

The Child in the Eyes of the Jury

Assessing Mock Jurors' Perceptions of the Child Witness*

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This article reports three experiments that examine how mock jurors respond to the testimony of a child witness as compared to the testimony of a young adult and elderly witness. In Experiment 1, mock jurors viewed a videotaped recreation of a court trial in which the age of the prosecution's key witness was presented as 8, 21, or 74. Contrary to prior research in this area, the testimony of the 8-year-old witness was rated as more credible than identical testimony given by the 21-year-old witness. The elderly witness was also viewed as more credible than the young adult witness, but less so than the child witness. These findings were replicated in Experiment 2, where mock jurors read a written transcript of the same trial that was presented via videotape in Experiment 1. In Experiment 3, a survey was taken of mock jurors' beliefs about age differences in eyewitness ability. In general, mock jurors were found to hold a negative stereotype of the child witness. These findings are discussed in terms of current theory and research on juror reactions to the child witness, and the more general issue of how stereotypes influence impression formation and social judgment.

As the number of child and spousal abuse cases in America continues to rise, there appears to be a concomitant increase in the frequency of children testifying in court (Beach, 1983; Finkelhor, 1984). Recent changes in legal procedure illus-

* We thank the Honorable Judge Betty Friedlander and attorneys William Sullivan and Frank Smithsen for playing the role of judge, prosecution, and defense in the videotaping of the mock trial used in this study. Moreover, we thank Beth Miller and Pat Moran for helping with data collection. This research was supported by a grant from the College of Human Ecology at Cornell to the first author. Requests for reprints should be sent to David F. Ross, Department of Human Development and Family Studies, MVR Hall, Cornell University, Ithaca, New York 14853.

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trate this trend. For example, some states no longer require children to pass competency examinations, all have abolished corroboration rules that specify a child's testimony can be accepted in court only if it is supported by an adult, and children's testimony is being videotaped and presented in court to avoid placing the child under the stress that may be experienced if asked to testify in the courtroom in full view of the defendant (Goodman, 1984).

Because children are becoming more active participants in the legal system, it is important to know what impact their testimony has on the juror. Specifically, do jurors accept the testimony of a child? Do they discount testimony when it is given by a child as opposed to an adult? This paper presents research addressing this important and—as we will see below—complex question.

Throughout history, there has been an ebb and flow in the legal system's treatment of the child witness. During the infamous Salem witch trials, the legal system was quite willing to accept the testimony of children. In a 3-month period in 1682, nearly 20 people were hung as witches and wizards in Salem, and the testimony of the notorious "circle girls" figured prominently in these cases. These girls ranged in age from 5 to 12 and reported having observed defendants fly away on brooms or transpose themselves into dogs and cats. In Seth's (1969) book, *Children Against Witches*, numerous instances of children providing testimony about supernatural visions are documented.

Since the beginning of the twentieth century, however, there has been a strong bias in the legal and scientific community against relying on the eyewitness accounts of children. This bias evolved, in part, from research conducted in the early 1900s on the susceptibility of children's memory to misleading or suggestive questions (Binet, 1900; Stern, 1910). Varendonck (1911), for instance, asked a group of 7-year-old children to describe the color of the beard belonging to one of the teachers in their school. He found that 84% of the children indicated a color, even though the teacher did not actually possess a beard. As a result of this genre of research, the scientific community came to the conclusion that children were unreliable witnesses. Whipple (1911) argued that "children are the most dangerous of all witnesses and that their testimony should be excluded from court record where ever possible" (p. 266). Nearly two decades later, Brown (1926) expressed a similar view: "Create, if you will, an idea of what the child is to hear or see, and the child is very likely to hear or see what you desire" (p. 133).

But what about the views of the jurors themselves? Recent studies reveal that this bias against the child witness extends beyond the legal and scientific communities to the layperson—and thus the potential juror. Both laypersons and psycholegal researchers appear to share a common belief that children are highly suggestible and unreliable as witnesses (Yarmey & Jones, 1983). As well, mock jurors believe that children are inferior to adults in terms of recall memory and incapable of providing accurate, reliable testimony until approximately 11 years of age. It should be noted, however, that jurors believe that children are somewhat more honest than adults and are equal to adults in terms of face recognition memory and in the ability to provide consistent testimony (Leippe & Romanczyk, 1987).

Recent research has also demonstrated that the bias against the child witness

extends to judgments of individual witnesses in specific trials. Experimental studies, in which subject-jurors are called upon to decide innocence and guilt in mock trials, show that the jurors perceive testimony given by a child as less credible than the same testimony given by an adult. For instance, Goodman, Golding, Helgeson, Haith, and Michelli (1987) asked college students to read a summary of a trial in which the key prosecution witness was as described as either 6, 10, or 30 years of age. Although the content of the testimony provided in these conditions was identical, subjects rated the testimony of the 6-year-old as the least credible, the testimony of the 10-year-old as moderately credible, and the testimony of the 30-year-old as the most credible. Witness age, however, had no impact on subjects' ratings of the guilt or innocence of the defendant. These findings held regardless of the type of trial (vehicle homicide or murder), type of subject (college students vs. a more representative sample), or modality used to present the trial information (written transcript vs. videotape).

