jacob's early interviews the investigator repeatedly asked Jacob if his mother or father was holding anything. Jacob responded ''no'' seven times. Jacob was, in this way, highly resistant to suggestion throughout his interviews.

The structure of an interview can greatly affect children's suggestibility, with different types of questions yielding significantly different responses from young children (Bjorklund, Bjorklund, Brown, & Cassel, 1998; Dent, 1982; Lamb, Orbach, Hershkowitz, Esplin, & Horowitz, 2007). Laboratory research suggests that open-ended questions, such as ''Tell me what happened that morning,'' result in more accurate reports than specific questions (Lamb et al., 2007). Open-ended questions allow children the opportunity to recount their experiences without introducing a large amount of misinformation or interviewer bias. Open-ended questions also require children to consider more than one potential option for a response (Lamb et al., 2007). Unfortunately young children often do not provide rich, detailed accounts in response to open-ended prompts (Goodman et al., 1994). Children frequently remember more than they will report on their own, they require cues to activate their memory systems, and they utilise fewer memory strategies than adults (Bjorklund, Coyle, & Gaultney, 1992; Goodman et al., 1994). Children do not always realise that adults don't already know information that the children know, and they may not fully understand the importance of a forensic situation. To obtain adequate information for prosecution, investigators commonly need to follow up with more specific questioning.

However, specific questions can easily become suggestive. Questions, such as the following were posed to Jacob and William: ''Did you see anything kinda strange or weird on your dad, like on his clothes or anything like that?''; ''Didn't you hear your mom crying again or yelling your guys' names?''; ''What door did he shut? Did he shut your mom's room's door or your door?'' These specific questions have the potential to taint a child's memory report, although they do not necessarily do so. In current best practices interview protocols, interviewers are discouraged from asking young children yes/no questions or forced

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choice questions. These questions can increase inaccurate responses from young children (Peterson & Biggs, 1997). Yes/no questions and forced choice questions have the potential to imply that the interviewer already knows the answer, which may result in children acquiescing to social pressure rather than reporting their own memory. This phenomenon can be seen in one of the interviews with 7-year-old William Reynolds. The interviewer asked William, "Do you know whether your father had a bulletproof vest?" In reply William stated, "I didn't know that." William assumed his father had a bulletproof vest because it was implied in the question. The interviewer immediately caught his mistake and explained to William that he was only asking a question, and that he did not have any information about whether his father owned a bulletproof vest. If William had replied "yes" or "no" the interviewer might never have realised the unintentional suggestion included in his question.

To avoid introducing suggestion into an interview, some researchers recommend that investigators utilise "Wh-" questions (Peterson, Dowden, & Tobin, 1999). Asking a child "Where was your father standing?" rather than "Your father was standing by the bed, wasn't he?" better allows the child an opportunity to provide an account without predetermining the response (Peterson & Biggs, 1997), although some "Wh-" questions can still be leading. Other researchers recommend more exclusive use of open-ended prompts, such as "Tell me more" and "What happened next?" (Lyon, 2010). Sticking to open-ended and "Wh" questions during an interview is surprisingly difficult. To aid investigators in performing interviews that will hopefully obtain the greatest amount of accurate information, researchers have developed structured interview protocols.

One widely used protocol is the National Institute of Child Health and Development Investigative Interview Protocol (NICHD Protocol) developed by Michael Lamb, Kathleen Sternberg, and their colleagues. This structured protocol covers all stages of a forensic interview. Briefly, the interview starts with an introduction in which the interviewer introduces herself or himself, explains the rules (e.g., "It is okay to say 'I don't know'.") and expectations of the interview, and determines if the child knows the difference between a truth and a lie. Next the interviewer builds rapport with the child through the use of open-ended questions. This stage is meant to create a level of comfort and trust between the child and interviewer, and familiarises the child with the interview process (e.g., that the child is expected to provide information to open-ended questions). The interviewer then identifies the event in question for the child, using open-ended prompts (e.g., Lamb et al., 2007). Once the child has identified the target event, and the interviewer is confident the child knows what event the interview is about, the "substantive" section of the interview begins. The child is first asked free recall questions. These questions are then followed, as necessary, by direct questions, which address information the child has provided in response to the free recall prompts (Lamb et al., 2007).

Jacob and William were not questioned using the NICHD protocol or any formal interview protocol. However, many of the tactics used by the investigators were consistent with the NICHD protocol's format. Investigators made an effort to build rapport with Jacob and William during their first interviews, asking them about school and sports. The police and prosecutor both ensured the boys knew the difference between a truth and a lie: The investigator asked Jacob during his first interview, "If I say my T-shirt is white, is that a truth or a lie?" Following the rapport-building stage, the investigators asked the boys open-ended questions. However, investigators who are not conforming to an open-ended interview protocol often quickly start to ask yes/no and forced choice questions, such as these posed to Jacob during his initial interview: "Was she laying face down or face up?" and "And when you came the first time, did you see anything in your dad's hand?" (Note that Jacob said he only came to the door once.)

The Reynolds case provides an excellent framework for a review of child eyewitness research in that it highlights many key variables associated with children's memory performance. This case involved two children who had just experienced a horrible tragedy. These two boys were interviewed repeatedly by many different professionals. The children's reports demonstrated some of the classic developmental trends in memory, including in memory for traumatic information. They also demonstrated that even in the face of some leading questioning and extreme stress, children can provide remarkably reliable testimony about central details of an event. Of course, one cannot fully measure the accuracy of their accounts, but the boys showed considerable resistance in the face of suggestion. Both Jacob and William reported

consistent accounts of the events of 22 July 2006, through what turned out to be years of interviews and testimony.

