

AN ASSESSMENT OF SEXUAL ASSAULT NURSE EXAMINER EXPERIENCE AND
TRAINING ON MOCK JURORS' DECISIONS IN A CHILD SEXUAL ABUSE TRIAL

A Thesis
by
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Abstract

AN ASSESSMENT OF SEXUAL ASSAULT NURSE EXAMINER EXPERIENCE AND TRAINING ON MOCK JURORS' DECISIONS IN A CHILD SEXUAL ABUSE TRIAL

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The positive impact of sexual assault nurse examiners (SANEs) in sexual abuse cases and trials is demonstrated throughout the literature. Field and experimental research show that SANEs are perceived as more credible experts than non-specialized registered nurses, and help increase conviction rates (Campbell et al., 2014; Golding et al., 2015). The primary goal of the current study was to extend these findings by examining factors about SANEs as professionals that may contribute to their positive influence in court. The current study focused on the role of expert training and years of professional experience based on research illustrating the importance of these variables to jurors' perceptions of expert credibility (Blackwell & Seymour, 2015; Wilcox & NicDaeid, 2018). A 2 (Training: SANE, registered nurse) x 2 (Experience: 1 year, 7 years) between-subjects factorial design was used. As predicted, due to their more extensive specialized training, SANEs were perceived as more credible experts than RNs in a child sexual abuse trial. High- versus low-experience experts were also judged as more credible. Although the interaction was not significant, the cumulative effect of high-experience SANEs on credibility ratings was significantly greater relative to each of the other combinations. In contrast to predictions, conviction rates did not vary by training nor experience. Potential reasons as to why this occurred are discussed, in addition to the legal implications of the findings pertaining to expert credibility.

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I wish to thank my mentor, Dr. Twila Wingrove, for her patience, guidance, and support. Dr. Wingrove, the mentorship you provided throughout the various stages of this project not only shaped me as a researcher; it impacted me on a personal level. I aspire to one day be half the mentor, professional, and caring person that you are. I also wish to extend a special thanks to Dr. Rose Mary Webb for her critical contribution to the design of this project. Dr. Webb, I mean this quite literally, this project would not have been the same without you. Additionally, I am grateful to many others who contributed to this project in various ways at varying timepoints including Dr. Alissa Call, and Dr. Christopher J. Holden who agreed to join my committee on very short notice. Last, though certainly not least, I want to express my gratitude to my mother, Margareth S. Ferreira, whose work ethic I take after, and is the person who has unfailingly and singlehandedly provided me the most encouragement and support throughout my academic career. Mom, I love you deeply. Thank you for all that you have taught me. I hope this project makes you proud.

Dedication

This project is dedicated to every child who has ever been sexually abused, and to all sexual assault nurse examiners who work hard caring for their patients.

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An Assessment of Sexual Assault Nurse Examiner Experience and Training on Mock Jurors' Decisions in a Child Sexual Abuse Trial

Child sexual abuse (CSA), defined as “any completed or attempted (non-completed) **sexual act, sexual contact** with, or exploitation (i.e., **noncontact** sexual interaction) of a child by a caregiver,” is a grave and pervasive problem that occurs worldwide (Leeb et al., 2008, p.14, bold in original; Stoltenborgh et al., 2011). National data suggest that as many as 1 in 9 girls and 1 in 53 boys become victims of CSA during their lifetime (Finkelhor et al., 2014). Because of their abuse, CSA victims face a heightened risk of experiencing mental health problems, suicide ideation and attempts, alcohol and drug dependence, and decreased self-esteem and life satisfaction (Amado et al., 2015; Fergusson et al., 2013; Kmett & Eack, 2018).

Despite high incidence rates (Finkelhor et al., 2014), CSA is among the most under-reported and under-prosecuted crimes (Block & Williams, 2019; Hanson et al., 1999; U.S. Department of Justice, 2019). National estimates indicate that about 1 in 10 cases involving female victims get reported to authorities (Hanson et al., 1999). Of the small number of reported cases, only a fraction are prosecuted. For example, Block and Williams (2019) found that over the course of five years, only 1 in 5 reported cases were prosecuted in a random sample of cases with known outcomes from several New England counties. Excluding instances where plea bargains were accepted (less than 2 in 5 prosecuted cases), only 1 in 5 prosecuted cases resulted in successful convictions at trial (Block & Williams, 2019; see also Campbell et al., 2014; Hornor et al., 2012; Patterson & Campbell, 2009). Given this small figure, research is needed to elucidate the mechanisms responsible for the

under-prosecution and low likelihood of success in CSA trials as well as those operating when successful outcomes (i.e., convictions) do in fact occur.

Fortunately, prosecution of CSA cases is an extensively researched topic area. Many studies have investigated factors that influence mock juror decision-making, including the presence and absence of psychological expert testimony. Much of this body of research has found that mock jurors are more inclined to render a guilty verdict when an expert witness on the prosecution's side testifies in comparison to when one does not (Goodman-Delahunty, et al., 2011, 2010; Kovera et al., 1997; Kovera et al., 1994). A few exceptions to this well-replicated finding come from research showing that testimony that is general (i.e., no direct connections are made between the expert's testimony and the case being tried), as opposed to specific (i.e., connections are made), does not help increase guilty verdicts (Gabora et al., 1993). Other research shows that testimony provided by an expert witness who is summoned by a judge is also ineffective in increasing conviction rates (Crowley et al., 1994). Despite these few exceptions, however, there is a wealth of evidence demonstrating the benefit of psychological expert testimony offered by the prosecution.

Currently, only a small number of studies have examined the influence of medical expert testimony provided by a sexual assault nurse examiner (SANE), a specialized registered nurse who is trained to testify in court (International Association of Forensic Nurses, 2019; Schafran, 2015). In fact, to date, only two known experimental studies have done so (Golding et al., 2015; Wasarhaley et al., 2012). In brief, mock jurors in both studies either read a trial summary containing no expert testimony or testimony from either a SANE or a non-specialized registered nurse (RN; Golding et al., 2015; Wasarhaley et al., 2012). The same expert testimony descriptions and basic procedures were utilized in both studies, with

the only exception being the complainant's age. Whereas Wasarhaley et al. (2012) presented an adult rape case, Golding et al. (2015) utilized a CSA case wherein the complainant was depicted as either being 6 or 15 years old. Both experiments rendered promising results indicating that SANEs are perceived as more credible and lead to higher conviction rates than RNs or when no expert testifies. Importantly, these findings are consistent with field studies showing that cases with the involvement of SANEs are more likely to be referred to the prosecutor's office and end in a conviction or guilty plea compared to those without (Campbell et al., 2012a; Campbell et al., 2012b; Campbell et al., 2014; Patterson & Campbell, 2009).

Given the demonstrated benefit of SANEs in sexual abuse trials, the dearth of experiments examining the impact of their testimony is surprising. Though, this may largely be explained by the fact that SANEs are not as common as their impact suggests they should be. Whereas about 800 SANE programs currently exist throughout the US (Office for Victims of Crime, n.d.), only about 5,000 SANEs total practice worldwide (IAFN, 2019), a small figure compared to the US's nearly 4 million RNs (The American Association of Colleges of Nursing, n.d.). In 2018, the IAFN reported that fewer than 1 out of every 5 US hospitals staff forensic nurses, leaving many without access to the quality exams SANEs provide. For hospitals that do staff forensic nurses, the picture is not improved by much, as issues such as understaffing typically prevent services from being offered around the clock (US Government Accountability Office, 2016).

Although SANEs are the exception, it remains important to continue studying the positive effect they have in trials. Generating a body of data that can be disseminated to the general public may help further increase awareness about the existence of this type of

professional. In turn, this heightened awareness may help engender interest among community members in pursuing this career path, while concurrently galvanizing policymakers to coordinate with local governments and hospitals in an effort to make SANEs accessible in every jurisdiction.

SANEs as Professionals

Thus far, the existing SANE research has stuck to comparing SANE testimony to RN testimony (Golding et al., 2015; Wasarhaley et al., 2012), without much focus on what it is about SANEs as professionals that contribute to their positive impact in court. Elucidating these factors is important as this can help enhance our scientific knowledge of juror decision-making in trials where SANEs testify. Additionally, this information can be used to devise evidence-based recommendations intended to guide the questions prosecutors should (or should not) ask SANEs while they are testifying. Based on previous research alone, it is impossible to decipher which factors relating to the SANE mock jurors considered when rendering their case-related decisions. Difficulty in making this determination partly stems from the fact that the expert witness manipulation employed in previous research varied several aspects of the descriptions provided for the SANE's and RN's testimony (Golding et al., 2015; Wasarhaley et al., 2012).

To illustrate, a major difference was the complexity in the medical procedures each expert conducted (Golding et al., 2015; Wasarhaley et al., 2012). That is, the exam conducted by the SANE included the same medical procedures as that of the RN (e.g., visual inspection of injuries and pubic hair and blood samples), but it also contained a number of additional procedures. Among these are internal vaginal exams, a pregnancy test, a test for sexually transmitted diseases, semen samples, and vaginal swabs. Notably, these additional

procedures are an accurate representation of the comprehensive exams SANEs are trained to conduct in the field (Schafran, 2015).

