**Persistent Misconceptions about Child Sexual Abuse: The Impact of Specialized Educative Information and Deliberation on Mock-Jurors**

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Persistent Misconceptions about Child Sexual Abuse:  
The Impact of Specialized Educative Information and  
Deliberation in a Simulated Trial¹

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In Australia, child sexual assault (CSA) cases typically result in low conviction rates, possibly because of a lack of corroborative evidence to prove the alleged sexual assault but also because of research findings suggesting a strong relationship between juror misconceptions about children and CSA, low assessments of complainant credibility, and a high acquittal rate.

The authors previously conducted a program of research to examine the effectiveness of specialized knowledge presented during a simulated CSA trial to counteract common juror misconceptions. The specialized knowledge consisted of written summaries of empirical findings about the counter-intuitive behaviors of sexually abused children as well as information about children’s memory, reliability and suggestibility as witnesses.

Our previous research assessed whether specialized knowledge reduced CSA misconceptions, enhanced credibility ratings of the complainant and increased the conviction rate in CSA.

cases. Two types of interventions presented specialized knowledge orally to mock jurors: (a) the judge in the form of a specially crafted judicial instruction to jurors; and (b) an expert witness. The first is not permissible under Australian law while expert evidence in CSA trials is permitted in five Australian jurisdictions,11 although it is under-utilised in practice.12 A comparison of the effectiveness of these two interventions is important in order to inform prosecutors about the efficacy of expert evidence and to consider law reform proposals regarding judicial directions. Other legal mechanisms such as jury selection were not tested since prospective jurors cannot be questioned before being empanelled in Australian courts, with juror selection being limited to a few peremptory challenges based on the appearance of the juror, or challenges for cause.13

The present research builds on our prior mock jury studies14 which examined the impact of specialized knowledge presented during a simulated CSA trial to counteract the effect of juror misconceptions on perceived complainant credibility and verdicts. Past studies were limited in terms of their ecological validity15 and hence the generalizability of those findings to actual trials. These limitations included the use of mock-jurors (undergraduate students and community volunteers) whose demographics and attitudes about CSA may differ from those of citizens who respond to a summons for jury duty, in terms of age, educational levels, parenting experience and other attitudinal measures.16

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11 Section 79(2) of the Uniform Evidence Act admits expert evidence as an exception to the opinion rule which, generally, excludes opinion evidence. The Uniform Evidence Act has been enacted in the ACT, NSW, the Northern Territory, Tasmania, the Commonwealth and Victoria.
Although meta-analyses of the influence of juror type in specific cases have generally yielded results showing little difference between students and nonstudents, research has shown that in some types of cases, such as death penalty or capital cases, different types of jurors produce different verdicts. For example, individual jurors who were more authoritarian and who supported capital punishment were more prone than other jurors to convict; and in sentencing decisions, students were more lenient than nonstudent mock jurors.

Gender effects in sex offence cases are common, with one meta-analysis of sexual abuse cases showing that women were more prone than men to convict. Women in the role of mock-jurors also rated child victims as more credible than their male counterparts. Although past studies of CSA cases have yielded mixed results based on juror demographics such as age and gender, a robust relationship between juror susceptibility to misconceptions about CSA cases and verdict emerged. Further research into the impact of jury attitudes and demographic features on case outcomes in CSA cases is required to determine whether CSA cases comprise a specific type of legal case where variations in jury attitudes and demographic composition yield different outcomes, and to assess the generalizability of results obtained with jury eligible student and other nonjury community samples to actual juror samples.

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Another feature of mock jury research is the use of written trial summaries instead of a trial re-enactment which may affect mock-jurors’ engagement with the case and their capacity to assess witness credibility, a key component of the decision-making process to reach a verdict, particularly in word-against-word cases. In CSA cases, the method of evidence presentation can impact jury responses in terms of credibility assessments of the complainant and defendant. Comparisons of written and videotaped methods of presentation in simulated trials have shown that juror attitudes have less impact when more realistic videotaped trial materials are used. Past reviews of the method of trial presentation yielded mixed outcomes, including a meta-analysis of cases that included presentations of expert witness testimony. Accordingly, it is necessary to determine whether a videotaped simulated trial presentation will change the relationship between jury attitudes to CSA and credibility assessments, compared to the use of written trial materials.

The mode of presentation of experimental materials is yet another issue to consider when conducting mock jury research. For example, if materials are administered online or in a laboratory setting, participants miss the experience of coming to court, engaging with court personnel, and participating in the court’s jury orientation and induction training, all of which emphasize the solemnity and gravity of jurors’ responsibilities and have been shown to influence jury motivations and attitudes. These are additional contextual features of

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ecological validity which some jury researchers contend should not be overlooked as they may impact mock jurors’ motivation and the decision criteria applied in assessing the trial consequences and verdict.

A key component of the jury decision making process is deliberation with fellow citizens. Research conducted in North America, South Korea and Taiwan has demonstrated a leniency effect following jury deliberation, perhaps because deliberation causes individual jurors to become more sensitive to the error of wrongful conviction, resulting in more decisions to acquit when verdicts before and after group deliberation are compared. One hypothesis confirmed by follow-up research is that jurors favoring acquittal in deliberation exert the most influence, especially when the jury is required to reach a unanimous decision rather than a verdict of the majority. Interestingly, in six Australian jurisdictions, majority verdicts are permitted in relation to some offences. Jurors are first instructed to deliberate to a unanimous verdict, and if they are unable to do so within a specified time, they are then instructed that a majority verdict of 11-1 or 10-2 will suffice, depending on the jurisdiction.

Overall, deliberation studies have yielded diverse outcomes. Although one meta-analysis reported that the impact of expert evidence did not differ significantly as a function

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37 *Jury Act 1977* (NSW), s55F; *Criminal Code* (NT), s368; *Juries Act 1927* (SA), s57; *Jury Act 1899* (Tas), s48(2); *Juries Act 2000* (Vic), s46; *Juries Act 1957* (WA), s41
of deliberation, none of the cited studies examined jury deliberation in a CSA case following expert witness testimony. To date, few studies have examined deliberation about CSA cases. One recent exception is an Australian study that incorporated online deliberations. Since deliberation is one of the legal procedures expected to reduce jury errors and misconceptions, adding this legal process to a jury research program is critical to assess its impact on misconceptions that may influence case outcomes in CSA trials.

As noted above, prior research reviews indicated that pre-deliberation attitudes may be reduced following deliberation. For example, predeliberation-verdict correlations in a criminal case among empanelled jurors were larger than those following deliberation. Whether the same pattern will emerge following deliberation in CSA cases is untested.