Beyond showing that subject-jurors view the child witness as less credible than the adult witness, further studies have shown that mock jurors are sensitive to and unforgiving of any inconsistency observed in the testimony of a young child, in part because the inconsistency confirms the jurors' stereotype that young children are incapable of rendering accurate and reliable testimony. In one study, Leippe and Romanczyk (1987) had college students read a description of a robbery-murder case in which the age of the witness to the crime was described as 6, 10, or 30 years. In addition, the testimony of that witness was varied as consistent or inconsistent, and the severity of the defendant's possible sentence was varied as light or heavy. The central finding was that the consistency of the testimony had an impact on mock jurors' perceptions of witness credibility *only* in the 6-year-old witness condition, in which the inconsistent witness was rated as less credible than the consistent witness.

Finally, there is evidence that subject-jurors at times are reluctant to convict a defendant when the testimony against that defendant comes from a child. Leippe and Romanczyk (1987) had college students read a trial summary involving a robbery and murder case in which the age of the key witness was described as either 6, 10, or 30 years of age, and the amount of incriminating evidence against the defendant was varied as weak, moderate, or strong. In general, the findings replicated those reported by Goodman et al. (1987). But more importantly, when the amount of incriminating evidence against the defendant was strong, subjects in the 6- and 10-year-old witness condition were less likely to convict the defendant (58% conviction rate), as compared to subjects in the adult witness condition, who unanimously voted to convict the defendant. Witness age had no impact on guilty verdicts when the amount of incriminating evidence against the defendant was weak or moderate.

In sum, a historical and contemporary analysis of this issue suggests that jurors believe that children are highly suggestible and unreliable witnesses. In addition, mock jurors also perceive the testimony of children as less credible than the testimony of an adult. It was against this background of research that we began our investigations about juror perceptions of the child witness. We attempted to extend the literature in this area in three ways.

First, we examined the reactions of mock jurors to a child witness when confronted with a realistic recreation of a trial, complete with an actual judge and practicing criminal attorneys. Up to now, researchers have predominantly employed written trial summaries in their studies, but it was unknown whether their findings would extend to more ecologically valid settings. This study provided a chance to explore that issue.

Second, we measured witness credibility as a multidimensional construct. To date, credibility has been measured as a unidimensional factor, but classic studies in social psychology (e.g., Hovland, Janis, & Kelley, 1953), as well as more recent treatments in the child witness literature itself (Leippe & Romanczyk, 1987), have asserted that credibility rests on two separate components: expertise and trustworthiness. Leippe and Romanczyk (1987) report that mock jurors believe children are less "expert" than adults at rendering accurate testimony and resisting suggestion. But at the same time, mock jurors believe children are more honest than adults. In the present research, we included separate measures of expertise and honesty in order to examine their interplay when jurors evaluate the testimony of a child.

Finally, this study examined how jurors react to the testimony of an elderly witness. Past research on this topic has compared jurors' perceptions of child witnesses to adult witnesses described as 30 years of age. This comparison may be misleading because a 30-year-old witness may not accurately represent adults of all ages. Yarmey, Rashid, and Jones (1981) argued that jurors perceive the elderly as incapable of rendering accurate testimony because the elderly are viewed as having limited memory abilities. If so, one might expect that jurors may discount the testimony of *both* young children and the elderly.

In the studies reported below, we presented subject-jurors with a complete trial (either videotaped or as a written transcript) and measured their reactions to the testimony of a witness who was presented as 8, 21, or 74 years of age. In general, our hypothesis, given past research and argument, was that subject-jurors would view the child and elderly witnesses as less credible than the young adult witness. As a result, subject-jurors would be less likely to convict the defendant when the testimony against the defendant came from a child or elderly witness as opposed to a young adult witness. As we shall see below, the results of the first experiment were quite surprising and actually in sharp contrast to our hypothesis.

EXPERIMENT 1

Method

Subjects

One hundred and fourteen college students from an introductory psychology class (43 female and 71 male) participated in the study for course credit. Most of the participants were white and middle class.

Materials

Subjects were shown a 50-min videotape of a simulated court trial that was created from an actual court transcript. The case involved a woman who was charged with possession of cocaine. At the time of her arrest, the defendant was dating a previously convicted drug dealer, who later testified under a grant of immunity that the cocaine discovered in the defendant's apartment belonged to him and that he brought the cocaine into the apartment in full view of the prosecution's witness. The prosecution's case was based on the testimony of an eyewitness who testified, contrary to the drug dealer's testimony, that the drug dealer did not enter the apartment with the cocaine. At the time of the incident, the prosecution witness was in the apartment because he was taking care of the defendant's cat while she was away on a trip. Thus the prosecution argued that the cocaine must have been in the defendant's apartment prior to the drug dealer's arrival and that she must have known it was being stored there.

Three versions of the trial were created. These were identical except for the age of the prosecution's key eyewitness, who was presented as an 8- 21- or 74-year-old male. Three people testified in the trial: (1) a key eyewitness for the prosecution (this is the witness whose age was varied), (2) the defendant, and (3) a defense witness (the previously convicted drug dealer). In the original trial, the prosecution witness was approximately 25 years old. Therefore, in recreating the trial some minor changes were made in the wording or vocabulary of the testimony so it would be reasonable that the testimony could come from either a child or an adult. To enhance the authenticity of the videotape, the respective roles of judge, prosecution, and defense were played by an actual judge and two practicing criminal trial lawyers. The sample sizes for the three conditions were as follows: child ($n = 32$), young adult ($n = 41$), and elderly ($n = 41$).

After viewing the videotape, subjects were asked to rate the guilt or innocence of the defendant on a seven-point scale (1 = *not at all guilty* to 7 = *extremely guilty*). Subjects were also given the opportunity to indicate that they were "undecided" about the guilt or innocence of the defendant. Only 5 subjects, 4.3% of the sample, indicated that they were undecided.