Past research shows, however, that strength of evidence is a strong correlate of convictions, with stronger evidence (e.g., DNA or physical evidence) leading to more guilty verdicts than weaker evidence (e.g., non-physical evidence; Bottoms et al., 2014; Golding et al., 2000; Klettke et al., 2010; Klettke & Powell, 2011; Patterson & Campbell, 2009; Tabak & Klettke, 2014). In both experiments, the SANE and RN indicated that their exams rendered results that corroborated the complainant's allegations (Golding et al., 2015; Wasarhaley et al., 2012). Though, it is possible that the sheer number of procedures the SANE conducted in her exam is part of what led mock jurors to render higher credibility ratings and to convict more often. Because of this, it is important to ascertain whether this expert's influence is solely a product of the exams they conduct, or if there are other factors involved.

Expert Training

Aside from the vast differences between the extent of their exams, the SANE and RN were depicted as having unique training histories in past research (Golding et al., 2015; Wasarhaley et al., 2012). Specifically, mock jurors were told that the SANE received 40 hours of specialized didactic instruction specific to sexual abuse crisis intervention, in addition to 60 hours of practical training. In contrast, mock jurors were informed that the RN received 3 hours of specialized didactic training only. Qualitative data suggests that an expert's academic background is an important factor that influences jurors' evaluations of an expert witness' credibility (Blackwell & Seymour, 2015; Wilcox & NicDaeid, 2018). In a similar vein, in a factor analysis of excerpts from expert testimony provided in actual trials, a

study found that affiliation with an academic institution was one of the strongest predictors of expert credibility (Hurwitz et al., 1992). It is conceivable then, that the SANE's more extensive specialized training history described in prior studies (Golding et al., 2015; Wasarhaley et al., 2012) also contributed to the effect she had on mock jurors' decisions. As such, directly examining whether this was indeed the case can potentially shed light on the information jurors draw on when judging this (and potentially other) experts.

Going beyond SANE research, some studies assessing the impact of psychological expert testimony in CSA trials have manipulated expert witness credentials, which inherently included varied information about the expert's academic training history. For example, experts in Klettke and Powell (2011) and Klettke et al. (2010) were either described as having earned a doctoral degree and being a published author of scholarly works, or as having earned a master's degree. In the latter conditions, authorship information was omitted. This research failed to detect a significant effect for the expert witness credentials manipulation, though this speculatively could have been an artifact of the evidence presented in certain conditions, or the content of the manipulation itself.

For instance, in response to their null findings in conditions containing physical evidence, the authors conjectured that expert training became less relevant to mock jurors' decisions to convict in the presence of this type of evidence (Klettke et al., 2010; Klettke & Powell, 2011). Notably, research supports this supposition (Bottoms et al., 2014; Golding et al., 2000). However, Klettke and colleagues' speculation fails to explain the null effect in conditions without physical evidence. Therefore, it is possible that mock jurors did not have a sufficient appreciation for what exactly differentiates training for a master's and doctoral degree. Without explicitly being told what distinguishes training for one degree from the

other, mock jurors might have inadvertently placed both professionals in the same mental schema for experts. This speculation is consistent with Klettke et al.'s (2010) finding that both experts were rated as being similarly effective. Consequently, in perceiving both experts equally, any discernable differences that may have otherwise emerged in response to a more versus less advanced degree were not detected.

A study assessing the impact of expert witness credentials in the context of a product liability trial provides preliminary data suggesting that more concrete information about an expert witness' academic training can affect mock jurors' decisions (Cooper et al., 1996). Notably, this conclusion should be considered with some caution, as the manipulation was confounded with information about each expert's current employment. In that study, mock jurors were told, among other things (see Cooper et al., 1996 for a full description), that the expert with higher credentials earned several advanced degrees from highly prestigious universities and was currently employed by a similarly ranked university. On the other hand, the expert with lower credentials was described as having earned his degrees from less prestigious institutions and as being currently employed by a state university.

Cooper et al. (1996) reported that under conditions of complex expert testimony (i.e., jargon-laden testimony) from a biochemist, mock jurors rendered more guilty verdicts when delivered by the expert with higher credentials. Albeit taken with caution, this finding implies that academic training, when conveyed in a manner that mock jurors can more easily comprehend (i.e., attained degrees from a more versus less prestigious institution), may have an effect on their decision-making. To determine whether this is the case and to what extent it occurs, more research focused on isolating the effect of expert training is needed.

In light of the preceding research and some of its limitations, to effectively examine the impact of SANE versus RN training, it is essential that the training histories of each expert be communicated in a manner that is likely to be appreciated by the average person. In particular, as was done in Golding et al. (2015) and Wasarhaley et al. (2012), explicitly describing the type of training each expert received (e.g., didactic and/or practical) and the number of hours spent in training may be more effective than solely presenting their attained degrees. Ideally, providing information in this format should help increase mock jurors' ability to appreciate and differentially utilize what they are being presented as they render their case-related decisions. Importantly, in order to avoid dwarfing any potential effects of this type of information, the amount of information relating to the exams conducted by each expert should remain constant across conditions, and should not be overwhelming in its amount.

Expert Experience

Qualitative data showing that academic training is important to jurors' perceptions of an expert's credibility also show that jurors heavily weight an expert's work experience. In fact, this research suggests that an expert's years of professional experience is viewed as more important than their academic background (Blackwell & Seymour, 2015; Wilcox & NicDaeid, 2018). Specifically, Wilcox and NicDaeid (2018) surveyed and interviewed actual jurors who were empaneled in a homicide trial. In a survey asking jurors about the most important qualities of expert witnesses, years of work experience was the response most commonly cited, followed by academic and on-the-job training. Notably, jurors' responses provided during a later interview corroborated their preferences indicated in their survey responses (Wilcox & NicDaeid, 2018).

These findings are supported by an earlier study that interviewed actual jurors who were empaneled in CSA trials (Blackwell & Seymour, 2015). It is important to note that no experts actually testified in the trials for which these jurors were empaneled, but their responses nonetheless offer valuable insight. That said, after 88.0% of jurors indicated that the presence of expert testimony would have been beneficial, jurors were asked to score various statements related to the credibility of (hypothetical) expert witnesses. In line with Wilcox and NicDaeid's (2018) report, professional experience had the highest average rating (Blackwell & Seymour, 2015).

Moreover, results from a study that interviewed SANEs about their last experience in court provides further insight into the association between an expert's years of experience and case outcomes. In Campbell et al.'s (2007) study, 80 SANEs were interviewed and classified into one of two categories based on their reports of their last experience testifying in court. Forty-three percent of SANEs were classified into a 'no difficulties' group, whereas the remaining 53.0% were classified into a 'difficulties' group. Difficulties reported by SANEs in this latter group related to their own emotional experiences while testifying as well as challenges they faced in fielding questions from lawyers and prosecutors intended to challenge the complainant's credibility, the evidence being discussed, and the SANE's qualifications (Campbell et al., 2007).

In a model assessing the effect of various SANE characteristics as potential predictors of whether SANEs reported having a difficult last experience, extent of work experience emerged as a significant predictor (Campbell et al., 2007). That is, SANEs with more experience in their profession more often reported not having a difficult last experience in court, whereas the opposite was true for SANEs with less experience in their profession. Of

greatest interest was the revelation that SANEs who reported a more positive last experience (i.e., those with more experience) were also more likely to have testified in a case that ended in a conviction or guilty plea (Campbell et al., 2007). Conversely, SANEs who reported a less positive last experience (i.e., those with less experience) were more likely to have testified in a case that ended in an acquittal.

Worth noting is the possibility that more experienced SANEs are better equipped to face challenges posed during cross-examination in comparison to their less experienced peers. In turn, this may explain part of the reason why more experienced SANEs reported better case outcomes (Campbell et al., 2007). Nonetheless, since jurors have the power to determine a case's ultimate fate, it is important to systematically investigate whether and how they perceive and judge experts who present as having different levels of experience in their profession. Based on reports that expert witness work experience is informative to their decision-making (Blackwell & Seymour, 2015; Wilcox & NicDaeid, 2018), there is reason to believe that SANEs with more work experience are perceived more positively and are associated with outcomes that differ from those related to a less experienced SANE.

Complainant Credibility

A secondary focus of the current study is to further examine the role complainant credibility plays in trials where SANEs testify. In Golding et al.'s (2015) study, the 6-year-old complainant was judged as being more credible than her 15-year-old counterpart, which is in line with previous research (Bottoms et al., 2014). However, of particular interest is the fact that SANE testimony predicted higher conviction rates for the older complainant, despite her being perceived as relatively less credible (Golding et al., 2015). This finding is especially interesting because studies have demonstrated a strong relationship between

perceived complainant credibility and guilt judgments, such that complainants perceived as more credible tend to secure significantly more convictions (Bottoms et al., 2014; Connolly & Gordon, 2011; Goodman-Delahunty et al., 2011, 2010; Tabak & Klettke, 2014; Voogt, 2017; Wessel et al., 2016).

In examining pathways through which SANE testimony led to increased conviction rates, Golding et al. (2015) reported findings further suggesting that complainant credibility played less of a deterministic role in the presence of SANE testimony. Firstly, testimony from either a SANE or an RN similarly increased complainant credibility ratings, though SANE testimony increased conviction rates beyond that of RN testimony. This finding indicates that the SANE's impact on mock jurors' verdict decisions might not have involved complainant credibility, and findings from additional analyses support this speculation. Specifically, complainant credibility failed to emerge as a significant mediator in the relationship between SANE testimony and higher conviction rates (Golding et al., 2015). Instead, anger toward the defendant, strength of the prosecution's case, and strength of the defense's case mediated the foregoing relationship.