An important question is whether changes made to ecological validity variables, such as deliberation, interact with substantive variables to influence the outcomes of simulated jury studies because “the presence of interaction effects may indicate that aspects of the research method limit the external validity or generalizability of the research conclusions.” Accordingly, further research testing the impact of the relationship between external, construct and ecological validity is needed. In this article, we consider the example of CSA since, in the Australian context, these cases constitute the highest case load, as a proportion of

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all criminal offences, in the courts which prosecute the most indictable offences.\textsuperscript{44} Despite this, CSA cases produce the lowest conviction rates, except for adult sexual assault cases.\textsuperscript{45}

**The form of expert evidence proffered in CSA cases**

To develop policies to guide courts in appointing expert witnesses in CSA cases, research on the most effective expert witnesses is helpful.\textsuperscript{46} Several studies have examined the impact of the type of expertise and credentials of expert witnesses who testify in CSA cases.\textsuperscript{47} An expert who is an experimental psychologist will provide a summary of relevant research pertinent to the case, often described as “social framework” testimony,\textsuperscript{48} but typically does not offer an explicit ultimate opinion as to whether the complainant was or was not sexually assaulted. By comparison, a clinical evaluating psychologist who interviews the complainant will often offer an ultimate opinion about whether she or he has been sexually abused. Past studies which have varied the credentials of the expert between experimental and clinical psychology have shown that jurors tend to prefer a clinical over an experimental researcher in death penalty and in sex offender cases.\textsuperscript{49} Results of a jury simulation study in a CSA case using written trial materials yielded no significant difference between the perceived credibility of a clinical psychologist and an experimental psychologist, but the conviction rate in response to the clinical psychologist significantly exceeded that in response

\textsuperscript{44} NSW Bureau of Crime Statistics and Research, *New South Wales Criminal Court Statistics 2012* (NSWBOCSAR, Sydney, 2013) 89 (Table 3.4).


to the experimental psychologist. Further research is needed to examine whether the observed difference in conviction rates is replicated using a sample of nonempanelled jurors, and whether it is attributable to unmeasured differences in the perceived credibility of the two types of experts, or the fact that the clinician interviewed the child and the experimental psychologist did not. Use of videotaped trial materials in which the same actor is portrayed as either an experimental or a clinical psychologists will assist in teasing apart these factors.

**Aims of the current study**

The current study had five aims. First, the study tested a new set of case facts to determine the external validity or generalizability of prior findings to other CSA case facts. Second, the study added ecological validity to the research program by (a) inviting nonempanelled excused jurors who reported for jury duty to participate in a simulated trial in lieu of jury eligible students and community volunteers; (b) conducting the study in the District and Supreme Courts of NSW in lieu of online or laboratory settings; (c) using a professionally-acted video-trial in lieu of written trial materials; and (d) inviting half the participants who watched the video-trial to deliberate in groups to a verdict. A third aim of the study was to explore the demographics of a sample of nonempanelled excused jurors and to measure their attitudes to children and CSA in order to discern any individual juror characteristics that might systematically be related to jury verdicts in CSA cases. A fourth aim was to compare the effectiveness of educative interventions in reducing misconceptions about child sexual abuse, namely (a) a specially crafted judicial direction, and (b) expert testimony presented by either an experimental psychologist or a clinical psychologist, with the complainant interviewed only by the latter expert. Finally, the study compared the outcomes of individual juror verdicts with those of deliberating jurors to assess the impact of the type of decision. The major dependent measures of interest were common CSA misconceptions, assessments of witness credibility, and verdict.

**Research Hypotheses**

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This study tested six hypotheses drawn from the foregoing literature review.

In relation to individual juror demographics and attitudes:

1. Female jurors, older jurors and better educated jurors would rate the complainant’s credibility more favorably than their male, younger and less well-educated counterparts.

2. Jurors with high CSA misconception scores would make unfavorable assessments of the complainant’s credibility and acquit the defendant while jurors with low CSA misconception scores would assess the complainant’s credibility favorably and convict the defendant.

In relation to educative interventions to counteract CSA misconceptions:

3. Exposure to the interventions would reduce jury misconceptions and result in significantly lower posttrial CSA misconception scores than pretrial CSA misconception scores compared to the CSA misconceptions scores of jurors without exposure to any intervention;

4. The credibility of the clinical psychologist would be rated more highly than that of the experimental psychologist and trials involving the clinical expert would produce significantly more convictions, compared to the other experimental conditions.

With respect to decision type:

5. Post-deliberation-verdict correlations among jurors who render individual verdicts would be larger than those among jurors who deliberate to a verdict in a group.

6. The conviction rate would be lower among deliberating jurors compared to those who rendered individual verdicts.

**Method**

**Participants**

Participants were 876 nonempanelled excused jurors\(^5\) (58% men, 42% women) who reported for jury duty in the District and Supreme Courts of New South Wales (NSW),

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\(^5\) Hereafter referred to as jurors
Australia, aged between 18 and 74 years ($M = 43.4, SD = 13.33$). More than half the participants held a university degree (61.7%), 17.1% had a tertiary level diploma, 7.2% had a trade certificate, 10.5% finished high school, and 3.6% reported fewer than 12 years of formal education. English was the first language for 84% of participants. More than half the participants reported that they were a parent or guardian of a child (55%).

**Study Materials**

A simulated trial transcript was written based on an actual CSA case involving a 12-year-old complainant. The defendant, the complainant’s grandfather, was charged with one count of sexual penetration. The case facts were constant in all experimental conditions, and the video-trial lasted 40-55 minutes depending on the condition. Professional actors were hired to play the roles of the parties, the witnesses and the judge. In all conditions, the trial included opening and closing addresses by the prosecution and defense, evidence-in-chief and cross-examination of the complainant and a corroborating witness for the Crown (the complainant’s grandmother), and the judge’s summing-up. The complainant reported that her grandfather penetrated her with his finger while she was sitting on a chair reading a book in the living room. Her grandmother was outside in the garden at the time. Before entering the living room, the grandmother heard the complainant say, ‘Grandpa, stop it, it hurts’. When she entered the room, the complainant’s pants were down and the defendant was doing up the belt on his pants. The complainant ran to her grandmother, crying, and made an immediate disclosure of sexual abuse. She was 13 years old when she testified at trial.

The specialized knowledge was presented by an experimental psychologist, a clinical psychologist or by the presiding judge during her summing up. The educative information summarized empirical findings on counter-intuitive behaviors of sexually abused children, developmental aspects of children’s memory, their reliability in reporting sexual abuse and suggestibility when questioned by adults. The judge reported these findings but made no statement to the effect that that the behavior of the complainant, Bridget, was consistent with

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that of a sexually abused child. Both experts presented the educative information in their testimony after the complainant’s testimony and cross-examination. Both stated explicitly that the complainant’s behavior was consistent with that of a sexually abused child. The verbatim testimony of the experimental psychologist was:

*Prosecution:* Based on your review of the research findings, and your examination of the police interviews of Bridget, in your professional opinion, is Bridget’s behaviour consistent with that of a child who has been sexually abused?

*Experimental psychologist:* There are factors in this case which are consistent with the research findings indicative of child sexual abuse.

The verbatim testimony of the clinical expert was:

*Prosecution:* Based on your experience and your interview with Bridget, in your professional opinion is Bridget’s account of events and behaviour consistent with that of a child who has been sexually abused?

*Clinical psychologist:* Yes, it is.

### a. Questionnaire about misconceptions about child sexual assault.

A questionnaire developed by the authors was administered to assess participants’ misconceptions about CSA (Cronbach’s alpha = .78) before and after viewing the simulated trial. The 20-item CSA misconception questionnaire measured behavioral indicators of sexual abuse (14 items, maximum score 70) and suggestibility of children (6 items, maximum score 30) on a 5-point Likert scale. A higher score indicated greater endorsement of CSA misconceptions.

### b. The Witness Credibility Scale

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53 We acknowledge the problematic ambiguity of this language and of conflating commonality with relevance, as noted by prior researchers (Lyon, T.D., & Koehler, J.J. 1996-1997. *The relevance ratio: Evaluating the probative value of expert testimony in child sexual abuse cases.* Cornell Law Review, 82, 43-78), but used it because it remains the standard admitted formulation of expert evidence on this topic.

