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1 Determinants of the Child Victim's Perceived Credibility

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It is heartbreaking to realize that children fall victim to crime. We like to think of childhood as a time of innocence, trust, and protection. Yet children are not immune from assault. To protect children from the dangers of such crimes as child abuse, murder, sexual exploitation, and kidnapping, legal action is often required. If legal action results in a trial, a child may be required to take the stand (Goodman, Jones et al., 1988).

When a child testifies, whether or not justice is done may depend largely on jurors' perceptions of the child's credibility. Although the credibility of any victim/witness may be questioned, there are reasons to expect that children's credibility will be of particular concern. Jurors may believe that children's memory is relatively poor and that they are easily coached. Alternatively, jurors may assume children are inherently honest and too naive to make false reports. Regardless of the specific position taken, such "theories" about the abilities of children are likely to affect their perceived credibility. The question of how jurors' theories about children's abilities affect the perceived credibility of a particular child witness is explored in this chapter. As a starting point, we assume that most jurors hold at least two kinds of theories and that these influence their perceptions of children's credibility as witnesses (see also Goodman, Golding, & Haith, 1984). One theory is that children are generally as honest as adults, if not more honest—a theory that might predispose jurors to believe child witnesses. The second theory is that young children's cognitive abilities are less developed than those of adults, which might be expected to lead jurors to question children's testimony under many conditions.

We propose, however, that the second theory does not necessarily lead to a devaluing of children's statements. Rather, it can lead jurors to believe

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children at some times and to disbelieve them at other times. Whether a child's credibility is weakened or strengthened by jurors' adherence to the second theory depends on how jurors' views of children interact with the details of a particular case. Moreover, at some age—probably late in childhood or during adolescence—the cognitive abilities children need to testify accurately about most events start to converge with the relevant cognitive abilities of adults. At this point, barring specific reasons to suspect dishonesty, the presumption that children are more honest than adults may lead to perceptions of heightened credibility for children.

To support these claims, we review current work on jurors' perceptions of child witnesses. We then describe two recent experiments on determinants of jurors' perceptions of child victim/witnesses. In one experiment, we investigated jurors' abilities to evaluate the accuracy of children's testimony. That is, we examined whether jurors can distinguish between accurate and inaccurate testimony given by a child. In the second experiment, we examined jurors' theories about child versus adult victim/witnesses. Both experiments focused on the credibility of child victim/witnesses, but in relation to two very different kinds of trials, one concerned with malpractice and the other with sexual assault.

Research on Jurors' Perceptions of Child Witnesses

Until recently, few studies were concerned with jurors' perceptions of child witnesses. This area of research is now expanding rapidly; unfortunately, the findings from current studies are not entirely consistent.

A number of studies indicate that child witnesses are viewed as less credible than adult witnesses. Goodman, Golding, Helgeson, Haith, and Michelli (1987; see also Goodman & Michelli, 1981; Goodman et al., 1984) conducted three experiments in which mock jurors read about or heard the testimony of a six-, ten-, or thirty-year-old bystander eyewitness. Regardless of whether the testimony was presented in written form or on videotape, whether the subjects were undergraduate students or adults from the Denver community, or whether the trial concerned vehicular homicide or murder, mock jurors rated the six-year-olds as less credible witnesses than the thirty-year-olds. The credibility of the ten-year-olds fell between that of the other two age groups. Surprisingly, however, there were no significant effects of eyewitness age on mock jurors' judgments of guilt in any of the three studies.

Similarly, Leippe and Romanczyk (1987) report that bystander witness credibility increases with age from childhood to adulthood. Descriptions of a robbery-murder case were read by college students. The age of the key eyewitness was six, ten, or thirty years. The amount of incriminating evidence was also varied. The results duplicate those of Goodman et al.

(1987). Specifically, Leippe and Romanczyk found that the thirty-year-old eyewitness was viewed as more credible than the six-year-old. The ten-year-old's credibility fell between that of the other two witnesses. No significant main effect of eyewitness age on guilt ratings was found.

Interestingly, however, the amount of incriminating evidence affected the jurors' ratings of the defendant's guilt. When the incriminating evidence was weak or moderate, age differences were not found to affect verdicts, perhaps because a substantial majority of jurors voted "not guilty" based on lack of evidence. When the incriminating evidence was strong, the age of the eyewitness mattered. Under these conditions, the thirty-year-old's testimony resulted in 100 percent of the jurors rating the defendant as guilty, while the six- and ten-year-olds' testimonies resulted in only 58 percent of the jurors (for both ages) rating the defendant as guilty.

In a second experiment, Leippe and Romanczyk (1987) varied the age as well as the consistency of witness testimony. College students read a description of a mugging followed by murder. The sole eyewitness was a six-, ten-, or thirty-year-old onlooker. The onlooker later provided testimony that was either consistent or inconsistent over time. Leippe and Romanczyk found that testimonial consistency did not significantly affect the credibility of the ten- and thirty-year-old eyewitnesses but did significantly affect the credibility of the six-year-old. The consistent six-year-old was judged to be more credible than the inconsistent 6-year-old.