THE OUTCOME

Both Jacob and William testified in two trials. The first trial of Michael Reynolds resulted in a conviction on 15 May 2008. However, the conviction was overturned by the trial judge on the basis of inadequate legal representation. Two years later the boys testified again at a second trial. The countless interviews and testimonies required by Jacob and William finally came to an end 4 years after the murder, on 7 October 2010. Michael Reynolds was again convicted of the first-degree murder of his wife, Tracy Reynolds, and was sentenced to 26 years to life in a state prison for the murder. This second verdict has been affirmed on appeal.

The boys were attending therapy and going to school while in the custody of their new caregiver. Understandably they have had some difficulties adjusting. One wonders how their past and the tragedy of their mother's murder will affect them, and how the memory of their mother's screams may haunt them. Effective interventions to help such children overcome their traumas and to break the potential for intergenerational cycles of violence are sorely needed.

EXPERIENCE AS AN EXPERT WITNESS ON CHILDREN'S EYEWITNESS MEMORY

Domestic violence cases that involve homicide are all too often witnessed or overheard by children (e.g., Pynoos & Eth, 1984). When a criminal case ensues and the children are called to the stand by the prosecution, as in the Reynolds case, the defence attorney may hire an expert in an attempt to discredit the children's testimony. The prosecution can then employ an expert witness to rebut the defence attorney's expert. If the experts have not interviewed the children, they would likely rely primarily on the scientific literature as the basis of their expert testimony, although information based on clinical experience might also be proffered. In a criminal trial the experts normally would not be permitted to go to the ''ultimate issue'' in the case. That is, they would not state if they thought the father was innocent or guilty or if the children were accurate or inaccurate in accusing their father. Rather, the experts' testimony would be more akin to a psychology lecture, to educate the trier of fact. This is what happened in the first trial in the Reynolds case.

In that first trial the defence attorney's expert discussed such issues as children's underdeveloped memory systems and children's suggestibility, citing for example writings by Ceci and Bruck (1993). The defence expert had not herself conducted research on children's eyewitness memory. The prosecution expert (Goodman) discussed many of the issues mentioned above. Usually an expert can expect a rigorous cross-examination. A rigorous cross-examination, while a bit daunting, can be helpful in bringing out qualifications to and caveats about the research findings. In the Reynolds case, surprisingly, the defence attorney in the first trial asked only a few questions of the prosecution expert.

In the second trial neither the defence nor the prosecution called an expert witness to the stand. The boys were older now and therefore probably even more convincing. Mr Reynolds was convicted again. It is unclear why the defence failed to call an expert witness, but given the absence of one there was nothing for a prosecution expert to rebut.

Although numerous memory issues were involved in the Reynolds case, it was still more straightforward than many other legal cases in which experts are called to testify about children's eyewitness memory. For example, in the Reynolds case the children were first interviewed soon after the event (the same day) while their memory was still fresh; the two boys were past the preschool years; and there was physical evidence of a crime (the mother's dead body was found on the floor in her bedroom). In many legal cases in which child eyewitness memory experts are called to testify, such as in child sexual abuse cases, there can be a relatively long delay between the alleged events and the first interview, the alleged events may have occurred when the children were quite young, and there is likely no physical evidence of the crime. The accuracy of the children's reports of sexual abuse becomes centre stage.

In some domestic violence homicides there can also be a variety of memory issues even more complex than in the Reynolds case. For example, in two separate cases in which Goodman consulted (but did not testify), one of the child witnesses to

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her mother's murder was 2 years 8 months old, and another was 4 years old. In the former it was 16 years between the murder and the trial, and in the latter it was 35 years. At the time of the initial investigations of the murders, these young children were deemed too difficult to interview and not able to withstand testifying at trial, and there were no other eyewitnesses to the murders. Thus prosecutions could not go forward initially.

However, in murder cases there is no statute of limitations; a defendant can be brought to trial regardless of the passage of time since the murder. In one case the father had crossed the border and was captured when he tried to return to the United States 16 years after the murder. In the other case new evidence emerged against the step-father after 35 years. In both cases the young children who witnessed the murders of their mothers were adults by the time of the prosecutions. Although these child witnesses had stated from the start that their father/step-father was the murderer, their initial statements were often difficult to interpret, and then, after so many years had passed, there were concerns that external influences (e.g., family discussion of the murder, methods used in police interviews) adversely affected their recollections, potentially clouding the credibility of their reports as adults. Although "flashbulb" memories might be expected to have been formed for such consequential events as the murder of one's mother (Brown & Kulik, 1977), even memories of highly salient events are subject to forgetting over time (Hirst et al., 2009; Neisser & Harsh, 1992). Nevertheless, in the case involving the 2-year-8-month-old, she was permitted to testify in the trial at the age of 19. Once she did, her father pleaded guilty, precluding the need for expert witnesses to testify. The father's admission of guilt was likely not based solely on her testimony, however: The circumstantial evidence was indisputably quite strong. In the second case, involving the 4-year-old, the judge ruled against admission of the (now adult) daughter's testimony at trial. The step-father went free. The memory issues inherent in such cases are quite complex, and more research is needed that is as directly on point as possible (Greenhoot, Bunnell, Curtis, & Beyer, 2008; Peterson, 2012).

CONCLUSION

As memory experts we must always be mindful of the fact that our laboratory research is limited in external validity to these types of dramatic, personally significant cases in which a child's mother is murdered. There is little we can study in the laboratory that approximates the consequentiality and trauma involved. Plus each case is unique, involving a mix of factors unlikely to have been studied in that same combination in scientific research. As developmental scientists we deal with averages, yet important individual differences exist in memory regardless of age. Still, there are robust findings in the scientific memory development literature that can provide important guidance to the courts. Quite arguably, we have a responsibility to provide it.

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