The Witness Credibility Scale (WCS; Cronbach’s alpha = .95) was used to measure jurors’ perceptions of the credibility of the witnesses and the judge. The WCS contains 20 semantic differential items measured on a 10-point Likert scale that includes four subscales reflecting the perceived confidence, likeability, trustworthiness, and knowledge of a witness, respectively. Credibility of the complainant and her grandmother were assessed by removing the item with the descriptor “scientific” from the WCS since this item was applicable only to expert witnesses and the judge. A higher total score indicated greater perceived credibility of the witness.

c. Other dependent measures

Participants rendered a binary verdict (guilty/not guilty) and rated the factual culpability of the defendant on a 5-point Likert-type scale. Finally, participants provided demographic information (gender, age, educational level, parental status).

Research design and procedure

A mixed study design was used in which the first variable, misconceptions about CSA, was a within-subjects factor and two variables were between-subjects factors, namely type of decision (deliberation in groups vs. individual verdicts) and source of specialized knowledge about CSA (none vs. judicial direction during summing up vs. expert experimental psychologist vs. expert clinical psychologist). A total of 442 nondeliberating jurors and 443 deliberating jurors were assigned to one of eight experimental groups:

1. Intervention 1 ($n = 109$ deliberating, $n = 115$ nondeliberating jurors): specialized knowledge presented as a judicial direction during the judge’s summing-up.

2. Intervention 2 ($n = 109$ deliberating, $n = 108$ nondeliberating jurors): specialized knowledge presented by an experimental psychologist.

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56 Analyses of factual guilt are not reported in this article.

3. Intervention 3 ($n = 116$ deliberating, $n = 106$ nondeliberating participants):
specialized knowledge presented by a clinical psychologist who interviewed the complainant.

4. Control group ($n = 109$ deliberating jurors, $n = 113$ nondeliberating jurors) received no specialized knowledge about CSA.

All jurors completed a pretrial questionnaire. After the trial, nondeliberating jurors completed a posttrial questionnaire about CSA misconceptions, rated the credibility of the complainant, the corroborating lay witness, the expert witness and the judge, and rendered individual verdicts.

Deliberating participants were allocated to one of 43 juries, with 10 or 11 juries per experimental group. Juries, comprising 8-12 jurors, were instructed to choose a foreperson, deliberate as a jury and rendered a unanimous or a majority decision before completing the same posttrial questionnaire. Participants were given a maximum of 90 minutes to reach a verdict. Deliberations lasted between 5 and 90 minutes. Because the courts released jurors from jury duty and invited them to participate in the study just before lunch hour, all deliberating participants were provided with sandwiches.

**Results**

Preliminary analyses indicated the presence of 12 out of 876 multivariate outliers. These participants were excluded from all further analyses. The perceived witness credibility of the experts and the judge violated the normality assumptions (positively skewed with a positive kurtosis). Accordingly, log transformations of the reflected values were performed to achieve a normal distribution.  

Preliminary analyses were conducted to test for differences between juror demographics (gender, age, educational level), their pre- and posttrial misconceptions and perceived witness credibility. Results revealed that female jurors in the sample were more educated than their male counterparts, with 63.9% of women and 60.8% of men having a

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university degree, 20.0% of women and 14.4% of men a TAFE\textsuperscript{59} diploma, compared to 11.% of men and 1.9% of women with a trade certificate. The remaining 14.1% of women and 13.8% of men reported finishing high school or less. No differences in age emerged between men and women. On average, older jurors were less educated (overall, $r_s = -.14, p < .001$). Jurors with a university degree were younger on average ($M = 41.79$ years, $SD = 12.51$) than jurors who had a TAFE diploma ($M = 46.82$ years, $SD = 14.16$) or those who had not finished high school ($M = 50.63$ years, $SD = 11.76$). The average age of jurors holding a trade certificate ($M = 43.42$ years old; $SD = 13.73$), and jurors who reported the highest level of education were similar ($M = 44.09$ years old; $SD = 15.01$).  

Juror misconceptions about CSA were related to participants’ demographic characteristics in several ways. Female jurors had significantly fewer CSA misconceptions, both pretrial ($M = 46.08$, $SD = 9.67$) and posttrial ($M = 47.04$; $SD = 51.93$) than male jurors (pretrial: $M = 50.79$, $SD = 8.70$, $t(833) = 7.36$, $p < .001$; posttrial: $M = 51.93$; $SD = 9.19$, $t(843) = 7.46$, $p < .001$) while female jurors perceived the complainant to be more credible ($M = 123.09$, $SD = 23.10$) than did male jurors ($M = 117.76$; $SD = 51.93$, $t(852) = -3.20$, $p = .001$). Further, there was no main effect of juror gender on the overall conviction rate ($\chi^2 (1, 869) = 2.09$, $p = .148$, Phi = .05). This effect was, however, moderated by type of decision. Whereas there was no effect of juror gender on convictions by deliberating jurors (women: 31.1%; men: 31.7%; $\chi^2 (1, 436) = 0.02$, $p = .894$, Phi = -.01), women who rendered an individual verdict were more likely to convict (53.3%) than were their male counterparts (41.0%; $\chi^2 (1, 433) = 6.27$, $p = .012$, Phi = .12).  

Juror age was positively correlated with perceived complainant credibility, such that older jurors perceived the complainant to be more credible than did younger jurors, $r = .16$, $p < .001$. Further, juror age was positively correlated with knowledge gains about CSA between the time of the pre- and posttrial measures, $r = .09$, $p = .015$. This effect was moderated by decision type, such that knowledge gain was only associated with age for nondeliberating participants, $r = .17$, $p < .001$. There was no correlation between age and knowledge gain for participants who deliberated as a jury, $p > .05$. Finally, juror educational

\textsuperscript{59} Tertiary and further education.
level was correlated with CSA misconceptions both pretrial (overall: \( r = -0.18, p < .001 \)) and posttrial (overall: \( r = -0.17, p < .001 \)), such that jurors who had higher educational levels held fewer CSA misconceptions. Education was, however, not correlated with knowledge gains or perceived complainant credibility, \( p > .05 \). Neither juror age nor education level was associated with the conviction rate, independently of the type of decision.

Table 1 displays the correlations between juror demographic characteristics, CSA misconceptions and perceived complainant credibility (measured by the WCS) separately for deliberating and nondeliberating mock-jurors.

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<td>-.45**</td>
<td>.24**</td>
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Note. Correlations below the diagonal are for nondeliberating jurors; correlations above the diagonal are for deliberating jurors. For education (higher numbers indicate more formal education) the statistic is Spearman’s Rho. * < .05; ** < .001.

**Juror Pretrial Misconceptions about Child Sexual Assault**

Juror CSA misconceptions were measured pre- and posttrial using the CSA Misconceptions Questionnaire. As shown in Figure 1, before trial, jurors held a moderate number of misconceptions, with average scores of approximately 50 out of a possible total of 100. The group scores ranged from a low of \( M = 45.79, SD = 9.42 \) (Intervention 3, nondeliberation), to a high of \( M = 58.81, SD = 10.39 \) (Control, nondeliberation). A two-way between-subjects analysis of covariance (ANCOVA) was conducted to assess juror pretrial misconceptions with age, gender and education as covariates, and type of decision making.
and experimental group as the independent variables. A main effect for juror gender \((F(1, 877) = 55.69, p < .001, \eta^2 = .06)\) and for juror education emerged \((F(1, 817) = 22.18, p < .001, \eta^2 = .03)\) but not for juror age, \(p > .05\).