Subjects were also asked to rate the prosecution's key witness on a variety of witness characteristics, including accuracy of memory, witness confidence, forcefulness of response, manipulation by prosecution and defense attorneys, consistency of testimony, truthfulness of response, credibility, objectivity, intelligence, trustworthiness, and the amount of influence the testimony had in their decision of the guilt or innocence of the defendant.

Procedure

Subjects were recruited to participate in a study on "psychology and the law." Each subject was shown one of the three versions of the videotaped trial in groups of 10–15. After watching the videotape, subjects were asked to indicate whether they thought the defendant was guilty or innocent, or to indicate that they were undecided, and to rate the prosecution's key witness on a variety of dimensions. After completing these ratings, subjects were debriefed.

Results and Discussion

Witness Age and Perceptions of Credibility

Does witness age influence jurors' perceptions of the credibility of a witness? As can be seen in Table 1, witness age has a powerful impact on credibility—but the direction of the effect is in *direct* contrast to our hypothesis and the findings of past research. In particular, our subjects reacted *more positively* to the testimony of the child witness than the testimony of the young adult. Specifically, the testimony of the child was rated as more accurate, confident, forceful, honest, and generally credible than when the identical testimony was given by the young adult. The elderly witness was viewed *more* positively than the young adult witness, but *less* positively than the child witness.

A MANOVA performed across the witness characteristic measures revealed a significant main effect for witness age, $F(24, 192) = 3.59, p < .01$. Univariate analyses indicate significant main effects for witness accuracy, $F(2, 112) = 3.39, p < .05$; witness confidence, $F(2, 112) = 3.36, p < .05$; forcefulness of response, $F(2, 112) = 7.83, p < .001$; consistency of testimony, $F(2, 112) = 3.67, p < .05$; truthfulness, $F(2, 112) = 7.80, p < .001$; intelligence $F(2, 112) = 35.36, p < .0001$; and trustworthiness, $F(2, 112) = 6.10, p < .01$. The main effects for the remaining variables were not significant. These variables included: manipulation by either the defense or prosecution attorneys, credibility, objectivity, and influence of the testimony on the guilt or innocence of the defendant. Finally, a one-way ANOVA performed on the total summation score (overall credibility) revealed a main effect for witness age, $F(2, 112) = 10.86, p < .0001$.

Witness Age and Judgments of Guilt

To what extent, if any, does witness age influence mock jurors' perceptions of the guilt or innocence of the defendant? Because subjects reacted more posi-

Table 1. Mean Ratings of the Prosecution's Key Witness by Condition (Videotape Trial)

Witness characteristic	Child ($n = 32$)	Young adult ($n = 41$)	Elderly ($n = 41$)
Accuracy of memory	4.03 ^a	3.38 ^b	4.00 ^a
Witness confidence	5.50 ^a	4.59 ^b	4.80 ^{a,b}
Forcefulness of response	4.28 ^a	3.11 ^b	3.21 ^b
Manipulation by defense	2.68	2.78	3.14
Manipulation by prosecution	4.37	4.35	4.73
Consistency of testimony	4.59 ^a	3.69 ^b	4.21 ^{a,b}
Telling truth	5.68 ^a	4.33 ^b	5.26 ^a
Credibility	4.18	3.73	4.19
Biased/objectivity	6.15	5.90	5.97
Intelligent	4.93 ^a	2.90 ^c	4.19 ^b
Trustworthy	5.21 ^a	4.42 ^b	5.31 ^a
Influential	3.78	3.64	3.82
Total score	55.40 ^a	46.80 ^b	52.90 ^a

^{a,b,c} Means with a different letter are statistically significantly different by a Bonferroni multiple comparison test at least at the $p < .05$ level, with the exception of witness accuracy, which is significant at the $p < .10$ level. Higher scores indicate more positive responses: greater perceived confidence, intelligence, etc. Range of potential response was 1–7.

tively to the child witness than the young adult and the elderly witness, were subjects more likely to convict the defendant based on the child's testimony? Consistent with past research (Goodman et al., 1987), subjects' ratings of the guilt or innocence of the defendant did not vary as a function of the age of the prosecution's key witness, $F(2, 107) = 1.58, p > .10$. (This analysis does not include 5 subjects who indicated that they were undecided whether the defendant was guilty or innocent.) There was, however, a nonsignificant pattern in which subjects were more likely to convict the defendant in the young adult ($M = 3.50$) and the elderly condition ($M = 3.37$), than in the child condition ($M = 2.75$).

In sum, the results of the first experiment were in direct contrast to our hypothesis. Past research on this issue and the historical view of the child witness taken by the legal system led us to predict that mock jurors would discount eyewitness testimony given by a child. Our subjects, however, rated the child witness as the most credible; the elderly witness, as moderately credible; and the young adult witness, as the least credible.

One could argue that these findings are an artifact and may be due to the physical appearance of the actors who played the witness role in the videotape. One possibility is that the child witness in our study was particularly "angelic" in appearance and thus made a very good impression on the mock jurors. Perhaps if another child had played the part he may not have been viewed as positively. We dealt with this potential difficulty, in part, by obtaining actors for the witness role who we felt were equal and average in attractiveness. We also asked subjects to rate the attractiveness of the witnesses and there were no reliable differences across the conditions. However, it remains very difficult to completely control these types of potentially confounding variables, and the possibility remains open that some subtle, uncontrolled characteristic other than witness age was at work.