In contrast to the findings of Goodman et al. and Leippe and Romanczyk that children are viewed as less credible than adults, several other researchers report that children are seen as no less credible and may, in fact, be seen as more credible than adults. Ross, Miller, and Moran (1987) asked college students to watch a videotape of a simulated trial. The trial concerned a narcotics case in which a woman had been arrested for possession of cocaine. The key eyewitness, who was described as being either eight, twenty-one, or seventy-four years of age, testified for the prosecution that the cocaine had been in the woman's house for some time. The mock jurors rated witnesses on a variety of dimensions (e.g., accuracy, confidence, credibility, and truthfulness). No significant age effect on witness credibility was found: The eight-year-old was rated just as credible as the two adults. The eight-year-old was viewed as more accurate, intelligent, forceful, competent, consistent, and truthful than the twenty-one-year-old. The ratings for the seventy-four- and eight-year-old witnesses did not differ.

A few points concerning the Ross et al. study should be made. First, the particular case they used may have affected their findings. Jurors may have believed that the twenty-one-year-old was somehow involved in the drug deal whereas the eight- and seventy-four-year-olds were not. This interpretation of their findings fits well with our contention that children's credibility will vary as a function of case factors. Second, it is possible that the

individuals who played the role of the key eyewitness were not representative of their age groups. This would explain the counterintuitive finding that the eight-year-old was judged as more intelligent, forceful, and competent than the twenty-one-year-old. Again, this possibility points to the many factors that can determine a child's perceived credibility in an actual case.

Johnson (1986) attempted to replicate the study by Goodman et al. (1984). Unlike these researchers, however, he presented the trial scenario on audiotape and varied the amount of contradictory evidence presented. Instead of the witnesses' credibility increasing with age, age had no effect. Like Ross et al., Johnson found that the child witness was actually judged to be somewhat more truthful and unbiased than the adult witness. Nigro, Buckley, Hill, and Nelson (this volume) also used the scenario developed by Goodman et al. to investigate jurors' impressions of child versus adult witnesses. The key eyewitness was described as either eight or twenty-five years old. Nigro et al. also varied the powerfulness of the witness's speech style. Subject-jurors rated the eight-year-old who used a powerful speech style as the most credible witness.

How can we explain the inconsistencies across these several studies? One possibility has to do with jurors' theories of children's honesty and cognitive abilities. In the Ross et al. and Nigro et al. studies, the youngest witness was eight years old. Perhaps jurors believe that children of this age are similar to adults in the cognitive abilities and relevant experience required to provide accurate testimony in the cases described. This possibility would explain why Goodman et al. and Leippe and Romanczyk tended not to find age differences between the credibility of ten- and thirty-year-old eyewitnesses. The belief that older children are reliable witnesses appeared in the literature as early as 1910, when Gross, a German judge, stated that a "healthy half grown boy" is the best possible witness for simple events (as cited by Whipple, 1912). The belief that older children are likely to have accurate memories for simple events, combined with the belief that children are basically honest, may have led to the findings of Ross et al. and Nigro et al.

Another possible explanation for the inconsistent findings across studies is implied by Leippe and Romanczyk's results. The amount of incriminating evidence may alter jurors' perceptions of a child's credibility. Thus, Johnson's inability to replicate the Goodman et al. study may be a result of differences in the amount of corroborating information presented. In any case, the fact that Johnson's subjects viewed the child witness as more truthful and unbiased than the adult witness points again to the belief that children are particularly honest witnesses.

In this chapter, we focus on the first possibility—that is, that jurors' theories about children's cognitive abilities and relevant experience can lead to different evaluations of their credibility. To develop this argument, we present findings from two recent experiments.

Juror's Ability to Discriminate between Accurate and Inaccurate Testimony

Recent research indicates that children, by at least the age of four years, can be quite accurate in reporting the main actions witnessed or experienced in real-life events (e.g., Goodman & Aman, 1987; Goodman, Aman, & Hirschman, 1987; Goodman & Reed, 1986; Marin, Holmes, Guth, & Kovac, 1979). Young children are also surprisingly resistant to suggestive questions concerning actions associated with abuse, such as being hit or having one's clothes removed (Goodman, Hirschman, & Rudy, 1987; Rudy, 1986). Yet, if jurors cannot distinguish accurate from inaccurate testimony, the child's accuracy is of little consequence. In fact, Wigmore (1909) argued that the crucial issue for psychological research on eyewitness testimony is not witness accuracy but the factfinder's ability to reach the truth (see also Melton & Thompson, 1987). With two exceptions (Leippe & Romanczyk, 1987; Wells, Turtle, & Luus, this volume), research on this matter has been limited to jurors' ability to distinguish accurate from inaccurate testimony given by adult bystander witnesses.

In a recent review of the literature on jurors' ability to reach the truth, Wells (1985) concluded that "there is no evidence supporting the view that people are good at evaluating the accuracy of eyewitness testimony under various conditions" (p. 60). This conclusion was based on a number of studies indicating that jurors cannot distinguish between accurate and inaccurate adult witnesses.

Two different experimental procedures have been used to investigate this issue. One involves asking subject-jurors to read descriptions of published research studies and predict the results. For example, Brigham and Bothwell (1983) asked randomly selected registered voters to read a scenario from a study by Leippe, Wells, and Ostrom (1978) dealing with a calculator theft and a scenario from a study by Brigham, Maass, Snyder, and Spaulding (1982) dealing with a customer's activities in a convenience store. In both studies (Leippe et al. and Brigham et al.), witnesses had attempted to identify the confederate from photo lineups. Brigham and Bothwell found that 70 to 91 percent of the registered voters overestimated witnesses' ability to identify the confederates.