Male jurors endorsed significantly more misconceptions about CSA \((M = 50.82, SD = 8.74)\) than did their female counterparts \((M = 46.11, SD = 9.66)\). After controlling for demographic variables, there was no main effect for type of decision or type of intervention, \(p > .05\), however, there was a significant interaction between the independent variables \((F(3, 817) = 3.04, p = .028, \eta^2 = .01)\). Before trial, nondeliberating jurors who were later exposed to specialized knowledge from a clinical psychologist endorsed significantly fewer CSA misconceptions \((M = 45.78, SD = 9.46)\) than did jurors in the nondeliberating control group \((M = 50.56, SD = 10.27)\). No pretrial differences in CSA misconceptions were found among deliberating groups. Further post hoc tests revealed that the pretrial CSA misconception scores of the nondeliberating jurors who were later exposed to expert evidence from the clinical psychologist counterparts \((M = 45.78 \text{ SD} = 9.46)\) were significantly lower than those of their deliberating counterparts \((M = 49.68, SD = 7.88)\). Jurors’ pretrial CSA misconception scores are displayed in Figure 1, by experimental group.
Figure 1. Juror pretrial CSA misconceptions by experimental group (Mean and 95% CI)

The Impact of Intervention and Decision Type on Misconceptions

A mixed between-within subjects ANCOVA, with age, gender and education as covariates, was conducted to assess the impact of different types of interventions on juror misconceptions about CSA by comparing pre- and posttrial misconception scores of deliberating (Figure 2A) and nondeliberating jurors (Figure 2B). A significant main effect for time emerged (Wilks’ Lambda = .98, $F(1, 797) = 12.76, p < .001, \eta^2 = .02$), indicating higher overall misconceptions posttrial. This effect was, however, moderated by the educative intervention (Wilks’ Lambda = 0.95, $F(3, 797) = 13.41, p < .001, \eta^2 = .05$).

Whereas there was a significant increase in jurors’ misconceptions posttrial in the control condition in the absence of specialized educative information (Figures 2A and 2B), misconception scores remained similar in all intervention groups following exposure to the educative information. Misconceptions decreased somewhat, but not to a statistically significant degree, among nondeliberating jurors who were exposed to the educative information in the form of a direction from the judge. There was no significant interaction between type of decision and time (pre- vs. posttrial) (Wilks’ Lambda = 1.00, $F(1, 797) = $...
0.09, $p = .768 \eta^2 = .05$). The interaction between time, type of decision and type of intervention was not statistically significant, Wilks’ Lambda = 1.00, $F(3, 797) = 1.17, p = .320, \eta^2 = .00$.

Figure 2. Pretrial and posttrial CSA misconceptions by decision type and experimental group.
A two-way between groups ANCOVA was conducted to assess the impact of the educative intervention independently of type of decision by calculating the change in individual CSA knowledge gain scores after controlling for juror pretrial misconceptions. The CSA knowledge gain score was calculated by subtracting posttrial CSA misconception scores from pretrial CSA misconception scores to discern individual jurors’ CSA knowledge change. Negative values in the change of CSA knowledge indicated that misconceptions increased following exposure to the video-trial; positive values indicated that misconceptions about CSA decreased after exposure to the video-trial. The pretrial misconception scores were added as covariate because of the significant differences in mean misconception scores that emerged between some of the experimental groups at the outset of the experiment, as reported above. Results yielded a significant effect for juror age ($F(1, 796) = 4.80, p = .029, \eta^2 = .01$), indicating a positive correlation between age and knowledge gains, and for juror gender ($F(1, 796) = 10.29, p = .001, \eta^2 = .01$), showing that older jurors and female jurors benefited more from the interventions than did younger jurors and male jurors. No effect emerged for juror education, $p > .05$, although participants’ pretrial CSA misconceptions were significantly associated with their knowledge gains ($F(1, 796) = 121.24, p < .001, \eta^2 = .13$) as reflected in a positive correlation between pretrial CSA misconception scores and knowledge change scores, $r = .32, p < .001$.

While there was no effect for decision type on knowledge change, $p > .05$, there was for source of specialized knowledge ($F(3, 796) = 19.57, p < .001, \eta^2 = .07$). As shown in Figure 3A, mean knowledge gains were significantly lower in the control group than in the intervention groups, indicating that CSA misconceptions increased among jurors who viewed the video-trial in the absence of any specialized information. This effect was, however, moderated by the type of decision. Misconceptions about CSA increased most among nondeliberating jurors who did not receive any specialized information about CSA ($M = -4.40, SE = 0.61$) but also increased among deliberating jurors in the control condition ($M = -2.82, SE = 0.60$). Knowledge gains were greater among nondeliberating than deliberating jurors who were exposed to specialized information irrespective of the intervention source.
In particular, the CSA misconceptions of nondeliberating jurors decreased most when the information was provided by the judge $M = 0.99$, $SE = 0.57$, or the clinical psychologist expert $M = 1.00$, $SE = 0.61$, but remained constant among deliberating jurors (Judicial direction: $M = -0.43$, $SE = .59$; Clinical psychologist expert: $M = -0.23$, $SD = 0.57$). When the specialized information was provided by an experimental expert, knowledge gains remained constant among both deliberating ($M = -0.52$, $SE = 0.60$) and nondeliberating ($M = -0.32$, $SE = 0.59$) jurors.
3A. Knowledge change scores by experimental condition

![Graph showing knowledge change scores by experimental condition.]

3B. Knowledge change scores in all deliberating juries by experimental condition

![Graph showing knowledge change scores in all deliberating juries.]

Figure 3. The impact of interventions on CSA knowledge change scores by decision type (3A), and by deliberating juries (3B) in all experimental conditions.
As shown in Figure 3B, the increases and decreases in CSA knowledge within each of the 43 deliberating juries revealed that CSA misconceptions increased most in the 11 deliberating juries in the control group, where no specialized educative information was presented. In contrast, CSA misconceptions increased significantly in only two of the 32 juries who were exposed to specialized knowledge (via a judicial direction and an experimental psychologist). Furthermore, the misconceptions decreased or tended to decrease after deliberation in only 7 out of 32 juries, and persisted (remained consistent) within the remaining 23 juries.

**Perceived Witness Credibility**

Separate between-groups ANCOVAs were performed on Witness Credibility Scores to assess the effect of type of intervention and type of decision on the perceived credibility of the complainant, her grandmother, the expert witness, and the judge, after controlling for jurors’ demographic characteristics and their pretrial CSA misconceptions. Table 2 displays the perceived witness credibility results by experimental group.
Table 2.