A rigorous solution to this problem would be to create many videotape versions of each condition (child, young adult, and elderly), so that the eyewitness roles are played by different characters. If the results were replicated with different persons playing these roles, one could be more certain that the findings are robust. The disadvantage of this method is the time, expense, and large subject pool required. A less costly option is to present the same trial information using a written transcript and compare the results from the two different modalities. A written transcript procedure should tap jurors' stereotypes concerning the prototypical child witness (Wells, Turtle, & Luus, 1989), because the impressions they form of a witness are not being contaminated by any visual or auditory information. This is the approach we adopted in Experiment 2.

EXPERIMENT 2

Method

Subjects

One hundred and two college students (50 male and 36 female) from an introductory psychology class participated in the experiment for course credit (16

subjects did not indicate their sex). The majority of the subjects were white and middle class.

Materials

The trial information from Experiment 1 was presented to subjects in transcript form, using a 15-page, single-spaced format. The age of the prosecution's key witness was varied as 8, 21, or 74 years. In addition, witness age was crossed with witness sex to provide another test of the generalizability of the findings in Experiment 1, where the witness was always male. The same witness characteristic ratings used in Experiment 1 were administered in Experiment 2.

Procedure

Subjects were recruited to participate in a study on "psychology and the law." Each subject was asked to read one of the three versions of the trial transcript in groups of 10–15. After reading the transcript, which took approximately 30–40 min, subjects were asked to indicate whether they thought the defendant was guilty or innocent, or whether they were undecided, and to rate the prosecution's key witness on a variety of witness characteristics. Subjects were not allowed to look back at the transcript when completing these ratings. When they were finished, subjects were debriefed.

Research Design

The design of the Experiment is a 3 (witness age) \times 2 (witness sex) fully crossed factorial with 17 subjects per cell. A 3 \times 2 MANOVA was performed across the witness characteristic ratings. A 3 \times 2 ANOVA was performed on the guilt ratings (excluding 8 subjects or 7.8% of the sample who indicated that they were undecided about the guilt or innocence of the defendant). In addition, a direct comparison was made between Experiments 1 and 2 using a 3 (witness age) \times 2 (modality: videotape/written transcript) MANOVA performed on the witness characteristic ratings, and a 3 (witness age) \times 2 (modality) ANOVA performed on the guilt ratings (excluding 13 subjects out a total of 217 or 5.9% of the total sample who were undecided whether the defendant was guilty or innocent).

Results and Discussion

Witness Age and Perceptions of Credibility

Do the findings from Experiment 1 replicate when the same trial information is presented to subjects using a written transcript? The answer is yes. As can be seen in Table 2, subjects reacted more positively to the testimony of the child witness than to the testimony of the young adult. For example, the child's testimony was rated as more confident, truthful, and consistent than the verbatim testimony given by the young adult witness. Subjects viewed the testimony of the elderly witness more positively than the testimony of the young adult, but less positively than the testimony of the child.

Table 2. Mean Ratings of the Prosecution's Key Witness by Condition (Written Transcript)

Witness characteristic	Child	Young adult	Elderly
Accuracy of memory	3.67	3.26	3.44
Witness confidence	4.61 ^a	3.55 ^b	4.32 ^{a,b}
Forcefulness of response	3.47	2.82	3.38
Manipulation by defense	3.50	3.73	3.17
Manipulation by prosecution	4.50	4.08	4.50
Consistency of testimony	3.85	3.17	3.61
Telling truth	4.64 ^a	3.94 ^b	5.00 ^a
Credibility	3.94	3.52	3.88
Biased/objectivity	5.79 ^{a,b}	5.08 ^b	6.02 ^a
Intelligent	5.08 ^a	3.23 ^c	4.41 ^b
Trustworthy	5.05 ^a	3.47 ^b	4.82 ^a
Influential	4.23	4.41	4.02
Total score	52.30 ^a	44.30 ^b	50.61 ^a

^{a,b,c} Means with a different letter are statistically significantly different by a Newman Keuls multiple comparison test at least at the $p < .05$ level. Higher scores indicate more positive responses: greater perceived confidence, intelligence, etc. Range of potential response was 1–7. Sample size equals 34 subjects per cell.

A 3 (witness age) \times 2 (witness sex) MANOVA performed across the witness characteristic measures revealed a significant main effect for witness age, $F(24, 170) = 2.83, p < .0001$. Neither the main effect of witness sex nor the Witness Age \times Sex interaction was significant. Univariate analyses indicated significant main effects for witness age on the majority of witness characteristics, including witness confidence, $F(2, 96) = 3.54, p < .05$; forcefulness of response, $F(2, 96) = 2.62, p < .10$ (marginal); truthfulness, $F(2, 96) = 4.90, p < .001$; objectivity, $F(2, 96) = 3.50, p < .05$; intelligence, $F(2, 96) = 24.94, p < .0001$; and trustworthiness, $F(2, 96) = 13.60, p < .0001$. The remaining variables were not significant. These variables included witness accuracy, manipulation by either defense or prosecution attorneys, consistency of testimony, credibility, and the influence of the testimony on their decision regarding the guilt or innocence of the defendant. Finally, a 3 (witness age) \times 2 (witness sex) ANOVA performed on the summation score (general credibility) revealed a significant main effect for witness age, $F(2, 96) = 8.02, p < .0001$, while the main effect for witness sex and the interaction between age and sex were not significant.