In an effort to elucidate the role complainant credibility plays in the context of SANE testimony, this study sought to retest part of Golding et al.'s (2015) mediation analysis. Specifically, anger toward the defendant, strength of the prosecution's case, strength of the defense's case, and complainant credibility were assessed as mediators. Should Golding et al.'s (2015) results replicate, this will afford more insight into the extent to which complainant credibility matters when SANEs testify in a CSA trial with a 15-year-old complainant.

The Current Study

Mock jurors reviewed a criminal trial summary adapted from Golding et al. (2015) wherein an expert testified for the prosecution regarding the alleged sexual abuse of a 15-year-old complainant. The age of the complainant was chosen on the basis that guilty verdicts are typically less frequent, and credibility ratings tend to be lower, for complainants of this age (Bottoms et al., 2014; Connolly & Gordon; 2011; Goodman-Delahunty et al., 2011, 2010; Tabak & Klettke, 2014; Voogt, 2017; Wessel et al., 2016). Therefore, it was of particular interest to further investigate the effect of SANEs in this context.

The current study's primary focus was to examine factors about SANEs as professionals that can help account for some of the outcomes (i.e., expert credibility ratings and conviction rates) in trials where they testify. In particular, based on evidence demonstrating the importance of expert training and experience (Blackwell & Seymour, 2015; Cooper et al., 1996; Hurwitz et al., 1992; Wilcox & NicDaeid, 2018), the extent to which these factors influence mock jurors' case-related decisions in the presence of SANE testimony was examined. In the current study, training was manipulated such that the testifying expert was described as being a SANE or RN. As part of that description, the SANE was described as having spent a greater number of hours in specialized training compared to the RN. In terms of experience, high experience was operationalized as seven years of work experience, and low experience as a year's worth.

Regarding expert credibility, it was hypothesized that as a function of their more extensive specialized training, SANEs would be perceived as more credible experts than RNs. Similarly, it was predicted that high-experience experts would elicit higher credibility ratings than their low-experience peers. In terms of conviction rates, it was hypothesized that,

again, as a function of their training, SANEs would lead to more convictions than RNs, and that high-experience experts would also lead to more convictions than less-experienced experts.

Finally, the last hypothesis was centered on addressing this study's second focus of investigating the level of influence perceived complainant credibility exerts on mock jurors' verdict decisions specifically in conditions containing SANE testimony. Accordingly, in retesting Golding et al.'s (2015) finding, the prediction was that strength of the prosecution's case, strength of the defense's case, and anger toward the defendant, but not complainant credibility, would mediate the relationship between SANE testimony and higher conviction rates.

Method

Design and Participants

This study adhered to a 2 (Training: SANE, RN) x 2 (Experience: 1 year, 7 years) between-subjects factorial design. An additional control condition with no expert testimony was also included. Based on two separate power analyses (Faul et al., 2007), this study required a minimum of 485 participants for the conviction analysis ($OR = 2.25$, $\alpha = .05$, $\beta = .80$) and at least 215 participants for the expert credibility analysis ($f^2 = 0.25$, $\alpha = .05$, $\beta = .80$) in order to detect medium effect sizes. Both estimates include a 20% failure rate on manipulation-check items.

In terms of the conviction power analysis, Golding et al. (2015) reported conviction rates of 90% for the SANE condition and 70% for the RN condition. Since this study was a replication in part and a smaller effect size was expected (Open Science Collaboration, 2015), the difference between the foregoing percentages was reduced in half when

calculating the power analysis. Ultimately, since the conviction power analysis rendered the greatest estimate (i.e., $n = 485$ including the expected 20% failure rate), the goal was to achieve an initial sample of this size or greater.

In all, 487 participants were recruited via Sona, an online subject pool consisting of undergraduate students in introductory and intermediate psychology courses. Removing failed or incomplete responses for a training manipulation-check item (19.3% of all responses; *What kind of nurse was Nurse Phillips?*) resulted in a final sample of 393 participants, which was 94 less than the original sample.

In the final sample, the average age was 19.8 years ($SD = 1.92$). As for gender, 76.6% ($n = 301$) self-identified as women, 21.4% ($n = 84$) as men, and 1.8% ($n = 7$) either indicated their preferred gender was not listed or that they preferred not to respond. In terms of race and ethnicity, 83.5% ($n = 328$) self-identified as White/Non-Hispanic, 7.9% ($n = 31$) as White/Hispanic, 3.6% ($n = 14$) as Black, and 2.5% ($n = 10$) as Asian. The remaining 2.3% ($n = 9$) either did not identify with any of the former categories or preferred not to respond. Most participants (98%, $n = 385$) had no experience previously serving on a jury. Given the small number of participants who did have such experience (1.5%, $n = 6$), or provided no response (0.5%, $n = 2$), their responses were not excluded from the formal analysis, as there was no reason to believe they would unduly influence results.

Materials

Criminal Trial Summary

A modified version of the trial summary used in Golding et al.'s (2015) study was administered to participants (see Appendix A). In particular, information about the length of the expert's work experience was added in order to create the appropriate manipulation. In

high-experience conditions, the expert was described as having 7 years of experience working in her profession during direct examination. In the interest of providing a point of reference, the trial summary indicated that most of the expert's colleagues had a year's worth of experience, while her supervisor had 10 years.

In low-experience conditions, the expert was described as having a year's worth of experience during cross-examination. The trial summary revealed that most of her colleagues had 7 years of experience, while her supervisor had approximately 10 years. The placement of the low-experience manipulation (i.e., under cross-examination) was changed from its original placement because it is unlikely that a prosecutor would ask his or her witness to make an upward comparison in a real-world scenario (see Golding et al., 2015). Inspired by the same goal of increasing ecological validity, in conditions containing RN testimony, this expert's training was outlined and compared to SANE training during cross- as opposed to direct examination.

Consistent with the original version of the summary, the training manipulation was such that the testifying expert was described as a SANE or RN. Whereas the SANE was described as having received 40 hours of specialized didactic instruction plus 60 hours of practical training in sexual abuse crisis intervention, the RN was described as having only received 3 hours of specialized didactic instruction. Information about practical training was omitted from the RN's training description. In addition to the SANE comparing her training to that of an RN, and vice versa, each expert compared their training to training medical doctors typically receive in sexual abuse crisis intervention (i.e., 15 hours).

In order to control the potentially confounding effect of having the SANE's testimony entail a greater number of performed procedures compared to the RN's testimony, this

information was held constant across all conditions. Similarly, the details of the SANE's training was reduced such that only the hours spent in training was highlighted. This change was implemented so that the potential effect of the difference in hours spent in training between the SANE and RN would not be conflated with an extensive description of the specific contents of SANE training (e.g., intensive training surrounding collection of forensic evidence and training in interview techniques).

With the exception of the information pertinent to the manipulations, case facts remained constant across all conditions. The trial summary depicted a mock CSA trial wherein the defendant (i.e., the complainant's stepfather) was accused of having sexually abused the 15-year-old complainant one afternoon while her mother was at work. In the adapted version of the summary, the defendant was charged with a felony sexual offense charge instead of rape in the third degree, which was used in Golding et al. (2015). This was done in order to minimize the possibility of hitting a ceiling effect, since Golding et al. (2015) reported conviction rates of 90% in the SANE condition.

After presenting a general overview of the trial, the summary depicted the prosecution's case, followed by the defense's. As part of the defense's case, the defendant testified and vehemently denied all allegations. The defendant's denial was then corroborated by his cousin's testimony regarding the defendant's wholesome and moral character. Direct and cross-examination of each witness (i.e., a detective on the prosecution's side and the SANE or RN, complainant, defendant, and defendant's cousin) was presented in the summary. Finally, once all witnesses provided their testimony, the summary concluded with closing arguments given by the prosecution and defense followed by the judge's instructions to the jury.

Trial Summary Questionnaire

A 31-item questionnaire adapted from Golding et al. (2015) was presented to participants after completing the trial summary portion of the study (see Appendix B). In most cases, participants recorded their responses using a 10-point scale with only the endpoints labelled (e.g., 1 = *not at all*, 10 = *completely*). In an effort to improve reliability, additional items were added to existing, single-item scales from the original questionnaire. In specific, these items included expert credibility, anger toward the defendant, strength of the prosecution's case, strength of the defense's case, sympathy and anger toward the defendant, and sympathy and anger toward the complainant. Items assessing the current manipulations (i.e., expert training and experience) were also added, with the expert training item being presented in the format of a multiple-choice question.

Items from the original questionnaire that were preserved are as follows: verdict decision (*guilty or not guilty*), defendant's guilt, and verdict decision confidence. Additionally, items assessing the extent to which the expert's training influenced mock jurors' verdict decision and the complainant and defendant's credibility were kept in their original format.

Demographics

After responding to the above items, participants were asked to indicate their age, race/ethnicity, sex, and whether they previously served on a jury (see Appendix B).

Procedure

After opting to partake in the study via Sona, participants were redirected to Qualtrics, a platform for online surveys. Once redirected, an informed consent document outlining the basic procedures of the study was presented (see Appendix C). After providing

their consent, participants were prompted to proceed to the trial summary portion of the study where they read one of five possible versions of the summary. At the summary's conclusion, participants were administered the above items before being debriefed (see Appendix D).

Results

Preliminary Analyses

Descriptives

Overall means, standard deviations, and response frequencies for each variable associated with the upcoming analyses are reported below in Table 1.