*Perceived Credibility of the Complainant, Grandmother, Expert Witnesses, and the Judge by Decision Type and Experimental Group*

<table>
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<tr>
<th></th>
<th>Control</th>
<th>Judicial Direction in Summation</th>
<th>Expert Experimental Psychologist</th>
<th>Expert Clinical Psychologist</th>
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<td>Mean</td>
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<tr>
<td>Complainant</td>
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<td>116</td>
<td>118.86</td>
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<td>Grandmother</td>
<td>118.35</td>
<td>27.01</td>
<td>117</td>
<td>114.90</td>
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<tr>
<td>Expert</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Judge</td>
<td>175.85</td>
<td>16.18</td>
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<tr>
<td><strong>Deliberation</strong></td>
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<tr>
<td>Complainant</td>
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<td>22.11</td>
<td>124</td>
<td>118.43</td>
</tr>
<tr>
<td>Grandmother</td>
<td>117.89</td>
<td>23.18</td>
<td>118</td>
<td>113.18</td>
</tr>
<tr>
<td>Expert</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Judge</td>
<td>173.92</td>
<td>18.05</td>
<td>177</td>
<td>171.69</td>
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</tbody>
</table>

*Note.* The descriptor “scientific” was removed from the Witness Credibility Scale for use with lay witnesses. The maximum possible score on the Witness Credibility Scale is 190.
Credibility of the child complainant.

A main effect for juror age emerged in relation to perceived complainant credibility \((F(1, 804) = 26.25, p < .001, \eta^2 = .03)\) but not for juror gender or level of education, \(p > .05\), indicating that older jurors were more likely to believe the testimony of the complainant, \(r = .16, p < .001\). Participants’ pretrial CSA misconceptions were significantly associated with perceived complainant credibility \((F(1, 804) = 58.21, p < .001, \eta^2 = .07)\), showing a negative correlation, \(r = -.28, p < .001\). After controlling for participants’ demographics and their pretrial misconception scores, there was no main effect for type of decision or intervention on perceived complainant credibility. Their interaction, however, was statistically significant \((F(3, 804) = 2.73, p = .043)\). Post hoc analyses revealed that in the absence of any specialized information, deliberating jurors perceived the complainant to be more credible than did nondeliberating jurors. Among nondeliberating jurors who viewed expert evidence from the clinical psychologist, the perceived credibility of the complainant exceeded that of nondeliberating jurors in the control group. Specialized knowledge presented by the judge or by the expert experimental psychologist did not significantly affect the perceived credibility of the complainant. When participants deliberated as a jury, the perceived credibility of the complainant was constant in all experimental groups. These results are displayed in Figure 4.
Figure 4. Perceived credibility of the complainant by experimental condition

Perceived credibility of the grandmother, corroborating witness for the Crown

The two-way between-groups ANCOVA on the perceived credibility of the complainant’s grandmother yielded a main effect for juror gender, $F(1, 807) = 7.21, p = .007$, $\eta^2 = .01$, and pretrial CSA misconceptions ($F(1, 807) = 45.52, p < .001, \eta^2 = .05$). Female jurors were more likely to believe the grandmother than were male jurors, while jurors’ pretrial CSA misconceptions were negatively correlated with the perceived credibility of the grandmother. No significant differences emerged for juror age and level of education, $p > .05$. A main effect for source of intervention emerged in relation to the perceived credibility of the grandmother ($F(3, 807) = 3.78, p = .010, \eta^2 = .01$), such that her credibility was greater when specialized educative information was presented by an expert witness (experimental or clinical psychologist) than by the judge in a judicial direction. No other comparisons were significant. There was no effect for type of decision or for the interaction between the
manipulated experimental variables on perceived credibility of the grandmother as measured by WCS, $p > .05$. These results are displayed in Figure 5.

![Figure 5. Perceived credibility of the corroborating witness for the Crown by experimental condition](image)

**Perceived credibility of the experimental vs. clinical psychological expert**

A two-way between-groups ANCOVA was performed to assess the perceived credibility of the two expert witnesses after performing log transformations of the reflected values to assess normality. Analyses indicated a main effect for juror age and gender on the perceived credibility of the expert, such as by older jurors ($F(1, 403) = 6.31, p = .012, \eta^2 = .02$) and female jurors ($F(1, 403) = 4.96, p = .027, \eta^2 = .01$) regarded the experts as more credible than did their younger and male counterparts. Jurors’ educational level and pretrial
CSA misconceptions were not associated with the perceived credibility of the experts, $p > .05$. After controlling for the above mentioned variables, the type of decision was nonsignificant, irrespective of the expertise of the psychologist ($F(1, 403) = 3.73$, $p = .054$, $\eta^2 = .01$), although nondeliberating jurors rated the experts as more credible ($M = 171.66$, $SD = 18.50$, $Mdn = 174$) than did deliberating jurors ($M = 166.58$, $SD = 20.55$, $Mdn = 140$).

**Perceived credibility of the judge**

The perceived credibility scores of the judge were skewed and transformed before conducting the ANCOVA. After controlling for participants’ gender, age, education, and pretrial CSA misconceptions, a significant main effect emerged for type of decision on the perceived credibility of the judge ($F(1, 805) = 4.56$, $p = .033$, $\eta^2 = .01$). The judge was perceived as more credible by nondeliberating jurors ($M = 175.55$, $SD = 20.73$, $Mdn = 180$) than by deliberating jurors ($M = 173.85$, $SD = 19.85$, $Mdn = 179$). Neither the type of intervention nor the interaction of type of intervention and type of decision was statistically significant.

As shown in Table 2, the perceived credibility of the judge decreased when the judge provided specialized information in a judicial direction compared to trials in which the same information was provided by an expert, irrespective of whether the expert was an experimental or a clinical psychologist. In those latter two conditions, the judge was rated as more credible than the experts.

**The impact of CSA misconceptions and interventions on verdict**

Results revealed an increase in the conviction rate when jurors rendered individual verdicts without deliberation following exposure to specialized knowledge from either the judge (44.3%), the experimental expert (45.4%) or the clinical expert (54.7%), compared to the control condition (38.9%). The verdicts of deliberating jurors showed that in comparison with the control group (43.1%), the individual conviction rate dropped significantly following exposure to all types of interventions (judge: 24.8%; experimental psychologist: 25.7%; clinical psychologist: 32.8%). Almost a quarter of deliberations (23.3%) resulted in hung
juries (no unanimous or majority decision was reached in the available time). Table 3 presents the pre- and posttrial CSA misconception scores and verdicts for each deliberation group and for nondeliberating jurors. Overall, 44.2% of juries rendered a unanimous verdict following deliberations, while 32.5% returned a majority verdict.

Insert Table 3 here

In the absence of educative information in the control condition, three juries voted unanimously to convict the defendant, five juries acquitted (2 unanimously) and three juries were hung. Juries endorsing higher levels of CSA misconceptions acquitted. Following exposure to specialized knowledge in a judicial direction, one jury with the lowest posttrial CSA misconception score ($M = 44.67, SD = 11.67$), convicted; six juries with mixed levels of CSA misconceptions acquitted (5 unanimously), and the remaining four juries were hung. Following exposure to specialized knowledge presented by an experimental psychologist, three juries with low CSA misconception scores convicted (1 unanimously), six acquitted, although in two of the six juries CSA misconceptions scores were low, one jury was hung. Similarly, after exposure to specialized knowledge presented by a clinical psychologist, three juries holding low to moderate levels of CSA misconceptions convicted, six juries in which overall levels of CSA misconceptions were high acquitted (4 unanimously) and two juries were hung.
Table 3.