Witness Age and Judgments of Guilt

Consistent with the findings from Experiment 1, subjects' ratings of the guilt or innocence of the defendant did not vary as a function of the age of the prosecution's key witness. Specifically, a 3 (witness age) \times 2 (witness sex) ANOVA revealed a nonsignificant main effect for both witness age, $F(2, 88) = .11, p > .10$; witness sex, $F(1, 88) = .08, p > .10$; and a nonsignificant interaction between the two factors, $F(2, 88) = .38, p > .10$. There was, however, an apparent trend in which subjects were more likely to convict the defendant in the young adult ($M =$

3.31) and elderly condition ($M = 3.25$) than in the child condition ($M = 3.01$), though these differences are small and not statistically significant.

Comparing Juror Responses Between Experiments 1 and 2

A direct statistical comparison between Experiments 1 and 2 provides further evidence that the findings from Experiment 1 are robust. The only difference observed in this comparison was that subjects in Experiment 1, who saw a videotaped trial, rated the prosecution's key witness as being more intelligent, confident, accurate, trustworthy, and so forth, as compared to subjects in Experiment 2, who read the testimony presented in the trial. This effect *did not* vary as a function of the age of the prosecution witness.

To make a finer-grade comparison between Experiments 1 and 2, a 3 (witness age) \times 2 (modality: videotape/written) MANOVA was performed on the witness characteristic ratings. This analysis revealed a significant main effect for both witness age, $F(24, 400) = 5.75, p < .0001$, and modality, $F(12, 200) = 3.85, p < .0001$, but most importantly, the Witness Age \times Modality interaction was not significant. Univariate analyses associated with the modality main effect indicate that subjects in the videotape condition were more extreme in their ratings of the prosecution's key witness than subjects in the written condition. This was true for the majority of the variables, including witness accuracy, $F(1, 211) = 3.65, p < .05$; confidence, $F(1, 211) = 12.66, p < .0001$; forcefulness of response, $F(1, 211) = 3.08, p < .10$ (marginal); manipulation by the defense attorney, $F(1, 211) = 7.23, p < .01$; consistency of testimony, $F(1, 211) = 10.11, p < .001$; truthfulness, $F(1, 211) = 7.92, p < .01$; objectivity, $F(1, 211) = 4.12, p < .05$; influence of testimony, $F(1, 211) = 5.09, p < .05$; intelligence, $F(1, 211) = 2.59, p < .10$ (marginal); and trustworthiness, $F(1, 211) = 9.23, p < .01$. The remaining variables, manipulation by the prosecution attorney and credibility, were not significant.

Finally, a 3 (witness age) \times 2 (modality: video/written) ANOVA performed on the guilt ratings (excluding subjects who were undecided in their verdicts) revealed nonsignificant main effects for both witness age, $F(2, 198) = .46, p > .10$, and modality, $F(1, 198) = .04, p > .10$, and a nonsignificant interaction between age and modality, $F(2, 198) = 1.25, p > .10$.

In sum, in both experiments mock jurors viewed the testimony of a child as most credible, the testimony of the elderly witness as moderately credible, and the testimony of the young adult as the least credible. This finding held regardless of whether the testimony was presented to subjects using a videotaped trial or a written trial transcript.

But while witness age had a dramatic effect on witness credibility, it failed to influence ratings of guilt. Whether the prosecution's key witness was a child, a young adult, or an elderly individual, subjects were equally likely to convict the defendant in all three conditions. This is surprising given our results on witness credibility, but entirely consistent with past research in this area (Goodman et al., 1987). One explanation for the lack of an age effect on guilt ratings is that the testimony in this case was weighted heavily in favor of the defense. This is

apparent by the fact that the mean guilt rating (3.2), when collapsed across the three age of witness conditions, is below the midpoint (4) of the guilt scale, $t(203) = -6.31, p < .001$. If the evidence in the case was more evenly balanced, perhaps a judgment concerning the credibility of the prosecution's key witness would have produced a greater impact on the outcome of the trial.

EXPERIMENT 3

Experiments 1 and 2 produced a surprising and somewhat counterintuitive result: Mock jurors rated the testimony of a child as more credible than the testimony of a young adult. This finding contradicts our assumption that mock jurors believe that children *and* the elderly are less likely than young adults to render accurate and credible testimony. One explanation for this apparent contradiction is that our assumption about mock jurors' stereotypes, though strongly intuitive, is incorrect. Does our subject population truly have the stereotypes we believe them to have? In Study 3, we measured mock jurors' stereotypes directly by asking 50 college students to consider the average 6-, 8-, 21-, and 74-year-old witness and to rate them on how accurate their testimony is likely to be, how susceptible they are to suggestive or misleading questions, their honesty, and how much weight should be given to the testimony provided by someone of that age.

Method

Subjects

Fifty college students (23 male and 27 female) from an introductory psychology class participated in the experiment for course credit. The majority of the subjects were white and middle class.

Materials

A questionnaire was given to subjects that asked them to consider the eyewitness abilities of the average 6-, 8-, 21-, and 74-year-old witness. Subjects were asked to rate each hypothetical witness on four dimensions using a 7-point scale. These dimensions included witness accuracy, susceptibility to misleading or suggestive questions, honesty, and how much weight they would give to the testimony of a witness of that age. Cronbach's alpha was calculated for each age of witness condition, resulting in moderately high reliabilities given the low number of items in the scale: 6-year-old (.67), 8-year-old (.60), 21-year-old (.76), and 74-year-old (.75).

Subjects were also asked two questions based on a survey by Leippe and Romanczyk (1987): First, at what age do people become capable of providing accurate and credible eyewitness testimony? And second, is there an age at which people become too old to be trusted as witnesses?