Leippe and Romanczyk (1987) conducted a similar study, but one that investigated adult predictions of children's testimony. College students read about a brief (15-second) argument between an experimenter and an intruder, a scenario taken from a study by Marin et al. (1979). In that study, the argument was witnessed by individuals from one of four age groups—kindergartners and first graders, third and fourth graders, seventh and eighth graders, and college students. Contrary to the findings of Brigham and Bothwell, Leippe and Romanczyk report that subjects underestimated the accuracy of the witnesses. Of particular concern were sub-

jects' estimates of accuracy as a function of eyewitness age. Leippe and Romanczyk's subjects did not believe there would be age differences in accuracy on a photo identification of the intruder but did believe there would be age differences in the accuracy of answering questions about the intruder and the event. In fact, Marin et al. did not find significant age differences on either measure.

The second experimental procedure used to investigate jurors' abilities to estimate the accuracy of eyewitness testimony has been championed by Wells (Lindsay, Wells, & Rumpel, 1981; Wells, Ferguson, & Lindsay, 1981; Wells & Leippe, 1981; Wells, Lindsay, & Ferguson, 1979; Wells, Lindsay, & Tousignant, 1980). This procedure has greater ecological validity than the first, in that mock jurors actually see witnesses testify about an event. For example, Wells, Lindsay, and Ferguson (1979) staged a theft that was witnessed by college students. The students were asked to identify the culprit from a photo lineup and were then cross-examined in front of mock jurors. The mock jurors were unable to distinguish accurate from inaccurate witnesses.

In other studies of this sort, Wells and his colleagues found that, regardless of accuracy, jurors are much more likely to believe confident than nonconfident witnesses (Lindsay et al., 1981; Wells & Leippe, 1981; Wells et al., 1979; Wells et al., 1980). For example, when viewing conditions for witnesses were varied so that some witnesses had a good opportunity to see the culprit while others did not, subject-jurors still placed great emphasis on the witnesses' confidence in assessing their statements; confident witnesses were believed to the same extent regardless of viewing conditions (Lindsay et al., 1981).

In this volume, Wells et al. report a study of mock jurors' abilities to estimate the accuracy of child versus adult witnesses. Adults and eight- and twelve-year-old children viewed a brief videotape of a kidnapping. The next day each witness was subjected to direct- and cross-examination by two researchers. Videotapes of these interviews were then shown to college students. Wells et al. found that jurors were fairly accurate in estimating the witnesses' accuracy except in one case: they underestimated the eight-year-olds' suggestibility.

In summary, research on jurors' ability to discriminate between accurate and inaccurate testimony indicates that subject-jurors often overestimate the accuracy of adult eyewitness testimony, placing too much emphasis on the confidence of witnesses. They may also overestimate children's ability to resist suggestion. In contrast, at least on some tasks (e.g., answering questions about a witnessed event), the abilities of child witnesses may be underestimated. It is important to note, however, that the few studies dealing with predictions of children's accuracy (Leippe & Romanczyk, 1987; Wells et al., this volume) examined bystander witnesses. Children who testify in court, however, are more likely to be victim/witnesses. Jurors' ability to predict the accuracy of a child's statements may differ depending

on whether the child experienced an event or merely observed it. In the following section we describe the first study conducted on jurors' ability to distinguish between accurate and inaccurate testimony provided by child victim/witnesses.

Experiment 1: "Do You Remember the Last Time You Went to the Doctor?"

In this study, we were concerned with subject-jurors' impressions of the accuracy of testimony given by young children who had experienced a stressful event, receiving an inoculation at a medical clinic. The study included three phases. In Phase 1, children were surreptitiously videotaped while receiving shots from a nurse as part of their regular medical care. The subjects ranged in age from three to six years and came from families of relatively low socioeconomic status. Three to four or seven to nine days later, the children's memory for the event was tested. The results of the initial phase have been reported elsewhere (Goodman, Aman, & Hirschman, 1987) and are described here only briefly. The children were very accurate in recalling what happened, although their reports were often sketchy. Age differences were found in the ability to answer objective and suggestive questions accurately. Finally, children's ability to recognize the nurse in a six-person photo lineup was relatively poor, especially for the three-year-olds, whose performance fell to chance levels following a seven- to nine-day delay period. The children's parents, however, were just as unsuccessful in identifying the nurse.

The second phase was conducted at a university law school and involved direct- and cross-examination of five of the children nine to twelve months after their visit to the medical clinic. The children were screened to ensure that they had not returned to the clinic and had not received another shot. The long delay period was chosen to mimic the time that often passes between initial interviews by police or other authorities and testimony in actual trials. A prosecutor and a defense attorney from the community, both of whom had worked with real child witnesses, volunteered to direct- and cross-examine the children. For purposes of the study, the two men alternated roles as prosecutor and defense attorney.

Each parent-child dyad was individually brought to a moot courtroom at the law school. Upon arrival, the child was told that a set of questions would be asked about what happened the last time he or she got a shot. The child was then given a second memory test identical to the one given months before. This memory test helped to remind the child of the event in question. No feedback concerning the correctness of the child's responses was provided.