Table 1
Overall Descriptives

	<i>n</i>	<i>M</i>	<i>SD</i>
Guilty verdicts	314	0.80	0.40
Nurse credibility	286	7.85	1.93
Complainant credibility	389	7.83	1.77
Strength of prosecution's case	392	7.31	2.04
Anger toward defendant	392	7.18	2.55
Strength of defense's case	392	4.18	1.97

Note. This table depicts overall descriptives for each variable associated with the conducted analyses. With the exception of guilt, all variables were measured using a 10-point scale, with higher values indicating higher levels of the measured construct.

Manipulation Assessment

Using only data from the experimental conditions ($n = 286$), a set of t tests confirmed the efficacy of the current manipulations. Specifically, in responding to an item assessing perceptions of the nurse's academic training (*How much academic training did Nurse Phillips receive?*), responses in SANE conditions ($M = 8.60$, $SD = 1.60$) were significantly higher than responses in RN conditions ($M = 5.80$, $SD = 2.11$), $t(284) = -12.82$, $p < .001$,

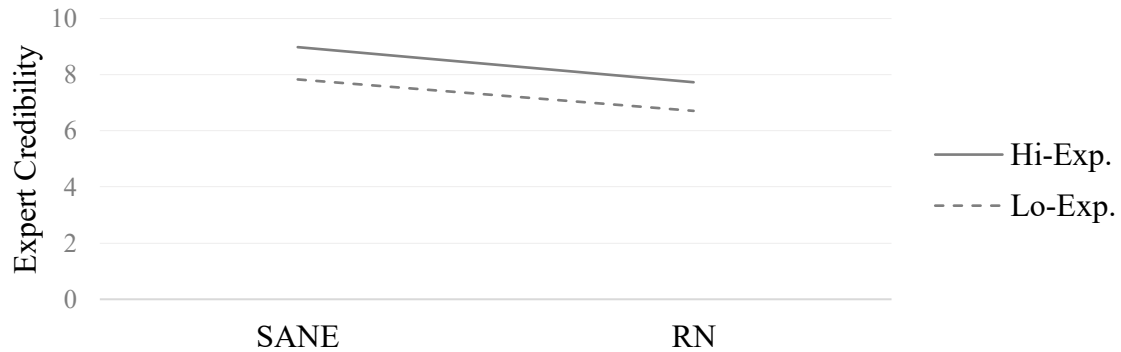
$d = 1.52$. As for the item measuring perceptions of the nurse's experience (*How much experience did Nurse Phillips have in her profession?*), responses in high-experience conditions ($M = 8.20$, $SD = 1.74$) were significantly greater compared to responses in low-experience conditions ($M = 5.50$, $SD = 2.42$), $t(284) = -11.11$, $p < .001$, $d = 1.32$.

Primary Analyses

Expert Credibility Analysis

A two-way ANOVA was used to assess the impact of expert training and experience on perceived expert credibility. As hypothesized, training significantly impacted perceptions of expert credibility, $F(1, 282) = 32.20$, $p < .001$, $\eta^2 = .10$. Specifically, participants in SANE conditions ($M = 8.48$, $SD = 1.64$) rated the expert as significantly more credible than participants in RN conditions ($M = 7.20$, $SD = 2.00$; see Figure 1). Also as predicted, perceived expert credibility significantly differed according to the extent of the expert's reported experience, $F(1, 282) = 27.26$, $p < .001$, $\eta^2 = .09$. That is, participants in high-experience conditions ($M = 8.42$, $SD = 1.74$) judged the expert as being significantly more credible than those in low-experience conditions ($M = 7.23$, $SD = 1.94$).

No explicit prediction concerning an interaction between training and experience was made, and it indeed was not significant, $F(1, 282) = .10$, $p = .75$, $\eta^2 = .00$. Although, a one-way ANOVA comparing expert credibility across the experimental conditions showed that high-experience SANEs elicited the highest average rating, $F(3, 282) = 21.91$, $p < .001$, $\eta^2 = .19$. Specifically, Tukey's HSD revealed that high-experience SANEs ($M = 8.98$, $SD = 1.29$) had the greatest cumulative effect on expert credibility in comparison to each of the other conditions. Means and standard deviations for all other conditions are depicted in Table 2.

Figure 1***Expert Credibility Ratings by Training and Experience***

Note. This graph represents expert credibility ratings based on training and experience.

Table 2***Simple Cell Means for Expert Credibility***

	<i>n</i>	<i>M</i>	<i>SD</i>
High-Experience x SANE	83	8.98	1.29
High-Experience x RN	67	7.73	1.97
Low Experience x SANE	63	7.83	1.83
Low Experience x RN	73	6.71	1.90

Note. This table includes a breakdown of mean ratings for expert credibility by condition.

Conviction Analysis

Binary logistic regression was employed to examine the impact of training and experience on conviction. Overall, two participants failed to render a verdict, both of whom were in the control condition. Of those who did ($n = 391$), 80.0% ($n = 314$) found the perpetrator guilty. Before running the logistic regression, chi-square test of independence was used to assess the proportion of guilty to not guilty verdicts across all five conditions. Results showed that proportions did not vary significantly by condition, $\chi^2(4) = 8.86$, $p = .07$. In all cases, the percentage of guilty verdicts ranged from 70.5% up to 85.0% (see Table 3).

Table 3
Conviction Rates per Condition

	Verdict Percentages		<i>n</i>
	Guilty	Not Guilty	
High-Experience x SANE	83.0%	17.0%	83
High-Experience x RN	84.0%	16.0%	67
Low Experience x SANE	84.0%	16.0%	63
Low Experience x RN	85.0%	15.0%	73
Control	70.5%	29.5%	105
Total	80.0%	20.0%	391

Note. This table depicts verdict proportions by condition.

Removing responses from the control condition to run the logistic regression reduced the sample size from $n = 391$ to 286. Of those participants, 84.0% ($n = 240$) found the perpetrator guilty. Given the reduced sample size, the conviction analysis was underpowered, since the power analysis showed that (after removing failed manipulation checks) this analysis required 388 responses. According to a post-hoc sensitivity analysis, running a logistic regression with a sample size of $n = 286$ provided sufficient power to only detect an *OR* of 0.46. Indeed, results failed to reach significance, $\chi^2(1) = 0.07, p = .79$, Nagelkerke $R^2 = .001$. As shown in Table 3, conviction rates across the experimental conditions remained within one to two percentage points of each other.

Mediation Analysis

This study sought to replicate Golding et al.'s (2015) mediation results. Though, as outlined above and in contrast to expectations, SANE testimony did not predict conviction in the current study. As a result, the first requirement for full mediation was not met.

Nonetheless, the planned models were still run out of an interest in assessing the indirect effect between SANE testimony and conviction via the mediators of interest. As such, composite scores were calculated to construct the complainant credibility ($\alpha = .89$), strength

of the prosecution's case ($\alpha = .93$), strength of the defense's case ($\alpha = .91$), and anger toward the defendant ($\alpha = .96$) variables using two to three items (see Table 1 for descriptives).

Using template 4 of SPSS's PROCESS macro (Hayes, 2017), the expert testimony dummy variable was entered as the independent variable and conviction as the dependent variable in four separate models. As expected, SANE testimony did not emerge as a significant predictor of conviction in any of the models. Therefore, only the results associated with the indirect effects are outlined below.

Strength of the prosecution's case was entered as the mediator in the first model. The overall indirect effect was not significant, $B = 0.10$, 95% CI [-0.14, 0.36]. In specific, SANE testimony did not predict strength of the prosecution's case, $B = 0.19$, $p = .41$. However, strength of the prosecution's case significantly predicted conviction, $B = 0.55$, $p < .001$. This result indicates that increases in perceptions of the prosecution's case increased the odds of a guilty verdict.

Strength of the defense's case was entered as the mediator in the second model. The overall indirect effect was not significant, $B = 0.07$, 95% CI [-0.27, 0.40]. Specifically, SANE testimony did not predict strength of the defense's case, $B = -0.09$, $p = .69$. Although, strength of the defense's case significantly predicted conviction, $B = -0.73$, $p < .001$, meaning that lower perceptions of the strength of the defense's case led to a greater chance that a guilty verdict would be rendered.

In the third model, anger toward the defendant was treated as the mediator. The overall indirect effect was not significant, $B = 0.14$, 95% CI [-0.09, 0.41]. SANE testimony was not a significant predictor of anger toward the defendant, $B = 0.33$, $p = .24$, but anger toward the defendant was a significant predictor of conviction, $B = 0.42$, $p < .001$.

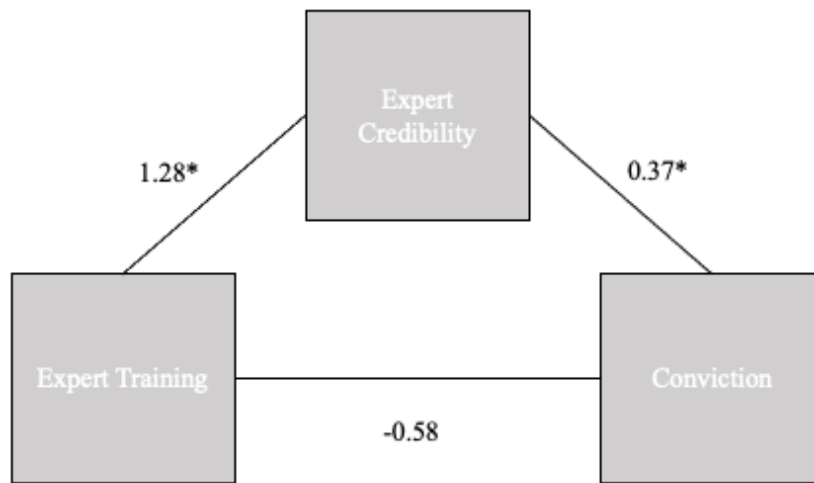
Specifically, higher levels of anger toward the defendant increased the odds of a guilty verdict.