Procedure

Subjects were recruited to participate in a study on “psychology and the law.” After entering our lab, subjects were told we were interested in their beliefs about the ability of people of different ages to testify in criminal court trials. In particular, are children more, less, or equally competent than adults to provide accurate and credible testimony? Subjects were given the questionnaire, allowed approximately 20 min to complete it, and then debriefed.

Results and Discussion

As can be seen in Table 3, subjects held a rather negative stereotype of the child witness. They believed that child witnesses are both less likely to render accurate testimony and more susceptible to suggestion than are adult witnesses (either young or old). Furthermore, they reported that they would give less weight to the testimony offered by a child than by a young adult. In addition, the elderly witness was viewed more negatively than the young adult witness on these same dimensions.

When subjects considered the issue of honesty, they consistently reported that the child witnesses were equally likely to be sincere in their testimony when compared to the young adult witness, while the elderly witness was viewed as the most likely to be honest of all four age groups. These findings provide support for the hypothesis outlined above stating that jurors’ stereotypes concerning the testimony offered by children and the elderly are very similar to, and more negative (with the exception of honesty) than, the stereotypes held in regard to young adults.

To test these hypotheses, a MANOVA was performed across the four witness characteristic measures using age of hypothetical witness as a within-subjects factor. This analysis revealed a significant overall main effect for witness age, $F(12, 510.92) = 20.37, p < .0001$. Univariate analyses indicated significant main effects for each of the four variables: witness accuracy, $F(3, 196) = 50.75, p < .0001$; suggestibility, $F(3, 196) = 60.06, p < .0001$; honesty, $F(3, 196) = 5.43,$

Table 3. Mock Jurors’ Beliefs about Age Differences in Eyewitness Ability

Witness characteristic	Age of hypothetical witness			
	6	8	21	74
Witness accuracy	3.28 ^c	4.22 ^b	5.92 ^a	4.74 ^b
Suggestibility	2.14 ^d	3.06 ^c	5.30 ^a	4.20 ^b
Honesty	4.94 ^b	4.94 ^b	5.14 ^{a,b}	5.72 ^a
Weight given to testimony	3.06 ^d	4.10 ^c	5.96 ^a	4.98 ^b
Total score	13.42 ^d	16.32 ^c	22.32 ^a	19.64 ^b

^{a-d} Means with a different letter are statistically significantly different at least at the $p < .05$ level by a Bonferroni multiple comparison test. Higher scores indicate more positive reactions: greater witness accuracy, less suggestibility, more honesty, greater weight given to testimony. Range of potential response was 1–7. Sample size = 50.

$p < .0001$; and weight given to the testimony, $F(3, 196) = 70.04$, $p < .00001$. In addition, a one-way ANOVA performed on the summation score (general credibility) also revealed a significant main effect for witness age, $F(3, 196) = 69.36$, $p < .0001$.

Additional queries, not displayed in Table 3, provided further support for the hypothesis outlined above. In response to the question asking at what age people become competent to testify, subjects estimated age of competency at 16.1 years ($SD = 7.2$, skewness = .99). In addition, when asked if there was an age when people become too old to testify, 34% of the sample (16/50) indicated that there was an age of incompetency, which was estimated at 75.3 years ($SD = 8.3$, skewness = -1.71). These results are consistent with past surveys on this topic (Leippe & Romanczyk, 1987; Yarmey & Jones, 1983). Therefore, in Experiments 1 and 2 reported above, the age of the child witness (8 years) was well below the age of "competency," and the age of the elderly witness (74) was at approximately the age of "incompetency."

GENERAL DISCUSSION

The research reported here was designed to investigate juror perceptions of the child witness in an ecologically valid setting and with multiple and multidimensional measures of credibility. We expected subject-jurors to view the child witness as less credible than a young adult offering the same testimony. However, whether the trial was presented in a videotaped or written format, the child witness was seen as more credible than his or her adult counterpart. As well, and once again counter to our predictions, subject-jurors viewed an elderly witness as more credible than a young adult, though not as credible as the child witness. These findings were obtained even though our survey respondents in Study 3 indicated their beliefs that, in general, child and elderly witnesses were less likely to offer accurate testimony than young adults. In addition, a comparison of Studies 1 and 2 showed that communication modality (videotape vs. written) did not modify these findings. If communication modality had any effect, it was to make subjects' ratings of the key witness more extreme in the the video condition, regardless of witness age.

On the Influence of Witness Age on Credibility

By far our most important, and surprising, finding is that subject-jurors viewed the child witness as more credible than the young adult witness. Though this stands in sharp contrast to previously published research (e.g., Goodman et al., 1987; Leippe & Romanczyk, 1987) and common intuition, this finding is not an isolated one. Since conducting these experiments, we have learned of several recent studies that report comparable findings. For example, Goodman, Bottoms, Hersocvici, & Shaver (1989) had mock jurors read a summary of a sexual abuse case. The age of the victim in the case was described as either 6, 14, or 22 years. Subjects rated the testimony given by the 6-year-old as the most credible, the

testimony of the 14-year-old as moderately credible, and the testimony of the 22-year-old as the least credible. In addition, subjects were more likely to convict the defendant in the child and adolescent condition than in the adult condition. Similar findings using a sexual abuse case are reported by Duggan, Aubrey, Doherty, Isquith, Levine, and Scheiner (1989).