Mean pre- and posttrial CSA misconception scores and verdict for each deliberating jury and for nondeliberating jurors, by experimental condition

<table>
<thead>
<tr>
<th>Jury No</th>
<th>M&lt;sub&gt;pre&lt;/sub&gt; (SD&lt;sub&gt;pre&lt;/sub&gt;)</th>
<th>M&lt;sub&gt;post&lt;/sub&gt; (SD&lt;sub&gt;post&lt;/sub&gt;)</th>
<th>Verdict</th>
<th>M&lt;sub&gt;pre&lt;/sub&gt; (SD&lt;sub&gt;pre&lt;/sub&gt;)</th>
<th>M&lt;sub&gt;post&lt;/sub&gt; (SD&lt;sub&gt;post&lt;/sub&gt;)</th>
<th>Verdict</th>
<th>M&lt;sub&gt;pre&lt;/sub&gt; (SD&lt;sub&gt;pre&lt;/sub&gt;)</th>
<th>M&lt;sub&gt;post&lt;/sub&gt; (SD&lt;sub&gt;post&lt;/sub&gt;)</th>
<th>Verdict</th>
<th>M&lt;sub&gt;pre&lt;/sub&gt; (SD&lt;sub&gt;pre&lt;/sub&gt;)</th>
<th>M&lt;sub&gt;post&lt;/sub&gt; (SD&lt;sub&gt;post&lt;/sub&gt;)</th>
<th>Verdict</th>
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<td>Clinical Psychologist</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>J1</td>
<td>50.11 (8.42)</td>
<td>51.56 (7.27)</td>
<td>9NG</td>
<td>52.94 (9.19)</td>
<td>55.73 (6.21)</td>
<td>12NG</td>
<td>49.42 (5.85)</td>
<td>52.17 (5.13)</td>
<td>12NG</td>
<td></td>
<td></td>
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<tr>
<td>J2</td>
<td>52.75 (10.00)</td>
<td>52.44 (10.33)</td>
<td>9NG</td>
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<td>49.27 (11.07)</td>
<td>52.58 (9.80)</td>
<td>11NG 1G</td>
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<tr>
<td>J3</td>
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<td>12G</td>
<td>47.73 (9.92)</td>
<td>45.50 (11.71)</td>
<td>11G</td>
<td>46.64 (6.83)</td>
<td>46.17 (8.04)</td>
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<td>J4</td>
<td>45.78 (12.03)</td>
<td>47.10 (11.01)</td>
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<td>42.91 (9.90)</td>
<td>46.08 (9.91)</td>
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<td>52.11 (11.07)</td>
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<td>7G 5NG</td>
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<td>J5</td>
<td>49.17 (10.91)</td>
<td>50.42 (9.85)</td>
<td>10NG 2G</td>
<td>46.13 (11.05)</td>
<td>48.38 (9.91)</td>
<td>7G 1NG</td>
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<td>9NG</td>
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<td>56.36 (12.40)</td>
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<td>J8</td>
<td>41.50 (7.77)</td>
<td>52.25 (7.21)</td>
<td>8NG 1G</td>
<td>47.64 (14.84)</td>
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<td>7NG 2G</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>50.13 (8.11)</td>
<td>50.75 (6.30)</td>
<td>8G</td>
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</table>

Nondeliberating jurors

<table>
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<th>M&lt;sub&gt;post&lt;/sub&gt; (SD&lt;sub&gt;post&lt;/sub&gt;)</th>
<th>Verdict</th>
<th>M&lt;sub&gt;pre&lt;/sub&gt; (SD&lt;sub&gt;pre&lt;/sub&gt;)</th>
<th>M&lt;sub&gt;post&lt;/sub&gt; (SD&lt;sub&gt;post&lt;/sub&gt;)</th>
<th>Verdict</th>
<th>M&lt;sub&gt;pre&lt;/sub&gt; (SD&lt;sub&gt;pre&lt;/sub&gt;)</th>
<th>M&lt;sub&gt;post&lt;/sub&gt; (SD&lt;sub&gt;post&lt;/sub&gt;)</th>
<th>Verdict</th>
<th>M&lt;sub&gt;pre&lt;/sub&gt; (SD&lt;sub&gt;pre&lt;/sub&gt;)</th>
<th>M&lt;sub&gt;post&lt;/sub&gt; (SD&lt;sub&gt;post&lt;/sub&gt;)</th>
<th>Verdict</th>
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<tbody>
<tr>
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<td>Clinical Psychologist</td>
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<tr>
<td>J1</td>
<td>50.81 (10.39)</td>
<td>48.99 (8.91)</td>
<td>64NG 51G</td>
<td>49.51 (10.04)</td>
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<td>58NG 49G</td>
<td>45.72 (10.40)</td>
<td>45.62 (8.61)</td>
<td>48NG</td>
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<tr>
<td>J2</td>
<td>55.14 (10.96)</td>
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<td>48.31 (9.08)</td>
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<td>45.62 (8.61)</td>
<td>48NG</td>
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</table>

Note. G = guilty; NG = not guilty. *Some jurors pressured others to change their views.
To explore the relationship between posttrial CSA misconceptions and verdicts, a serial mediation analysis was conducted, with perceived complainant credibility as the first mediator, perceived credibility of the grandmother as the second mediator and participants’ pretrial CSA misconception scores as covariates. A moderated mediation with type of decision and source of intervention as moderators and perceived complainant credibility as mediator was not statistically significant, $p > .05$. Table 4 displays the serial mediation analysis with pretrial misconceptions as a covariate which moderated the direct and indirect effects of posttrial misconception scores on verdict, separated for nondeliberating and deliberating jurors.

After controlling for pretrial CSA misconception scores, the overall effect of posttrial misconceptions about CSA on individual verdict was statistically significant for both deliberation ($c = -0.10$, Wald Statistic $= -4.97$, $p < .001$) and nondeliberation groups ($c = -0.09$, Wald Statistic $= 4.80$, $p < .001$). The greater the endorsement of CSA misconceptions, the less likely jurors were to convict the defendant. Jurors’ posttrial misconceptions about CSA were related to the perceived credibility of the complainant and her grandmother, with higher credibility scores for both associated with fewer CSA misconceptions. The relationship between posttrial CSA misconceptions and perceived complainant credibility was stronger in the nondeliberation ($a_1 = -1.46$, $t(401) = -7.96$, $p < .001$, $r = -.45$) than in the deliberation group ($a_1 = -1.05$, $t(395) = -6.11$, $p < .001$, $r = -.40$). This effect was reversed for perceived credibility of the corroborative witness (nondeliberation group: $a_2 = -0.44$, $t(401) = 2.94$, $p = .004$, $r = .21$; deliberation group: $a_2 = -0.53$, $t(395) = -3.99$, $p < .001$, $r = .24$). In addition, perceived complainant credibility was positively correlated with the perceived credibility of the grandmother (nondeliberation: $a_3 = 0.69$, $t(401) = 18.06$, $p < .001$, $r = .74$; deliberation: $a_3 = 0.69$, $t(395) = 21.60$, $p < .001$, $r = .74$).