Finally, complainant credibility was assessed as the mediator in the fourth model. Again, the overall indirect effect was not significant, $B = 0.65$, 95% CI [-0.25, -0.41]. SANE testimony did not predict complainant credibility, $B = 0.07$, $p = .68$. However, complainant credibility predicted conviction $B = 0.82$, $p < .001$, indicating higher complainant credibility ratings were associated with a greater chance of a guilty verdict being rendered.

Exploratory Mediation Analyses

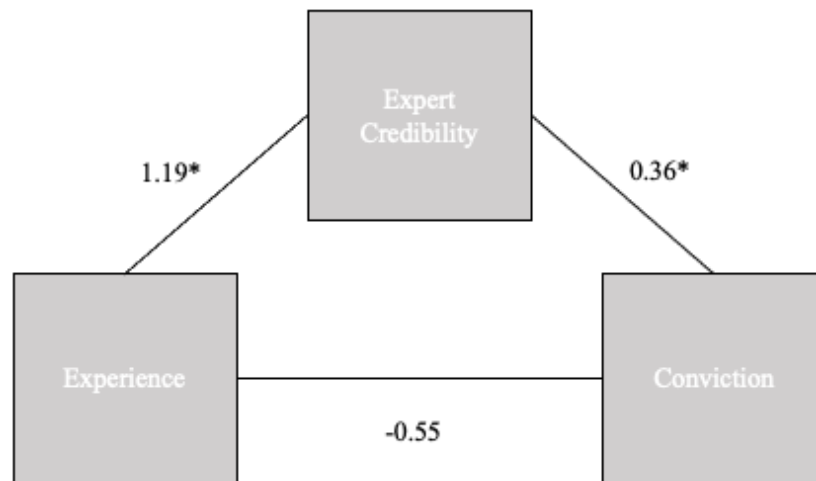
Two separate exploratory mediation analyses were conducted to examine potential indirect effects between expert training and experience on conviction via expert credibility. This was done to further probe the earlier findings that SANE training and high experience independently led to significantly higher expert credibility ratings. As before, only the indirect effects are reported below, since conviction rates did not vary significantly by expert training or experience.

In the first exploratory model, expert training was entered as the independent variable, expert credibility as the mediator, and conviction as the dependent variable. Results showed a significant overall indirect effect, $B = 0.47$, 95% CI [0.23, 0.79] (see Figure 2). Specifically, expert training significantly predicted expert credibility, $B = 1.28$, $p < .001$. Expert credibility in turn significantly predicted conviction, $B = 0.37$, $p < .001$. This finding indicates that the more extensive training SANEs were described as having received increased perceptions of their credibility, which in turn enhanced the odds of a guilty verdict.

Figure 2***Model of the Indirect Effect of Expert Credibility on Expert Training and Conviction***

Note. Indirect effect: $B = 0.47$, 95% CI [0.23, 0.79]; direct effect: $B = -0.58$, 95% CI [-1.29, 0.13]; $*p < .001$

In a second exploratory model, experience was entered as the independent variable while the same mediator and dependent variable from the model above were maintained. Results revealed a significant overall indirect effect, $B = 0.43$, 95% CI [0.19, 0.74], (see Figure 3). In particular, experience significantly predicted expert credibility, $B = 1.19$, $p < .001$, which in turn significantly predicted conviction, $B = 0.36$, $p < .001$. This finding demonstrates that higher levels of experience increased perceptions of the expert's credibility. In turn, this increased perception enhanced the likelihood of a guilty verdict.

Figure 3***Model of the Indirect Effect of Expert Credibility on Experience and Conviction***

Note. Indirect effect: $B = 0.43$, 95% CI [0.19, 0.74]; direct effect: $B = -0.55$, 95% CI [-1.25, 0.14]; $*p < .001$

Discussion

Using a CSA trial scenario, the primary aim of this study was to further examine the impact of SANE testimony by exploring the influence of training and experience on mock jurors' perceptions of SANE credibility and decisions to convict. As predicted, both training and experience independently exerted a significant impact on mock jurors' credibility judgments. Relatedly, high-experience SANEs had the greatest cumulative effect on this outcome compared to each of the other conditions. In contrast to predictions, neither expert training nor experience significantly impacted conviction.

This study's second aim was to replicate previous research showing strength of the prosecution's case, strength of the defense's case, and anger toward the defendant, but not complainant credibility, as mediators of the relationship between SANE testimony and higher conviction rates (Golding et al., 2015). In contrast to expectations, these findings did not

replicate in the current study. Instead, exploratory analyses of indirect effects revealed that mock jurors' increased perceptions of SANE credibility (i.e., the expert with more training) increased the odds that they would render a guilty verdict. Similarly, mock jurors' enhanced perceptions of more-experienced experts functioned to increase the likelihood that they would convict.

The Role of Training and Experience on Expert Credibility Ratings

Results from the current study fill an important gap in the literature by highlighting the importance of taking into account factors about SANEs as professionals that can influence juror decision-making in court. From past research it was already known that SANEs are considered more credible experts than RNs (Golding et al., 2015; Wasarhaley et al., 2012), but this research fell short in addressing factors about SANEs that might be responsible for this. Elucidating these factors is important as this can help increase our scientific understanding of juror decision-making processes while also highlighting which aspects of a SANE's testimony prosecutors should emphasize more or less at trial.

In illustrating differences in mock jurors' perceptions of an expert's credibility based on their academic training history, this finding converges with previous reports from qualitative research (Blackwell & Seymour, 2015; Wilcox & NicDaeid, 2018) and other non-experimental research (Hurwitz et al., 1992). In terms of the qualitative evidence, actual jurors who were empaneled in homicide (Wilcox & NicDaeid, 2018) or child sexual abuse (Blackwell & Seymour, 2015) trials indicated that they used information about an expert's academic background to inform their perceptions of expert credibility. Worth noting is that, in one study, jurors' responses remained consistent whether they were completing a survey or being interviewed (Wilcox & NicDaeid, 2018). This consistency in jurors' responses in

addition to the current results increases the reliability (and potentially the validity) of the evidence demonstrating the positive impact of having expert witnesses state their training history in court.

Interestingly, Klettke and colleagues (2010, 2011) failed to detect an effect of expert witness credentials, which included manipulated information about whether the expert earned a master's or doctoral degree, on expert effectiveness ratings. Although expert effectiveness may be a separate construct from expert credibility, it is not unreasonable to suggest that the two are related and thus inform each other. That said, the report that expert witness credentials had no impact on perceived expert effectiveness presumably stemmed from the fact that mock jurors in that study were unable to appreciate on their own what differentiates a master's-holding expert from an expert holding a doctoral degree (Klettke et al., 2010; Klettke & Powell, 2011).

In contrast, mock jurors in the current study were given much more concrete information regarding the distinction between the training SANEs and RNs receive. Specifically, mock jurors were informed about the number of hours each expert spent in training. Notably, in addition to the impact of more concrete information, the current findings suggest that jurors are impacted by advanced training that is focused on providing practical skills in conducting medical exams, an aspect that also differentiated SANE from RN training. As such, because neither a master's nor a doctoral degree involve this type of practical training, this may be another factor (or lack thereof) that led to the previous null results (Klettke et al., 2010; Klettke & Powell, 2011).

Despite this study being the first known to experimentally examine the impact of experience on expert credibility, the current findings align with previous qualitative research

(Blackwell & Seymour, 2015; Wilcox & NicDaeid, 2018). In the current study, SANEs who were described as having seven years of experience were perceived as significantly more credible than SANEs described as having only a year. Perceptions of RN credibility also varied according to experience in this same positive direction (i.e., higher experience led to higher credibility ratings). Although, at each level of experience, the SANE's credibility surpassed that of the RN's as demonstrated by the training main effect reported earlier.

In terms of previous research, in addition to indicating the relevance of an expert's academic training history, the same homicide-trial and CSA-trial jurors discussed earlier cited the extent of an expert's experience in their profession as informative to their expert credibility judgments (Blackwell & Seymour, 2015; Wilcox & NicDaeid, 2018). In fact, in both studies, years of experience was rated as more important than academic training. Again, the convergence between past and current findings increases the reliability of the evidence, which may also be indicative of their validity.

In their entirety, the current findings taken in combination with past research (Blackwell & Seymour, 2015; Wilcox & NicDaeid, 2018) have legal implications. In specific, the existing evidence altogether speak to the fact that prosecutors should ask SANEs to disclose information about their training in court. It is expected that doing so will significantly increase jurors' perceptions of the expert's credibility. With regard to having an expert disclose their years of professional experience, prosecutors should have no reservations about asking more-experienced SANEs to discuss the length of their experience practicing. Again, it is expected that doing so will foster highly positive perceptions of their credibility.

To the contrary, prosecutors should consider whether they should have less-experienced SANEs outline their experience on the stand on a case-by-case basis. More specifically, low-

experience SANEs were perceived as more credible than low-experience RNs in the current study. However, relative to high-experience SANEs, low-experience SANEs were perceived as less credible. That said, in a case where prosecutors might have reason to believe that jurors may not perceive a SANE as credible as they normally would (e.g., in a highly controversial case in favor of the defendant), perhaps they may want to avoid highlighting the fact that the SANE is a novice. Otherwise, disclosing this information may foster lower perceptions of the expert's credibility, relatively speaking. In contrast, regardless of whether the case may be controversial, having a more-experienced SANE highlight her years of experience should only help reinforce, or at a minimum not compromise, perceptions of her credibility.