The "prosecutor" then entered the moot courtroom, greeted the family, and explained to the child what would happen. Specifically, he said that the

TABLE 1.1 Sample direct- and cross-examination questions (Experiment 1).

Direct-Examination Questions
What happened the last time you went to the doctor's office?
Was the person who gave you the shot a man or a woman?
Had you ever seen that person before that day?
I'm going to show you some photographs. Is the person who gave you the shot in these photographs?
Did you take your clothes off?
Did she make you swallow anything?
Did she hit you?
Did the person use one of these things on you that day? (attorney holds up a stethoscope)
Cross-Examination Questions
Have you ever seen the Easter bunny?
When was the last time the tooth fairy was at your house?
What did the nurse look like?
What did the doctor look like?*
Was there a refrigerator in the room?
How many chairs were in the room?
The truth is, you don't really remember who it was who gave you the shot, do you?*
What were you wearing that day?

*Suggestive questions.

child would be seated at the witness stand and be interviewed by himself and another attorney. He also explained that the child should tell the truth in response to all questions and indicated that it was fine to say "I don't know" if the child could not answer a question.

The child then took a seat at the witness stand, while her or his parents sat in the audience. The child was first asked a set of direct-examination questions by the prosecutor. As part of the direct examination, a six-person photo lineup that included the nurse was shown to the child and the child was asked if the nurse was pictured in it. The man playing the role of the defense attorney then asked a series of cross-examination questions. The cross-examination began with questions concerning the child's ability to distinguish fantasy from reality. For example, the child was asked if he or she had ever seen the Easter bunny. The child was then questioned more generally about the inoculation episode, and an average of six misleading questions (range four to six) were included.

While the attorneys were given some freedom to ask for clarification from the child and to follow the child's lead, the questioning generally conformed to a preestablished script that had been agreed on at an earlier meeting. It included some of the same questions that had appeared in the initial and delayed memory tests, in addition to a number of new questions. Sample questions from the script are presented in Table 1.1. At the com-

pletion of questioning, the child was thanked and given a toy. Phase 2 was videotaped in its entirety.

The children's responses were scored in terms of their accuracy in (1) answering the questions and (2) identifying the nurse. The children's overall scores in answering the questions ranged from about 50 to 70 percent correct. On the photo identification task, one of the five children accurately identified the nurse, who was pictured in photograph 1; one incorrectly chose the person pictured in photograph 5; two were unable to identify anyone; and one indicated some awareness of the correct nurse (i.e., said she had seen that nurse "at another doctor's office"). For purposes of analysis, the latter three children were grouped into an intermediate category.

Phase 3 consisted of showing the videotapes of the children answering the direct- and cross-examination questions to 100 college students who served as mock jurors. Twenty individuals (twelve females and eight males) were randomly assigned to view each of the videotapes.

Before viewing the videotape, each individual was asked to read a one-page description of a case involving a civil suit. The description stated that the child's parents had brought a medical malpractice suit against a nurse for giving their child an unauthorized shot that resulted in significant physical injuries. The nurse claimed that she had not given the child a shot and the child was confusing that visit to the clinic with a visit to a different clinic during which the child had received a shot. The nurse also claimed that the injuries to the child were sustained as a result of an undisputed fall, which had occurred within a day or two of the child's visit to the medical clinic.

Within each group, the subject-jurors were randomly assigned to one of two "defendant" conditions. Specifically, half of the jurors were told that the accused nurse was pictured in photograph 1 of the photo lineup; the other half were told that the accused nurse was pictured in photograph 5. In fact, the correct nurse was always pictured in photograph 1. The defendant condition was introduced to corroborate or refute the child's testimony. In an actual trial, a defendant would be seated before the jury, and whether or not the child could identify that person would be of critical importance.

Jurors were then shown the videotape of one of the children. Following that, each juror was asked to complete a questionnaire concerning the child's accuracy in answering questions about the nurse's physical appearance, the room, the actions that took place, and the timing of the event; the child's suggestibility, truthfulness, consistency, confidence, intelligence, attractiveness, and ability to distinguish fantasy from reality; the child's ability to correctly identify the nurse; the effects of stress on the child's accuracy; and how capable, compared with an adult, the child was of providing accurate testimony and how likely it was that the child had actually received a shot at the clinic. Finally, the jurors were asked to make

a global rating of the child's credibility as a witness and a judgment about the defendant's innocence or guilt.

Preliminary analyses of the jurors' ratings revealed few sex differences or differences associated with defendant condition (nurse 1 vs. nurse 5). The following findings were collapsed across these factors.

The first question of interest was whether the jurors could distinguish between accurate and inaccurate testimony. To examine this question, correlations were computed between the children's actual accuracy scores and the jurors' perceived credibility scores as assessed on the global credibility question. These correlations revealed that the jurors were unable to discriminate between accurate and inaccurate testimony. Specifically, the correlation between the children's actual accuracy in answering the objective and the misleading questions and the jurors' ratings of the children's overall credibility was only $-.12$. The correlation between the children's actual ability to identify the nurse and jurors' ratings of overall credibility was $-.14$.