Similarly, the perceived credibility of the complainant and grandmother predicted verdict, in that jurors who perceived both the complainant and the grandmother as more credible were more likely to convict, for both nondeliberating (WCS complainant: $b_1 = 0.02$, Wald Statistic $= 3.16$, $p = .002$; WCS corroborative witness: $b_2 = 0.03$, Wald Statistic $= 4.27$, $p < .001$) and deliberating jurors (WCS complainant: $b_1 = 0.03$, Wald Statistic $= 2.91$, $p =$
.004; WCS corroborative witness: \( b_2 = 0.03 \), Wald Statistic = 3.59, \( p < .001 \). Finally, for jurors who rendered a verdict individually, the direct effect of posttrial CSA misconceptions on verdict was not significant, \( c' = -0.04 \), Wald Statistic = -1.63, \( p = .102 \), indicating that the perceived credibility of complainant and corroborative witness completely mediated the effect of posttrial misconceptions about CSA on verdict. For jurors who deliberated as a jury, the direct effect of posttrial CSA misconceptions on verdict for deliberating jurors was statistically significant, \( c' = -0.05 \), Wald Statistic = -2.25, \( p = .025 \), and partially mediated by the perceived credibility of the complainant and the grandmother. The mediation model explained between 28% (Cox & Snell R square) and 38% (Nagelkerke R squared) of the variance in verdict for nondeliberating jurors, and between 24% (Cox & Snell R square) and 34% (Nagelkerke R squared) for deliberating jurors. These results are shown in Table 4.

Insert Table 4 here
### Table 4.
Serial Mediation Analysis for Direct and Indirect Effects of Posttrial CSA Misconceptions on Verdict with Juror Pretrial CSA Misconceptions as a Covariate

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Consequent</th>
<th>Convictions</th>
</tr>
</thead>
<tbody>
<tr>
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<td>WCS Complainant credibility</td>
<td>WCS Grandmother credibility</td>
</tr>
<tr>
<td>Nondeliberating jurors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttrial CSA Misconceptions</td>
<td>(a_1)</td>
<td>-1.46</td>
</tr>
<tr>
<td>WCS Complainant credibility</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>WCS Grandmother credibility</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Pretrial CSA Misconceptions</td>
<td>(f_1)</td>
<td>0.36</td>
</tr>
<tr>
<td>Constant</td>
<td>(i_1)</td>
<td>173.84</td>
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<tr>
<td>Deliberating jurors</td>
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<tr>
<td>Posttrial CSA Misconceptions</td>
<td>(a_1)</td>
<td>-1.05</td>
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<tr>
<td>WCS Complainant credibility</td>
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<tr>
<td>WCS Grandmother credibility</td>
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<tr>
<td>Pretrial CSA Misconceptions</td>
<td>(f_1)</td>
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<td>Constant</td>
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Discussion

The current study aimed to explore juror attitudes towards children in CSA cases and to test the effects of educative interventions by presenting specialized knowledge to reduce common misconceptions and increase the conviction rate in CSA cases. To add ecological validity to the findings, nonempanelled excused jurors in the District and Supreme Courts in NSW were invited to participate in the study, and verdicts rendered by individual jurors were compared with those of jurors and juries who deliberated to a verdict in groups of eight to twelve.

The present findings showed that overall, jurors who reported for jury duty held moderate levels of misconceptions about CSA, and that these were dependent on juror age, gender, and education level. Without exposure to any educative intervention, juror misconceptions about CSA increased significantly after viewing the video-trial, whereas they persisted or decreased when specialized knowledge about CSA was presented in the video-trial. Jurors’ pretrial CSA misconceptions were negatively correlated with the perceived credibility of the child complainant. The complainant’s credibility was dependent on the type of intervention and the type of decision, whereas the perceived credibility of the corroborative witness, the grandmother, was dependent only on the type of intervention. The perceived credibility of the expert was not dependent on the nature of his particular expertise, experimental versus clinical psychology, but on the type of decision. Finally, jurors’ posttrial CSA misconceptions were significantly associated with the decision to convict. For nondeliberating jurors who rendered an individual verdict, this effect was fully mediated by the perceived credibility of child complainant and of the corroborative witness. For deliberating jurors, this effect was partially mediated by the perceived credibility of the child complainant and of the corroborative witness.
Inspections of jury groups showed that levels of CSA misconceptions varied by group both between and within each of the experimental conditions. These findings indicated that the combination of the type of intervention, the variety of juror misconceptions at the outset of the experiment and the deliberation process were related to juror posttrial CSA misconceptions and verdict. These results are discussed in relation to the proposed hypotheses.

**The Influence of Individual Juror Demographic Characteristics on Perceived Credibility of the Complainant and Verdict**

Our hypotheses that jury demographic characteristics would affect perceived witness credibility assessments and verdict were confirmed in a number of ways. Correlations between demographic characteristics and CSA misconceptions showed that women held significantly fewer CSA misconceptions than men, before and after exposure to the video-trial. Further, CSA misconceptions were significantly correlated with juror education, such that jurors with higher educational levels endorsed fewer CSA misconceptions. Women and older jurors gained most benefit from the educative trial interventions as shown by their higher knowledge gain scores and posttrial reductions in CSA misconceptions, compared to male and younger jurors. Further, women and older jurors rated the complainant as significantly more credible than did men and younger jurors.

Further, conviction rates were related to juror gender, such that women rendering individual decisions were more likely to convict the defendant than were their male counterparts. This effect disappeared when jurors deliberated as a jury before being asked to report their verdict. These results indicated that although women had a higher propensity than men to convict before deliberation commenced, the influence of deliberating in a group with other jurors exerted a more powerful effect than that of juror demographics on verdict.
The Impact of Educative Interventions on Juror CSA Misconceptions

The hypothesis that the educative interventions would reduce jurors’ CSA misconceptions was confirmed. In the absence of any intervention, both deliberating and nondeliberating jurors endorsed more CSA misconceptions after viewing the video-trial than before, and the increase in CSA misconceptions was greater for nondeliberating than for deliberating jurors. Similarly, analyses of jurors’ CSA knowledge gain scores showed that jurors in the control groups acquired significantly less accurate information about CSA in the course of the trial than did their counterparts who were exposed to specialized educative information.

The observed increase in CSA misconceptions in the control conditions posttrial is an important finding since it is likely to mirror the everyday trial situation in the majority of CSA trials conducted in Australia. In other words, prosecutors typically do not call expert witnesses to provide educative information to jurors in CSA trials about the counter-intuitive behaviors of sexually abused children and children’s ability to give reliable evidence, nor do judges provide this information in a judicial direction. Thus, jurors’ CSA misconceptions and those introduced by lawyers for the defence in cross-examining the complainant and other witnesses are left unchallenged. Absent any exposure to educative information to curtail CSA misconceptions, when jurors deliberate in groups to a verdict, the impact of the CSA misconceptions intensified.

The observed posttrial increase in CSA misconceptions may in part be due to stereotypical misconceptions introduced by the defence lawyer during her vigorous cross-examination of the complainant. For example, the complainant was asked about continuing to live with her grandfather after the alleged assault and she confirmed that he took her to school each day. Defence counsel also asserted that the complainant had given three different versions of the events, that she had fabricated her assault allegation after coaching
by her grandmother, and had the knowledge to do so because she had attended sex education classes at school.

The Persistence of CSA Misconceptions in Deliberation Groups

The hypothesis that CSA misconceptions would decrease after exposure to one of the three educative interventions was partially confirmed. CSA misconception scores of jurors in all nondeliberating conditions either decreased slightly or remained stable, unlike those of their deliberating counterparts. Following deliberations, endorsement of CSA misconceptions persisted at a level equivalent to that of pretrial CSA misconceptions in all intervention groups. The increase in CSA misconception scores of deliberating jurors who were not exposed to any educative information (control condition) far exceeded those of jurors in all other deliberating groups. While the increase in CSA misconception scores was moderated by the presence and type of educative intervention, these findings demonstrated that deliberation did not reliably reduce juror errors and misconceptions. Whereas in some juries CSA misconceptions decreased after a discussion of the case facts as a jury, other juries endorsed CSA misconceptions in the course of the deliberation. Deliberation may have provided an opportunity for many jurors to repeat and reinforce the CSA misconceptions introduced by defence lawyer during cross-examination of the complainant or by other deliberating jurors.