Furthermore, it is noteworthy that while RNs were consistently seen as less credible than SANEs regardless of level of experience, the same logic presented above applies here. That is, if prosecutors have pre-established reasons to believe that an RN's credibility might be perceived especially poorly, then refraining from having the expert disclose their novice status may help preserve whatever credibility jurors may have initially assigned them. Finally, as before, prosecutors should feel confident asking more-experienced RNs to disclose their level of experience regardless of the direction a case is leaning, be it in favor of the complainant or defendant.

The Role of Training and Experience on Conviction

Findings from the current study suggest that differences conveyed concerning the amount of training SANEs and RNs receive and their extent of experience in their profession do not systematically alter conviction rates. In terms of expert training, these findings are consistent with some past studies (Klettke et al., 2010; Klettke & Powell, 2011) but not

others (Golding et al., 2015; Wasarhaley et al., 2012). Whereas findings pertaining to experience stand in contradiction to the only known previous study that is directly pertinent (Campbell et al., 2007). A few possible explanations concerning these outcomes are worth noting.

First, previous experimental SANE studies varied several pieces of information between SANE and RN conditions, including the extent of the medical exams they conducted (Golding et al., 2015; Wasarhaley et al., 2012). For instance, descriptions of the exams each expert conducted entailed information about visual inspection of injuries in addition to pubic hair and blood samples. However, only the SANE's exam included information about additional procedures such as internal genital exams including genital swabs; tests for pregnancy and sexually transmitted diseases; and semen samples. Importantly, this discrepancy in the number of procedures carried out by each expert is reflective of reality (see Schafran, 2015). Nonetheless, these differences were eliminated in the current study in order to properly examine the impact of expert training and experience while minimizing potential confounding effects stemming from dissimilarities in procedure complexity. In specific, both experts were described as having conducted only visual inspection of injuries as well as pubic hair and blood samples.

In addition to methodological reasons, it was especially important to take this approach given jurors' strong inclination to convict in the presence of physical evidence (Bottoms et al., 2014; Golding et al., 2000; Klettke et al., 2010; Klettke & Powell, 2011; Patterson & Campbell, 2009; Tabak & Klettke, 2014). That said, it is reasonable to speculate that differences in procedure complexity described in previous studies is what led to greater conviction rates in SANE conditions (Golding et al., 2015; Wasarhaley et al., 2012). If so, in

conjunction with the present findings, the evidence collectively implies that while a SANE's training and experience influences jurors' perceptions of their credibility, the details of the procedures SANEs conduct is what increases conviction rates. Further research is of course needed to confirm this speculation.

Next, the combination of using a student sample and a written trial summary could have also contributed to the non-significant conviction results. Bornstein et al. (2017) reported in their meta-analysis that students and community members overall render similar decisions in mock juror research. However, in cases where written trial materials are presented as opposed to nonwritten materials (e.g., audio or video recordings), students can be more punitive. In line with this report, students in the current study's control condition containing no expert testimony convicted 70.5% of the time. In stark contrast, Golding et al. (2015) reported conviction rates in their control condition that ranged from 30% to 60% depending on the complainant's age. Importantly, Golding et al. (2015) used a community sample, and presented materials similar to those used in the present study. Recall that the materials used here were a modified version of what Golding et al. (2015) used. That said, because the present conviction rates were already high to begin with in the control condition, adding any type of expert testimony only served to further heighten students' punitive tendencies.

Bornstein et al. (2017) proposed that written materials require more systematic thinking, which may be a processing mode students are more accustomed to engaging in compared to community members. Accordingly, this difference is purportedly what leads students to render more guilty verdicts compared to their non-student peers in cases where written materials are presented (Bornstein et al., 2017). As such, further investigating the

potential impact of expert training and experience on conviction may prove beneficial if either a community sample is used, or non-written trial materials are presented to a student sample.

Finally, another possible explanation regarding the current null results relates to the fact that the present study was underpowered. In order to detect a medium effect size, a minimum of 388 participants was required across the experimental conditions. As such, removing responses from the control condition ($n = 107$) resulted in a testable sample of only $n = 286$, which led to the logistic regression being insufficiently powered. However, because conviction rates varied by very small amounts (one to two percentage points) across the experimental conditions, it is noteworthy that being underpowered may be the least probable explanation compared to those outlined above.

In any case, it is also worth noting that in terms of continuing to examine the role of experience on conviction in particular, past research supports the idea that doing so may be fruitful. In specific, practicing SANEs with more experience in Campbell et al.'s (2007) study reported better courtroom outcomes (i.e., more guilty pleas and verdicts) than SANEs with less work experience. Indeed, the isolated impact experience had on the measured outcomes is unclear given the non-experimental design of Campbell et al.'s (2007) study. However, the fact that experience did emerge as a significant predictor of courtroom outcomes suggests that it could be worthwhile reexamining the impact of this variable on conviction using an experimental design.

Complainant Credibility

The second aim of this study was to further examine the role of complainant credibility in the context of SANE testimony by replicating previous research (Golding et al.,

2015). In particular, Golding et al. (2015) found that complainant credibility did not mediate the relationship between SANE testimony and conviction, but that anger toward the defendant, strength of the prosecution's case, and strength of the defense's case did. Of particular interest was the finding pertaining to complainant credibility. In specific, unlike prior research showing a strong relationship between complainant credibility and conviction (Bottoms et al., 2014; Connolly & Gordon, 2011; Goodman-Delahunty et al., 2011, 2010; Tabak & Klettke, 2014; Voogt, 2017; Wessel et al., 2016), Golding et al.'s (2015) report indirectly suggested that complainant credibility played less of a deterministic role on conviction in the presence of SANE testimony. For this reason, this study sought to reexamine this finding.

Contrary to expectations, the predicted full mediations did not pan out due to the fact that SANEs and RNs elicited similar conviction rates. Although the tested mediators were not predicted by SANE testimony, they each independently predicted conviction. This suggests that mock jurors' perceptions of the complainant, defendant, and each case being argued still impacted their decisions to render a guilty verdict, even though these impressions occurred independently of the SANE's testimony. As outlined earlier, among other possibilities, reasons as to why the SANE did not exert the expected influence on conviction may be tied to the fact that, unlike Golding et al. (2015), procedure complexity was held constant in the current study. Again, it is possible that differences in procedure complexity is what caused the SANE to elicit more convictions than the RN in their study (Golding et al., 2015). In sum, future research is needed to further investigate Golding et al.'s (2015) mediation analysis.

Exploratory Analyses

Returning to the current manipulations, although SANE testimony did not directly impact the tested mediators or conviction, it increased mock jurors' expert credibility ratings as reported earlier. Consequently, this finding inspired a couple of exploratory analyses. In the first analysis, the indirect effect between expert training and conviction via expert credibility was significant. This result suggests that, on the basis of their more extensive specialized training, mock jurors perceived SANEs as more credible, and this in turn increased the odds that they would convict. This finding serves as an additional piece of evidence supporting the notion that prosecutors should have SANEs emphasize their academic training in court. To provide a comparison point, they should have SANEs contrast their training with the training RNs receive.

Golding et al. (2015) reported that they also assessed SANE credibility as a mediator of the relationship between SANE testimony and conviction in their CSA study. However, expert credibility did not emerge as significant in the context of a full mediation. It is likely that the indirect effect of expert credibility was also not significant, since other indirect effects that had emerged as significant were reported. Assuming this was in fact the case, the current results stand in contrast to Golding et al.'s (2015) analysis.

From a logical standpoint, it is surprising that expert credibility did not fully nor partially mediate the relationship between SANE testimony and conviction in Golding et al. (2015), especially because Wasarhaley et al. (2012) reported a full mediation in their *adult rape* study. Convergence between the results reported in these two studies would have been expected, since the same exact SANE testimony materials containing all the procedures SANEs typically conduct were used in both. In fact, the only known difference between these

studies was the complainant's age. As a result, the reasons underlying these discrepant findings are unclear. Overall, given the small number of SANE experimental studies, additional research that can help provide some clarification is needed.

In the second exploratory analysis, a significant indirect effect between expert experience and conviction via expert credibility was revealed, suggesting that jurors perceive experts with more experience as more credible. This increased perception in turn increases the likelihood that they will convict. This result also serves to reinforce the notion that SANEs with more experience should be asked to state the length of their experience in their profession, as this can help increase conviction rates. Because this study is the first known to manipulate expert experience, future studies focused on replicating and potentially extending this finding are needed.

Limitations and Future Directions

This study extends our scientific knowledge in important ways. Nonetheless, a few important limitations deserve mention. First, this study is limited by its compromised ecological validity stemming from an absence of deliberations. Evidence suggests that case outcomes can differ based on whether mock jurors are afforded the opportunity to deliberate or not (Klettke et al., 2010; Klettke & Powell, 2011). Klettke and colleagues conducted two separate studies using the same CSA vignettes. Mock jurors did not deliberate in their first study (Klettke et al., 2010), but did so in a follow-up study (Klettke & Powell, 2011). When given the opportunity to deliberate (Klettke & Powell, 2011), mock juries were more conservative compared to individual mock jurors (Klettke et al., 2010). That is, mock juries were less apt to convict than mock jurors. Therefore, future research using a mock jury paradigm is needed to assess the impact of SANE testimony more thoroughly.