Although the jurors' impressions of the children's credibility were not reliably influenced by the children's accuracy, they were influenced by their age. The correlation between the jurors' overall credibility ratings and the child witness's age was $.32$ ($p < .001$). (All significance tests were two-tailed.) As it turned out, because of the children who happened to be included in the study, their accuracy in answering the questions and their age were actually *inversely* related ($r = -.26$, n.s. with $n = 5$). Thus, the jurors seemed to be assuming that the older children were more accurate witnesses when in fact they were not. On the photo identification task, the children's age and their accuracy were also negatively related ($r = -.85$, $p < .05$ with $n = 5$). Nevertheless, as was pointed out earlier, jurors were unable to discriminate between accurate and inaccurate performance on this task. (In addition, accuracy on the photo identification task was essentially uncorrelated with accuracy in answering the questions; $r = -.13$.)

To summarize, jurors' impressions of credibility were virtually independent of children's actual accuracy but were positively correlated with witness age. In addition, it is worth noting that, on average, the children's perceived credibility was low. The perceived credibility ratings ranged from "very uncredible" to "somewhat credible"; the most accurate child—a four-year-old who correctly identified the nurse and answered 70 percent of the questions correctly—was rated as "very uncredible."

To further explore determinants of jurors' impressions, their responses to individual questions were entered into a principal components analysis followed by varimax rotation. Five factors emerged, corresponding to the jurors' estimates of (1) the children's accuracy and confidence in answering the questions, (2) the children's suggestibility, consistency, and truthfulness, (3) the children's accuracy in identifying the nurse from the photo lineup, (4) the children's ability to provide accurate testimony (compared with an adult), as well as the effects of stress on their memory, and (5) the children's attractiveness.

TABLE 1.2 Correlations between child's age and perceived credibility measures (Experiment 1).

Perceived accuracy/confidence	.35**
Perceived suggestibility	-.04
Perceived consistency	.03
Perceived truthfulness	.23*
Perceived identification accuracy	.01
Perceived accuracy compared to that of an adult	.21*
Perceived effects of stress	.08
Perceived attractiveness	.11

* $p < .05$, two-tailed.

** $p < .01$, two-tailed.

Coefficient alphas were calculated to determine whether the factors formed coherent multi-item scales. Only the questions concerning the children's accuracy and confidence in answering the questions did so ($\alpha = .86$). This scale is referred to as the perceived accuracy/confidence scale. The remaining items were analyzed separately rather than in scale form.

Table 1.2 presents the correlation between the perceived accuracy/confidence scale and the age of the child witness, as well as correlations between the remaining items and the age of the witness. As can be seen, the perceived accuracy/confidence scale was significantly related to age, as were the items concerning the child's truthfulness and her or his capability of providing accurate testimony compared with that of an adult.

Wells et al. (1979) have found that an adult witness's confidence has a powerful effect on perceived credibility. Correlations between ratings of the child's confidence, on the one hand, and the child's perceived overall credibility and the guilt ratings, on the other, were therefore examined. Taken alone, the child's perceived confidence correlated significantly with the child's perceived credibility ($r = .40$, $p < .01$) and with the jurors' impressions of the defendant's guilt ($r = .23$, $p < .05$). In reality, however, the children's perceived confidence and their accuracy in answering the attorneys' questions were not reliably related ($r = .09$), nor were children's perceived confidence and accuracy in identifying the nurse ($r = -.04$). Thus, it seems that jurors' impressions of confidence biased their ratings of witness credibility and defendant guilt.

It was also of interest to determine how the children's age and perceived credibility related to the subject-jurors' determinations of guilt or innocence. No significant relation between age and guilt was found ($r = .05$). Stepwise multiple regression analyses were conducted in which the child's age, the perceived accuracy/confidence scale, the child's actual accuracy in answering questions and identifying the nurse, the child's ability to answer the fantasy versus reality questions, and the remaining items from the jurors' questionnaire were entered in an attempt to predict the jurors'

impressions of the defendant's innocence or guilt. The only significant predictor was the jurors' score on the perceived accuracy/confidence scale (beta = .42, $t = 4.57$, $p < .001$). Thus, as other studies (e.g., Goodman et al., 1984) have found, witness age alone did not directly affect judgments of a defendant's guilt.

The findings of this study indicated that subject-jurors were unable to discriminate between accurate and inaccurate testimony presented by child victim/witnesses. A significant part of the subject-jurors' judgments were, instead, based on the child's age, although age was not the sole determinant. The child's perceived accuracy and confidence also substantially contributed to jurors' determinations of a child's credibility. The age of the children did not directly determine how guilty or innocent the defendant was perceived to be.

The Effects of Age on Jurors' Perceptions of Children's Credibility in a Sexual Assault Case

Experiment 1 indicates that jurors are biased to assume that older children are more credible witnesses than younger children. But is this always the case? Our thesis is that children are viewed as less credible than adults to the extent that jurors believe children lack the cognitive skills or relevant experience needed to testify accurately. In some cases, however, the lack of cognitive skills or relevant experience may actually make children appear to be particularly credible. A case in point concerns sexual assault.