Other studies have produced results consistent with our own. In one study by Nigro, Bulkley, and Hill (1989), mock jurors read a trial transcript involving a car-pedestrian accident in which the age of a witness was described as either 8 or 25 years, and the testimony given by that witness was presented in either a powerful (self-assured) or powerless manner. In general, subjects rated the child witness as more credible than the adult witness, and the child who testified in a powerful speech style produced the highest percentage of guilt verdicts, while the child who testified in a powerless speech style produced the lowest percentage of guilt verdicts. Finally, Leippe and Romanczyk (1989) found that mock jurors reacted more favorably to testimony offered by a witness described as 6 versus 30 years of age. This occurred only when the mock jurors were asked to read a written transcript of the testimony and not when mock jurors were asked to read a short summary of the testimony.

To summarize this research, we are led to conclude that witness age has no uniform influence on juror perceptions of credibility. Sometimes jurors view the child as less credible than an adult offering the same testimony; at other times they view the child as more credible. (We can only speculate on how many times researchers have documented the last remaining possibility—that witness age has no effect on judgments of credibility—and have not published the result.)

Two explanations for the contradictory findings in this literature have been offered by a number of researchers (Goodman, Golding, & Haith, 1984; Goodman et al., 1987, 1989; Leippe & Romanczyk, 1987, 1989; Ross et al., 1987, 1989). One explanation centers on how stereotypes influence social judgment. A second explanation centers on whether the credibility of witnesses rests primarily on the accuracy of their testimony (expertise) or the sincerity of their intentions (honesty).

An Explanation Centering on the Role of Stereotypes

Social psychological research has shown that stereotypes have a dramatic influence on social judgment. Put simply, if people expect to see a characteristic in a witness (such as inconsistency in the testimony of a child), they will usually see it, particularly if the behavior of the witness conforms to these expectations or is ambiguous enough to be interpreted as conforming to them. This may have occurred in the studies by Goodman et al. (1987) and Leippe and Romanczyk (1987, 1989). Mock jurors viewing the videotape testimony of a child may have been watching a hesitant and confused witness. Or, when reading a written summary of a trial, mock jurors may have assumed that the child witness acted in a vague, unforceful, and inconsistent manner. This is referred to as an *assimilation effect*—social judgments assimilate toward the relevant stereotype.

But assimilation does not occur at all times, only when the behavior of the

relevant individual or “target” conforms to the stereotype—or is at least open to interpretation. Many social psychological studies have shown that when stereotypes are violated, a *perceptual adaptation* or *contrast effect* occurs. When this happens the target individual is rated by the observer as *less* similar to the relevant stereotype than another target individual of a different social category displaying the exact same behavior (Condry & Ross, 1985; Jussim, Coleman, & Lerch, 1987; Manis, Paskewitz, & Cotler, 1986). For example,

if an adult witness describes an event that is fairly complex, jurors may report that the witness is only average in terms of both intelligence and accuracy because they expect such abilities from an adult. However, if a child gives the identical description, then jurors are likely to rate the child as being extremely intelligent and as having an excellent memory because they do not expect children to remember complex events. (Ross, Miller, & Moran, 1987, p. 49)

In the study reported here, subjects may have attributed greater credibility to the child’s testimony because it violated their expectations about child witnesses. Survey research suggests that jurors believe children are highly suggestible and easily confused, whereas our child witness appeared, in our judgment and in the judgment of our subjects, to be quite confident, forceful, and consistent. In addition, the child’s credibility may have been enhanced because there was no concern that the child was involved in the drug transaction or was trying to “cover-up” for his friend and neighbor, something that would seem much more likely to occur with a 21-year-old witness.

A similar explanation appears appropriate for the young adult/elderly comparison. The positive ratings given to the elderly witness, relative to the young adult, could have resulted because the behavior of the elderly witness violated subjects’ stereotypes about the elderly. Subjects may have expected to see an old man with a failing memory, but instead viewed a very confident, accurate witness, and someone who (like the child witness) would be very unlikely to be involved in a drug transaction. Finally, the lack of differences between subjects’ reactions to the child and the elderly witness could be attributed to a similarity in the age stereotype—both age groups are viewed, in general, as less credible witnesses (with the exception of honesty) than a young adult. The findings from Experiment 3 support this contention.

Upon reflection, our findings suggest that jurors’ perceptions of a witness depend not only on the age of a witness, but also on the specific behavior of that witness. Specifically, if a child witness acts like a typical child, then jurors will question the credibility of the child. If the child witness acts more “adultlike,” mock jurors may be favorably impressed by the child. This speculation has interesting consequences for the real world, for it suggests that both assimilation and contrast effects frequently occur. As Wells, Turtle, and Luus (1989) report, there is enormous individual variability within a given age range in terms of confidence and accuracy exhibited by witnesses. Undoubtedly, then, there are instances when a child witness seems hesitant and confused, and whose testimony is thus given little weight. And undoubtedly there are situations where adultlike children are asked to testify, and when they do, perceptual adaptation or contrast effects may enhance the credibility of the child’s testimony.

This analysis also suggests concerns for any future research on the credibility of the child witness. Researchers should be cautious when they attempt to hold the statements of adult and child witnesses as constant as possible (Wells et al., 1989). When they do, they are in essence creating an adultlike child (or a childlike adult) and therefore ensuring a contrast effect in which the child is seen as unduly credible or the adult is seen as not at all credible. In short, researchers should be attentive to the interaction between the age of the witness and individual differences in witness performance when asking mock jurors to evaluate the credibility of a witness.