Another limitation of this study relates to the gender normative complainant-defendant dyad used in the trial summary. While most CSA studies utilize gender normative cases (Voogt et al., 2019), there is evidence to suggest that mock jurors have unique perceptions of non-gender normative dyads (e.g., male complainant and female defendant; Anderson et al., 2018). As such, future investigations manipulating the defendant and complainant's genders is warranted.

In a similar vein, the generalizability of the current results is restricted by the fact that they only apply to female SANEs. Previous research shows that mock jurors' decisions can vary according to the expert's gender (Maeder et al., 2016; McKimmie et al., 2019; McKimmie et al., 2004; Schuller & Cripps, 1998; Schuller et al., 2001; Schuller et al., 2005). For example, some studies show that mock jurors award higher damages to plaintiffs in civil cases and view the expert as more credible when the gender domain of the case being tried and the expert's gender are congruent (McKimmie et al., 2004; Schuller & Cripps, 1998; Schuller et al., 2001; Schuller et al., 2005). Consequently, examinations of how perceptions of male SANEs may differ from that of female SANEs in the context of training and experience information will add to the literature.

Finally, as previously stated, the sample size used for the conviction analysis was smaller than originally planned after excluding responses from the control condition. Ultimately, this resulted in this analysis being underpowered. Although, given the trend in the conviction data, it is unclear the extent to which this may have in fact contributed to the null results. It is possible that the use of written materials in conjunction with a student sample (Bornstein et al., 2017), or the alteration in procedure complexity described earlier,

played a larger role than a lack of power. In any case, future research can help address these limitations.

Conclusion

Using a CSA trial scenario, this study sought to examine the role of expert training and experience on mock jurors perceptions of SANEs and decisions to convict. As hypothesized, as a function of their specialized training, SANEs versus RNs, as well as high- versus low-experience experts received higher credibility ratings. In a similar vein, high-experience SANEs led to the greatest credibility ratings relative to other combinations. These findings underscore key pieces of information prosecutors should have SANEs emphasize in their testimony, namely details of their training history and their experience in their profession, especially if they are not novices. Although conviction rates did not directly vary according to training or experience, findings indicate that the odds of a guilty verdict were indirectly increased as a product of training and experience information augmenting mock jurors' perceptions of expert credibility. This study is the first illustration of the benefit of examining factors about SANEs as professionals that can account for jurors' favorable perceptions of them. Research replicating and extending the current findings is warranted.

References

- Amado, B. G., Arce, R., & Herraiz, A. (2015). Psychological injury in victims of child sexual abuse: A meta-analytic review. *Psychosocial Intervention, 24*, 49-62.
<https://doi.org/10.1016/j.psi.2015.03.002>
- Anderson, A., Wingrove, T., Fox, P., McLean, K., & Styer, E. (2018). Who is the rotten apple? Mock jurors' views of teacher–student sexual contact. *Journal of Interpersonal Violence, 33*, 1449-1471. <https://doi.org/10.1177/0886260515618214>
- Blackwell, S., & Seymour, F. (2015). Expert evidence and jurors' views on expert witnesses. *Psychiatry, Psychology and Law, 22*, 673-681.
<https://doi.org/10.1080/13218719.2015.1063181>
- Block, S. D., & Williams, L. M. (2019). *The prosecution of child sexual abuse: A partnership to improve outcomes: Final summary overview*. U.S. Department of Justice.
- Bornstein, B. H., Golding, J. M., Neuschatz, J., Kimbrough, C., Reed, K., Magyarics, C., & Luecht, K. (2017). Mock juror sampling issues in jury simulation research: A meta-analysis. *Law and Human Behavior, 41*, 13-28.
<http://dx.doi.org/10.1037/lhb000022313>
- Bottoms, B. L., Peter-Hagene, L. C., Stevenson, M. C., Wiley, T. R., Mitchell, T. S., & Goodman, G. S. (2014). Explaining gender differences in jurors' reactions to child sexual assault cases. *Behavioral Sciences & The Law, 32*, 789-812.
<https://doi.org/10.1002/bsl.2147>
- Campbell, R., Bybee, D., Kelley, K. D., Dworkin, E. R., & Patterson, D. (2012a). The impact of sexual assault nurse examiner (SANE) program services on law enforcement

- investigational practices: A mediational analysis. *Criminal Justice and Behavior*, *39*, 169-184. <https://doi.org/10.1177/1077801212440158>
- Campbell, R., Bybee, D., Townsend, S. M., Shaw, J., Karim, N., & Markowitz, J. (2014). The impact of sexual assault nurse examiner programs on criminal justice case outcomes: A multisite replication study. *Violence Against Women*, *20*, 607-625. <https://doi.org/10.1177/0093854811428038>
- Campbell, R., Long, S. M., Townsend, S. M., Kinnison, K. E., Pulley, E. M., Adames, S. B., & Wasco, S. M. (2007). Sexual assault nurse examiners' experiences providing expert witness court testimony. *Journal of Forensic Nursing*, *3*, 7-14.
- Campbell, R., Patterson, D., & Bybee, D. (2012b). Prosecution of adult sexual assault cases: A longitudinal analysis of the impact of a sexual assault nurse examiner program. *Violence Against Women*, *18*, 223-244. <https://doi.org/10.1177/1077801214536286>
- Connolly, D. A., & Gordon, H. M. (2011). He-said–she-said: Contrast effects in credibility assessments and possible threats to fundamental principles of criminal law. *Legal and Criminological Psychology*, *16*, 227-241. <https://doi.org/10.1007/s11896-014-9146-1>
- Cooper, J., Bennett, E. A., & Sukel, H. L. (1996). Complex scientific testimony: How do jurors make decisions? *Law and Human Behavior*, *20*, 379-394.
- Crowley, M. J., O'Callaghan, M. G., & Ball, P. J. (1994). The juridical impact of psychological expert testimony in a simulated child sexual abuse trial. *Law and Human Behavior*, *18*, 89-105.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*, 175-191.

- Fergusson, D. M., McLeod, G. F., & Horwood, L. J. (2013). Childhood sexual abuse and adult developmental outcomes: Findings from a 30-year longitudinal study in New Zealand. *Child Abuse & Neglect, 37*, 664-674.
<https://doi.org/10.1016/j.chiabu.2013.03.013>
- Finkelhor, D., Shattuck, A., Turner, H. A., & Hamby, S. L. (2014). The lifetime prevalence of child sexual abuse and sexual assault assessed in late adolescence. *Journal of Adolescent Health, 55*, 329-333. <https://doi.org/10.1016/j.jadohealth.2013.12.026>
- Gabora, N. J., Spanos, N. P., & Joab, A. (1993). The effects of complainant age and expert psychological testimony in a simulated child sexual abuse trial. *Law and Human Behavior, 17*, 103-119.
- Golding, J. M., Stewart, T. L., Yozwiak, J. A., Djadali, Y., & Sanchez, R. P. (2000). The impact of DNA evidence in a child sexual assault trial. *Child Maltreatment, 5*, 373-383. <https://doi.org/10.1177/1077559500005004009>
- Golding, J. M., Wasarhaley, N. E., Lynch, K. R., Lippert, A., & Magyarics, C. L. (2015). Improving the credibility of child sexual assault victims in court: The impact of a sexual assault nurse examiner. *Behavioral Sciences & The Law, 33*, 493-507.
<https://doi.org/10.1002/bsl.2188>
- Goodman-Delahunty, J., Cossins, A., & O'Brien, K. (2010). Enhancing the credibility of complainants in child sexual assault trials: The effect of expert evidence and judicial directions. *Behavioral Sciences & The Law, 28*, 769-783.
<https://doi.org/10.1002/bsl.936>
- Goodman-Delahunty, J., Cossins, A., & O'Brien, K. (2011). A comparison of expert evidence and judicial directions to counter misconceptions in child sexual abuse

- trials. *Australian & New Zealand Journal of Criminology*, 44, 196-217.
<https://doi.org/10.1177/0004865811405140>
- Hanson, R. F., Resnick, H. S., Saunders, B. E., Kilpatrick, D. G., & Best, C. (1999). Factors related to the reporting of childhood rape. *Child Abuse & Neglect*, 23, 559-569.
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Publications.
- Honor, G., Thackeray, J., Scribano, P., Curran, S., & Benzinger, E. (2012). Pediatric sexual assault nurse examiner care: Trace forensic evidence, anogenital injury, and judicial outcomes. *Journal of Forensic Nursing*, 8, 105-111. <https://doi.org/10.1111/j.1939-3938.2011.01131.x>
- Hurwitz, S. D., Miron, M. S., & Johnson, B. T. (1992). Source credibility and the language of expert testimony. *Journal of Applied Social Psychology*, 22, 1909-1939.
- International Association of Forensic Nurses. (2019). *Sexual assault nurse examiners*.
http://www.iafn.org:80/resource/resmgr/Certification/2014_SANE_CERTIFICATION_EXAM
- Klettke, B., Graesser, A. C., & Powell, M. B. (2010). Expert testimony in child sexual abuse cases: The effects of evidence, coherence and credentials on juror decision making. *Applied Cognitive Psychology: The Official Journal of the Society for Applied Research in Memory and Cognition*, 24, 481-494.
<https://doi.org/10.1002/acp.1565>
- Klettke, B., & Powell, M. (2011). The effects of evidence, coherence and credentials on jury decision-making in child sexual abuse trials. *Psychiatry, Psychology and Law*, 18, 263-269. <https://doi.org/10.1080/13218719.2010.543400>