Little research exists on jurors' reactions to child sexual assault victims (but see Duggan, Aubrey, Doherty, Isquith, Levine, & Scheiner, this volume), even though children appear to be more likely to testify in this type of trial than in any other (Whitcomb, Shapiro, & Stellwagen, 1985). Children are particularly likely to testify in this kind of trial because of the prevalence of sexual assault against children (Finkelhor, 1979, 1984; Russell, 1983) and because the child victim is likely to be the only witness. Moreover, since child sexual assault typically involves fondling rather than rape, physical evidence is often unavailable. Thus, to prosecute such cases, the child may be required to take the stand.

Although little research exists on jurors' reactions to child sexual assault victims, psychologists have actively pursued research on jurors' reactions to adult rape victims. We review this research next, drawing inferences about how the factors investigated in adult studies might relate to cases involving children. We then present the findings of our own study of age differences in the credibility of sexual assault victims.

The rape literature indicates that a number of factors may influence jurors' perceptions of rape victims—prior sexual history, consent by the victim, provocativeness of the victim, relationship to the defendant, empathy

toward the defendant or victim, and sex of the juror (Brownmiller, 1975; Dietz & Byrnes, 1981; Field, 1978, 1979; Field & Bienen, 1980; Luginbuhl & Mullin, 1981; for review, see Borgida & Brekke, 1985; and Wrightsman, 1987). The findings from adult studies are not always consistent, but they have implications for how child sexual assault victims may be perceived in court.

Research indicates that the more sexual experience a victim has had, the more she is blamed and the more her credibility suffers (Burt & Albin, 1981; L'Armand & Pepitone, 1982). It seems likely that, because children will be assumed to be less sexually experienced than adults, jurors may attribute less blame to them than to adults.

A common defense tactic in rape cases is to argue that the sexual relations did occur but the woman had consented to intercourse (Wrightsman, 1987). If the woman consented, the act is not rape. Children, however, are legally incapable of consenting to sexual acts. Since the "consent defense" is technically inapplicable to children, it would not be as likely to undermine children's credibility. Therefore, a child who reports sexual experiences may be seen as more credible than an adult.

Children also seem less likely to have their credibility questioned on the basis of being intentionally provocative. Children's naivety about sexual matters might preclude them from being intentionally provocative.

A child's relationship to a defendant cannot be used to attack a child's credibility. Jurors might feel that a woman's credibility is more questionable if she is claiming rape by a husband or boyfriend. With children, the relationship between the child and the defendant is more likely to be viewed as irrelevant. Sexual relations with a child are illegal regardless of the child's relation to the defendant.

In sum, previous research indicates that there are a number of reasons to expect children to be seen as more credible witnesses than adults in sexual assault cases. In addition, children's presumed lack of cognitive abilities may play a crucial role. Young children may be seen as lacking knowledge of sexual acts and, therefore, as unable to invent a story about sexual assault. Moreover, young children may be seen as incapable of planning revenge, again because of a lack of cognitive sophistication.

On the other hand, there may be reasons, based on children's cognitive abilities, for not believing them. Young children may be seen as highly suggestible, easily confused, or having poor memories. One purpose of our second study was to examine these possibilities.

Another purpose was to investigate sex differences in subject-jurors' reactions to sexual assault victims as a function of victim age. One of the most studied topics in the rape literature is sex differences in reactions to rape victims. Although no consistent sex differences have been found in judgments of defendant guilt (Kaplin & Miller, 1978; Lenehan & O'Neill, 1981), they have been found for factors related to victim and defendant credibility. Women identify more with rape victims than men do, and men

identify more with defendants than women do (Borgida & Brekke, 1985; Kahn et al., 1977; Krulewitz & Nash, 1979). Men also attribute greater responsibility to the victim's character and actions than women do (Calhoun, Selby, & Warring, 1976; Luginbuhl & Mullin, 1981). It is possible that these biases extend to children. Furthermore, to the extent that women have been socialized to be more empathic than men toward children, women may show greater empathy to child victims and thus be more likely to believe them. Even so, to the extent that adults in general are more empathic toward children than toward adults, they may feel, regardless of their own gender, that a child's allegations of sexual assault are more believable than such allegations by an adult.

Experiment 2: The Sexual Assault Victim

One hundred twenty-one students enrolled in lower-level psychology courses at the University of Denver participated in the experiment. Thirty-four of these students were male; eight-seven were female. The participants ranged in age from eighteen to forty-five years, with a mean age of twenty-one years.

All of the participants read a one-page scenario describing details of an alleged sexual assault case. The case was similar in important ways to some actual cases of sexual assault. In the scenario, a female student claimed to have been sexually assaulted in her twenty-eight-year-old male teacher's office after school. In brief, the victim claimed that she had missed her usual ride home after class and had waited for her mother to come pick her up. Before her mother arrived, the victim was asked by the defendant to come into his office to discuss class grades. Once in his office, the victim claimed she was forced to engage in oral sex with him. Additional information about the case was presented in the form of testimony from the following five witnesses: the victim, the victim's mother, the defendant, a fellow teacher, and a school administrator. Of particular importance was testimony from the victim's mother and the teacher-defendant. The victim's mother claimed that when she picked her daughter up from school, the daughter appeared upset. After a week of repeated questioning, the daughter told her mother about the assault. The defendant testified that he remained at school later than usual that afternoon because of extra work. He recalled speaking briefly with the victim before she went out to wait for her ride. The defense rested on two assertions: that the victim had gotten the idea for the accusation from her mother's suggestive questioning and that the victim had been motivated to pursue the accusations by a desire for revenge over poor grades.