As noted above, compared to the control group in which CSA misconceptions increased after the trial, the level of CSA misconceptions after exposure to educative information persisted, but rarely decreased. The frequency of hung juries was greater among deliberating jurors who received specialized information from the judge in a judicial direction compared to those who received it from an expert witness. This finding raises the possibility that jurors were perplexed by educative information provided in the form of a judicial direction compared to expert testimony.
The posttrial persistence of CSA misconceptions in deliberating jurors who were exposed to three different types of educative interventions was unexpected. The persistence of misconceptions posttrial may be due to the persistence of discredited information due to a confirmation bias or to attitude polarization, both of which have been tested and observed previously in the context of mock jury research on other topics. Misconceptions contained in statements by the jury foreperson or other dominant jurors in the group could have dominated the discussion. Group dynamics within each deliberation group may have led to these outcomes. The findings are also consistent with deliberation theories such as the liberation hypothesis which postulates that when the evidence is ambiguous, jurors will resort to extra-legal information such as their own experiences and beliefs, to reach a verdict. Alternatively, the findings may be due to the leniency effect previously observed in deliberation. However, no support for any one of these theories over another was apparent from the analyses presented in this article. They will be explored by analysing the content of each of the deliberation groups separately, a task beyond the scope of the current study.

The Impact of Type of Expertise on Juror CSA Misconceptions and Verdict

The hypothesis that jurors would prefer a clinical over an experimental psychologist and that trials involving the clinical expert would yield significantly more convictions compared to other educative interventions was partially confirmed. Jurors’ assessments of

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the experts as measured by the Witness Credibility Scale, revealed that the perceived credibility of the clinical and the experimental psychologist was equivalent. Ratings of the credibility of these experts may have been similar because the present study did not vary the attributes of the experts intrinsic to the WCS. Both experts were portrayed by the same actor who conveyed similar evidence in a uniform manner in direct and cross-examination. The levels of education and experience in the field establishing their expertise was parallel, and thus it is understandable that they were perceived by jurors as equivalently likeable, confident, trustworthy and knowledgeable. In testifying, both stated that the behavior of the complainant was consistent with that of a sexually abused child. The only difference between the experts was that one inspected only police records (experimental psychologist), whereas the other inspected these records and interviewed the complainant (clinical expert). The fact that the expert interviewed the complainant appears to be the main factor which increased the perceived credibility of the child. Specifically, educative information presented by the clinical psychologist increased the perceived credibility of the complainant compared to ratings by jurors in the control condition, whereas educative information presented by the experimental psychologist or the trial judge did not impact the perceived credibility of the complainant. This effect was significant for only for nondeliberating jurors. The conviction rate revealed a similar pattern of results: both deliberating and nondeliberating jurors tended to convict more often when the expert stated that he interviewed the child than when he only inspected police reports. However, among deliberating jurors, the number of juries that voted to convict the defendant was undifferentiated in response to the type of expert witness.

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The Impact of CSA Misconceptions on the Perceived Credibility of the Complainant and the Corroborative Witness

Although deliberating jurors in the control group were less likely to convict than were nondeliberating jurors, deliberating jurors in the control condition perceived the complainant as more credible than did their nondeliberating counterparts. Thus, while deliberation appeared to enhance credibility perceptions in the control condition, that effect did not translate into convictions, suggesting that the deliberation process, itself, increased the doubt that jurors had about the defendant’s culpability or their willingness to convict, even if they perceived him to be factually culpable.

Unexpectedly, the educative interventions appeared to have little impact on the perceived credibility of the complainant among deliberating jurors: ratings of the complainant’s credibility were constant in all experimental conditions. For nondeliberating jurors, however, the perceived credibility of the complainant was highest in the clinical expert condition and lowest in the control condition. Further, the grandmother’s credibility was rated more favorably in the two expert witness conditions than in the judicial direction condition, although no similar effect emerged for the credibility of the complainant. As noted above, the educative interventions impacted the verdict, but not the sole predictors of verdict.

The mediation analyses provided an explanation for these results. Specifically, the mediation analysis revealed that it was not the source of the educative intervention but rather the extent of jurors’ posttrial CSA misconceptions that predicted the perceived credibility of the complainant and the corroborative witness. The effect was the stronger on the perceived credibility of the complainant, especially among deliberating jurors. Moreover, the mediation analysis showed that the combination of CSA misconception scores and the perceived credibility of the complainant and her grandmother were associated with verdict. The less susceptible jurors were to CSA misconceptions, the higher the perceived credibility of the
complainant and the corroborative witness, and the more likely the jurors were to convict the defendant. Notably, the mediation model was sufficient for nondeliberating jurors such that the effect of misconceptions on verdict was no longer statistically significant once witness credibility was taken into account. The mediation model for deliberating jurors, however, showed that this effect was still significant, indicating that other factors that were not measured in this model had an impact on verdict, namely, unique factors within each of the deliberating juries.

Limitations of the Study

In Australia it is impossible to videotape deliberations of real jurors sitting on a real trial. In NSW, for example, it is an offence under section 68 of the Jury Act 1977 to publish or broadcast the identity of a juror. The second best option for researchers in Australia is to recruit jurors called for jury duty, something this study was able to do for the very first time in NSW. Although we sought to increase the external validity of our findings by recruiting actual jurors who reported for jury duty and by conducting our experiments within a court precinct, and by using a professionally acted video-trial, one can argue that our findings will not generalize to real juries because our mock-jurors knew they were participating in a simulated trial. It is possible that a number of deliberations ended with hung juries because the mock-jurors knew that no consequences would ensure if they failed to reach a verdict within the allotted time period. While jury deliberations were confined to 90 minutes, if the juries had been allowed to deliberate to a verdict, there may have been fewer hung juries.

The conviction rates reported in this article for both nondeliberating and deliberating jurors are individually rendered verdicts. Because the verdicts of deliberating jurors were rendered following group deliberation, the independence of those verdict data is compromised. Accordingly, appropriate adjustments taking into account their non-
independence are required using multi-level modeling and a nested design with these verdict outcomes nested within jury groups. Those analyses are currently in progress.

Conclusion

As anticipated, the educational interventions in the form of a judicial direction and expert evidence from a psychologist significantly reduced jury CSA misconceptions, which enhanced the credulity of the complainant and increased the conviction rate for nondeliberating jurors. However, jury deliberation mitigated these effects. The persistence of CSA misconceptions through deliberations led to unfavorable perceptions of the complainant’s credibility and fewer convictions.

Our study further suggested that specialized information was best conveyed by an expert witness rather than a judge who, in our study, may have been perceived by jurors to be partial to prosecution case when giving expert-type information about CSA and children. An expert who interviewed the complainant appeared to have greater impact on juror perceptions of the complainant’s credibility and verdict, possibly because this expert appeared more competent to express an opinion about the whether the child was sexually assaulted.
Figure 6. Serial Mediation Analysis for Direct and Indirect Effects of Posttrial CSA Misconceptions on Verdict with Juror Pretrial CSA Misconceptions as a Covariate

Key: nd = nondeliberating jurors

del = deliberating jurors