An Explanation Centering on the Components of Credibility

Another factor that influences whether a child's testimony is perceived as more or less credible than an adult's is whether trial circumstances place a premium on the witness's ability to remember or capacity to be honest (Goodman et al., 1984, 1987, 1989; Leippe & Romanczyk, 1987, 1989). In two recent surveys it was found that mock jurors and members of the legal profession believe that, compared with adult witnesses, child witnesses are less able to render accurate testimony and are more susceptible to misleading questions. These same subjects, however, thought that children are more honest than adults (Leippe & Romanczyk, 1987; Leippe, Brigham, Cousins, & Romanczyk, 1989; see also Yarmey & Jones, 1983, 1984). As Leippe and Romanczyk (1987, 1989) and Goodman et al. (1984, 1989) point out, this finding is important because research in social psychology has demonstrated that a person's credibility depends on two separate components: expertise and honesty. Therefore the impact of child and adult testimony may depend on which of these components, expertise or honesty, is most salient in a trial (see also Ross et al., 1987, 1989).

For instance, some types of trials place a premium on a person's ability to remember, as seen in the Goodman et al. (1987) study, where the witness testified about a car-pedestrian accident. In this type of situation, the testimony of a child is likely to be seen as less credible than the testimony of an adult, because jurors question children's ability to accurately reconstruct the details of the complex scenario (Goodman et al., 1989). Consider, instead, a crime for which the honesty of the witness is the critical issue. Trials of sexual abuse, as Goodman et al. (1989) point out, fall into this category. Jurors may believe that an adult has an ulterior motive for accusing someone of sexual abuse. A child, however, may be seen as incapable of fabricating such a story based on a lack of sexual knowledge. Here a child's limited cognitive ability may actually enhance their credibility (see also Duggan et al., 1989). Similarly, in the present study the credibility of the child may have been enhanced because subject-jurors would not expect a child to be involved in drug possession or to possess the cognitive ability to produce an elaborate set of lies needed to protect the defendant who was a friend and neighbor of the child.

In summary, several conclusions can be drawn about how jurors form impressions of the child witness. First, the testimony of a child will be evaluated more positively than the testimony of an adult under two conditions: (a) when the

child's testimony violates, in a positive manner, jurors' expectations about children's eyewitness abilities, or (b) when witness credibility depends more on honesty than cognitive ability. Second, the testimony of a child will be viewed more negatively than the testimony of an adult when neither of the above conditions are present, and (a) when the child's behavior conforms to the stereotype of the child witness, and (b) when credibility rests mainly on the ability to remember events.

The research reported here raises a last, additional, intriguing question: How accurate are jurors at evaluating the testimony of a child? Are jurors' stereotypes about child witnesses warranted or accurate? Several recent studies have addressed these questions. Goodman et al. (1989) videotaped children who were 3–6 years of age as they answered direct and cross-examination questions concerning a visit they made 9 to 12 months earlier to a medical center to receive an inoculation shot. The videotapes were shown to mock jurors who were asked to make judgments about the accuracy of each witness. In general, there was no correlation between mock jurors' perceptions of children's accuracy and the children's actual accuracy scores. In a similar study, Wells et al. (1989) videotaped 8- and 12-year-olds, and college students answering direct and cross-examination questions about a crime they observed. The videotapes were shown to mock jurors who were asked to estimate the accuracy of each witness. Wells et al. (1989) found that children's performance scores increased with age, and though the mock jurors' estimates of witness performance were fairly accurate on the direct examination questions, they grossly overestimated the performance of the 8-year-olds on the cross-examination questions. Finally, Leippe and Romanczyk (1987) found that adults were accurate in their estimates of children's face recognition performance, but they underestimated young children's ability to recall events.

These findings are consistent with research showing that jurors tend to have difficulty estimating the accuracy of adult witnesses (Brigham & Bothwell, 1983; Lindsay, Wells & Rumpel, 1981; Wells, Lindsay, & Tousignant, 1980; Wells & Leippe, 1981; Leippe & Romanczyk, 1987). One possible explanation for this general finding is that there are no quick and easy markers or traits that distinguish accurate from inaccurate witnesses. Memory researchers over the last several decades have shown that memory performance is context specific and not cross-situationally consistent (e.g., Ceci & Bronfenbrenner, 1985; Gardner, 1983; Neisser, 1982). Because there are no memorial traits that can be observed across all contexts to differentiate accurate from inaccurate witnesses, jurors use markers such as witness confidence, facial expression, and memory for irrelevant details to make judgments about witness accuracy. Unfortunately, many of these markers, like witness confidence, have been shown to be unrelated to witness accuracy (Deffenbacher & Loftus, 1982; Wells, Leippe, & Ostrum, 1979).

A similar situation appears to exist in relation to age differences in eyewitness performance. Leippe and Romanczyk (1987) point out that there is widespread disagreement among memory researchers in terms of whether there are age differences in certain types of memory ability such as face recognition or susceptibility to misleading suggestion. In many situations it may be the case, as Wells et al. (1989) suggest, that variability in eyewitness performance is greater within

age groups than between them. Therefore, using age as a marker to judge witness accuracy and credibility may lead jurors to make erroneous assumptions. Perhaps the judicial system would benefit by informing jurors of this finding prior to deliberation when child witness testimony is involved.

In sum, the studies reported here indicate that mock jurors do not have uniformly simple age stereotypes or reactions to the child witness. Although, in general, mock jurors have a negative stereotype concerning child witnesses (with the exception of beliefs about honesty), this can produce both negative *and* positive reactions to a particular child witness based on the performance of the witness and other case characteristics. This line of investigation would benefit greatly if researchers could isolate experimentally the factors that produce these divergent results. A study of this type would provide enormous insight not only in terms of juror reactions to the child witness, but to the more general issue concerning how stereotypes influence impression formation and social judgment.

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