The variable of primary interest was the victim's age. She was described as being either six, fourteen, or twenty-two years old. Participants were randomly assigned to one of these age conditions, with the exception that approximately one-third of the males and one-third of the females were included in each condition.

After reading the scenario, participants were requested to judge the guilt or innocence of the defendant and to indicate their degree of confidence. The combination of these ratings resulted in a six-point scale that ranged from 1 (not guilty/very confident) to 6 (guilty/very confident). The subject-jurors were also asked to rate the credibility of each witness on a six-point scale from 1 (not at all believable) to 6 (extremely believable). In addition, forty-nine of the subjects were required to provide a brief statement about the reasons underlying their guilt and credibility judgments.

The findings revealed that the victim's credibility varied reliably as a function of age. When each subject-juror's credibility ratings were entered into 3 (victim age) \times 2 (subject-juror sex) \times 5 (witness) analyses of variance, with witness being the only factor to vary within subjects, a significant age \times witness interaction emerged, $F(8, 452) = 2.54, p < .05$. The interaction was examined in detail through analysis of simple effects, followed by planned comparisons. The simple effect of age for the victim was significant, $F(2, 117) = 3.58, p < .05$. Planned comparisons revealed that the twenty-two-year-old ($M = 3.68$) was judged to be significantly less credible than the six-year-old [$M = 4.50, F(1, 117) = 7.20, p < .01$]. The credibility of the fourteen-year-old ($M = 4.08$) did not differ reliably from that of the six- or twenty-two-year-old. The credibility of the other witnesses did not differ significantly as a function of victim age, with the exception of the defendant. The defendant was seen as more credible when the case involved a twenty-two-year-old ($M = 3.10$) than when the case involved a six-year-old [$M = 2.52, F(1, 118) = 4.27, p < .05$]. The defendant's credibility did not differ reliably when the case involved a twenty-two- versus a fourteen-year-old victim ($M = 3.28$), but the defendant was seen as more credible when the case involved a fourteen-year-old rather than a six-year-old [$F(1, 118) = 7.42, p < .01$]. No significant sex of subject effects were found.

Participants' judgments of the defendant's degree of guilt also varied in relation to victim age. Specifically, the defendant was judged to be less guilty when the victim was a twenty-two-year-old [$M = 3.14, F(1, 109) = 13.23, p < .01$] or a fourteen-year-old [$M = 3.63, F(1, 109) = 4.94, p < .05$] than when the victim was a six-year-old ($M = 4.40$). The degree of defendant guilt did not differ reliably between the twenty-two- and fourteen-year-old conditions. Again, no significant sex of subject effects were found.

When the guilty versus not guilty judgments were analyzed, a similar picture emerged. No significant sex differences were found. Nevertheless, it is interesting to examine the means for the different age conditions as a function of subject sex (see Table 1.3). A high proportion of females and males thought the defendant was guilty when a six-year-old was the victim. A low proportion of the males believed that the defendant was guilty when a twenty-two-year-old was the victim. The lack of significance for the sex \times age condition interaction may have been a result of the relatively small number of males (approximately eleven) included in each cell and the dichotomous nature of the data (guilty vs. not guilty).

TABLE 1.3 Proportion of participants voting "guilty" as a function of victim age and participant sex (Experiment 2).

	Victim Age		
	6 years	14 years	22 years
Males	.67	.55	.18
Females	.71	.61	.41

TABLE 1.4 Correlations between degree of guilt and witness credibility (Experiment 2).

	Victim Age		
	6 years	14 years	22 years
Defendant	-.77**	-.46*	-.53*
Victim	.80**	.73**	.78**

* $p < .01$, two-tailed.

** $p < .001$, two-tailed.

Correlations between witness credibility ratings and degree of guilt were computed to examine whether judgments of witness credibility and guilt ratings were related. In each of the three age conditions, significant correlations between degree of guilt and credibility ratings for the defendant and the victim were found (see Table 1.4). Thus, subject-jurors who believed the victim were more likely to find the defendant guilty.

As mentioned, forty-nine of the participants were asked to describe the basis for their credibility and guilt judgments. We were particularly concerned with examining rationales for judgments made about the victim. Were judgments of the victim's credibility influenced by jurors' theories about her cognitive abilities?

To address this question, we examined the subject-jurors' comments about the victim. On initial inspection, five categories of responses emerged: cognitive abilities, honesty, characteristics expected of sexual assault victims, blaming the victim, and miscellaneous. Comments about cognitive abilities included such statements as "I don't think a child of six would have the knowledge about assault to be able to make it up, unless it truly happened," "She seemed clear about what happened," "Her mother may have suggested it to her," and "I don't think her reasoning would be that advanced to plot out the sexual incident and her motive being a poor grade" (sic). Comments about honesty included the following: "Little girls wouldn't lie about some man sticking a penis in her mouth," "Usually children tell the truth," and "I don't think a 14-year-old would make up a story that accusational (sic) if she were just upset over grades." Comments

TABLE 1.5 Frequency of comments made about the victim/witness as a function of age (Experiment 2)

Type of Comment	Victim Age			χ^2	p
	6 years	14 years	22 years		
Total Cognitive	26	11	3	20.46	.001
Positive	22	2	0	37.00	.001
Negative	4	9	3	3.88	ns
Total Honesty	9	7	13	1.93	ns
Positive	9	7	8	.25	ns
Negative	0	0	5	—	—
Expected Characteristics	6	6	8	.40	ns
Positive	3	1	6	—	—
Negative	3	5	2	—	—
Blaming the Victim	0	1	1	—	—
Positive	0	0	0	—	—
Negative	0	1	1	—	—
Miscellaneous	6	4	4	—	—

Note: Chi-square values could not be computed in several cases.

ns = not significant.

about expected characteristics included the following: "She was afraid to tell anybody about the incident, which is normal," and ". . . I find it hard to believe she took a whole week to tell her mother." Comments that seemed to blame the victim were few but consisted of such statements as "She could have avoided this type of assault." Miscellaneous comments included general statements such as "The story sounds real" and "The reasons why [she] was angry could have been any number of things."

Within each category, subcategories were created for positive and negative comments. Positive comments were defined as those that would enhance a witness's credibility. Negative comments were defined as those that lowered a witness's credibility. For example, a positive instance of the cognitive abilities category was, "She would probably not know enough about anatomy to lie about her teacher." A negative instance of the cognitive abilities category was, "The girl was 14 and at a very awkward age—entirely possible to create the story." Two raters independently scored the protocols; the proportion of agreement was .78.

As can be seen in Table 1.5, subject-jurors' comments differed depending on the age of the victim. Chi-square analyses indicated that subject-jurors made more comments about the younger than about the older victims' cognitive abilities. In particular, they made many more positive comments about the young victim. Also of note is the finding that subject-jurors seemed to question the twenty-two-year-old's honesty more than that of the fourteen- and six-year-old children. These findings lend support to our thesis that children's presumed honesty and lack of cognitive abilities at times enhance their credibility.

Conclusion

The two studies described here indicate that children's credibility is influenced by a variety of factors. Of particular importance are jurors' impressions of a witness's cognitive ability and honesty. In some cases, such as those investigated in prior research (e.g., Goodman et al., 1984) and in Experiment 1 here, young children's presumed lack of cognitive sophistication seems to result in lowered credibility. Two common denominators of these studies are that (1) the witness's credibility seemed to rely mainly on jurors' perceptions of the accuracy of memory and (2) young children (i.e., below seven years of age) served as witnesses. When, for example, the witness is an older child (e.g., Ross et al., 1987; Wells et al., this volume), he or she may be seen as quite capable of providing accurate statements.

In other cases, children's lack of cognitive ability may actually enhance their credibility. In Experiment 2, for example, subject-jurors seemed to believe that children lacked the ability to invent a sexual assault or plan revenge. Because the teacher was familiar and the victim's testimony concerned a salient, central event, memory was less likely to be a crucial issue. In addition to cognitive ability, the witness's honesty was of concern. Here again children were perceived to be more honest than adults. Thus, jurors' impressions of a child's credibility seem to vary depending on how their theories about children interact with important factors in a particular case. This renders the inconsistencies in existing research less surprising.

Future research should concentrate on jurors' ability to detect the accuracy or inaccuracy of children's testimony. In Experiment 1, there was no relation between the child witness's accuracy and jurors' perceptions of that accuracy. This question was examined with respect to a single situation, however, and for only five child witnesses. Perhaps jurors can better estimate a child's accuracy in other situations. The findings of Wells et al. (this volume) that mock jurors can validly judge the accuracy of testimony provided by older children and adult bystander witnesses indicate that there may, indeed, be some situations in which jurors can distinguish between accurate and inaccurate testimony.

Future research should also focus on issues of ecological validity. Psychologists have a nagging tendency to study the testimony of bystander witnesses to fairly brief, neutral events. A similar emphasis appears in the budding literature on jurors' perceptions of child witnesses (e.g., Goodman et al., 1984, 1987; Ross et al., 1987; Wells et al., this volume; but see Duggan et al., this volume). Because children are particularly likely to testify as victim/witnesses, this focus is of limited value. In the research reported in this chapter, we examined jurors' perceptions of child victim/witnesses. Experiment 2 provided interesting information about jurors' theories concerning a hypothetical sexual assault victim, but the study was based on a written scenario of a trial. More ecologically valid research on this subject is still needed. It is encouraging to us, however, that the results

reported by Duggan et al. (this volume)—based on a study in many ways more ecologically valid than Experiment 2—are consistent with our findings. Duggan et al. found that, in a simulated child sexual assault trial, a nine-year-old child was viewed as a more credible victim/witness than a thirteen-year-old.

One issue concerning ecological validity may be particularly difficult to overcome, however. The decisions made by mock jurors in laboratory studies do not affect actual child victims or defendants. It may be more difficult to place one's faith in a child's testimony when this could result in an adult serving many years in prison. In actual cases, concerns about children's suggestibility, for example, may be given more weight in deciding a defendant's guilt than is indicated in laboratory studies. Thus, regardless of the findings of our research, in an actual case the fear of convicting an innocent person may make jurors more likely to question a child's word and vote "not guilty" when a child takes the stand.

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