- Kmett, J. A., & Eack, S. M. (2018). Characteristics of sexual abuse among individuals with serious mental illnesses. *Journal of interpersonal violence, 33*, 2725-2744.
<https://doi.org/10.1177/0886260516628811>
- Kovera, M. B., Gresham, A. W., Borgida, E., Gray, E., & Regan, P. C. (1997). Does expert psychological testimony inform or influence juror decision making? A social cognitive analysis. *Journal of Applied Psychology, 82*, 178-191.
- Kovera, M. B., Levy, R. J., Borgida, E., & Penrod, S. D. (1994). Expert testimony in child sexual abuse cases. *Law and Human Behavior, 18*, 653-674.
- Leeb, R. T., Paulozzi, L. J., Melanson, C., Simon, T. R., & Arias, I. (2008). *Child maltreatment surveillance: Uniform definitions for public health and recommended data elements*. Centers for Disease Control and Prevention.
- Maeder, E. M., McManus, L. A., McLaughlin, K. J., Yamamoto, S., & Stewart, H. (2016). Jurors' perceptions of scientific testimony: The role of gender and testimony complexity in trials involving DNA evidence. *Cogent Psychology, 3*, 1-14,
<https://doi.org/10.1080/23311908.2016.1264657>.
- McKimmie, B. M., Newton, C. J., Terry, D. J., & Schuller, R. A. (2004). Jurors' responses to expert witness testimony: The effects of gender stereotypes. *Group Processes & Intergroup Relations, 7*, 131-143. <https://doi.org/10.1177/1368430204043724>
- McKimmie, B. M., Schuller, R. A., Thomas, S., & Sherrel, H. (2019). The impact of gender-role congruence on the persuasiveness of expert testimony. *University of Queensland Law Journal, 38*, 279-299.
- Office for Victims of Crime. (n.d.). *SANE program development and operation guide*. Office of Justice Programs. <https://www.ovcttac.gov/saneguide/introduction/>

- Open Science Collaboration. (2015). Estimating the reproducibility of psychological science. *Science*, *349*, <https://doi.org/10.1126/science.aac4716>
- Patterson, D., & Campbell, R. (2009). A comparative study of the prosecution of childhood sexual abuse cases: The contributory role of pediatric forensic nurse examiner (FNE) programs. *Journal of Forensic Nursing*, *5*, 38-45. <https://doi.org/10.1111/j.1939-3938.2009.01029.x>
- Schafran, L. H. (2015). Medical forensic sexual assault examinations: What are they, and what can they tell the courts? *Judges' Journal*, *54*, 16-20, 43.
- Schuller, R. A., & Cripps, J. (1998). Expert evidence pertaining to battered women: The impact of gender of expert and timing of testimony. *Law and Human Behavior*, *22*, 17-31. <https://doi.org/10.1023/A:1025772604721>
- Schuller, R. A., Terry, D., & McKimmie, B. (2001). The impact of an expert's gender on jurors' decisions. *Law & Psychology Review*, *25*.
- Schuller, R. A., Terry, D., & McKimmie, B. (2005). The impact of expert testimony on jurors' decisions: Gender of the expert and testimony complexity. *Journal of Applied Social Psychology*, *35*, 1266-1280. <https://doi.org/10.1111/j.1559-1816.2005.tb02170.x>
- Stoltenborgh, M., Van Ijzendoorn, M. H., Euser, E. M., & Bakermans-Kranenburg, M. J. (2011). A global perspective on child sexual abuse: Meta-analysis of prevalence around the world. *Child Maltreatment*, *16*, 79-101. <https://doi.org/10.1177/1077559511403920>

Tabak, S. J., & Klettke, B. (2014). Mock jury attitudes towards credibility, age, and guilt in a fictional child sexual assault scenario. *Australian Journal of Psychology, 66*, 47-55.

<https://doi.org/10.1111/ajpy.12035>

The American Association of Colleges of Nursing. (n.d.). *Nursing Fact Sheet*.

<https://www.aacnnursing.org/News-Information/Fact-Sheets/Nursing-Fact-Sheet>

U.S. Department of Justice. (2019). *Criminal Victimization, 2018*.

<https://www.bjs.gov/content/pub/pdf/cv18.pdf>

US Government Accountability Office. (2016). *Sexual assault: Information on training, funding, and the availability of forensic examiners*.

<https://www.gao.gov/assets/680/675879.pdf>

Voogt, A. (2017). *Perceptions of victim credibility in child sexual assault*

cases (Unpublished doctoral dissertation). Deakin University, Victoria, Australia.

Voogt, A., Klettke, B., & Crossman, A. (2019). Measurement of victim credibility in child sexual assault cases: A systematic review. *Trauma, Violence, & Abuse, 20*, 51-66.

<https://doi.org/10.1177/1524838016683460>

Wasarhaley, N. E., Simcic, T. A., & Golding, J. M. (2012). Mock juror perception of sexual assault nurse examiner testimony. *Violence and Victims, 27*, 500-511.

<https://doi.org/10.1891/0886-6708.27.4.500>

Wessel, E. M., Eilertsen, D. E., Langnes, E., Magnussen, S., & Melinder, A. (2016).

Disclosure of child sexual abuse: Expressed emotions and credibility judgments of a child mock victim. *Psychology, Crime & Law, 22*, 331-343.

<https://doi.org/10.1080/1068316X.2015.1109087>

Wilcox, A. M., & NicDaeid, N. (2018). Jurors' perceptions of forensic science expert witnesses: Experience, qualifications, testimony style and credibility. *Forensic Science International*, 291, 100-108. <https://doi.org/10.1016/j.forsciint.2018.07.030>

Appendix A: Trial Summary

Trial Summary

Introductory Overview

Thank you for participating in this experiment. Please assume the role of a juror who has been empaneled for the trial you will read about. After reading through a summary of the trial, you will be asked to answer questions about it. You will not be able to change your responses once you move to the next page, so make sure you read the trial summary carefully enough that you will be able to answer questions about it. You may exit the survey at any time.

All Conditions

This is a criminal trial for the alleged sexual abuse of 15-year-old Veronica Stephenson by the 30-year-old defendant, Mr. Charles Harlin. It is alleged that the complainant, Ms. Veronica Stephenson, was sexually abused by her stepfather, Mr. Charles Harlin, in their house on the afternoon of April 20, 2007 at approximately 4:00pm. At the time of the alleged sexual abuse and at the time of the trial, Veronica was 15 years old. The state is charging Mr. Charles Harlin with Statutory Sexual Offense with a Person Who is 15 Years Old or Younger, a Class B felony.

Mr. Harlin pleaded not guilty to the felony sexual offense charge. The defense attorney will argue that Mr. Harlin is a responsible and law-abiding man who has never been accused of any crime, and that the felony sexual offense charge is a grave mistake.

Prosecution's Case

Witness No. 1: Detective John Perry

Direct Examination. Detective Perry was assigned to Ms. Stephenson's case after Ms. Stephenson's school principal contacted the police the morning after the sexual abuse. Ms. Stephenson had told the principal about the alleged sexual abuse. Detective Perry came to the school, where he noticed that the alleged victim appeared nervous and told the principal that she was afraid. He took Ms. Stephenson and the principal to the hospital so that a doctor could examine Ms. Stephenson and collect any available evidence. Detective Perry stated that he was responsible for investigating the case and keeping track of all evidence.

Cross-examination. Detective Perry acknowledged that he did not know for certain why Ms. Stephenson appeared nervous or afraid. Moreover, he stated that it is possible that Ms. Stephenson was acting this way around him since he is a police officer, whom people often view as intimidating.

Witness No. 2: Ms. Veronica Stephenson

Direct Examination. Ms. Stephenson is a 15-year-old girl. At 4:00pm on the afternoon of April 20, 2007 her stepfather Mr. Charles Harlin took Ms. Stephenson to the family room. At this time, Ms. Stephenson's mother was at work. Ms. Stephenson stated that Mr. Harlin sexually abused her while they were alone together in the family room. Although Ms. Stephenson told him not to, Mr. Harlin took off Ms. Stephenson's pants and underwear, touched her genitals, and then forced Ms. Stephenson to have sexual intercourse. Mr. Harlin threatened Ms. Stephenson into silence by saying he would hurt Ms. Stephenson if she told anyone about the incident.

Cross-examination. In the three years Mr. Harlin has been her stepfather, Ms. Stephenson has never mentioned being scared of being alone with Mr. Harlin. Nor has Ms. Stephenson ever told anyone of any former abuse by Mr. Harlin. Prior to this alleged incident, Ms. Stephenson never gave any indication that she did not want to spend time with her stepfather.

Low-experience x RN Conditions Only

Prosecution's Case Continued

Witness No. 3: Gwen Phillips

Direct Examination. Gwen Phillips is a Registered Nurse (RN). She graduated in 4 years from the University of Kentucky, College of Nursing with a Bachelor of Science in Nursing (BSN). She then took and passed the examination to be a Registered Nurse (RN). She has had 3 hours of classroom instruction dealing with crisis intervention in cases of sexual abuse.

Finally, Nurse Phillips testified that she met with the complainant, Ms. Stephenson, at approximately 10:00am after Ms. Stephenson was brought in by Detective Perry. During the examination, Nurse Phillips observed bruises and abrasions on Ms. Stephenson's hips, inner thighs, and vaginal region consistent with the history the witness provided. Nurse Phillips also collected pubic hair samples and blood samples. All evidence was labeled, stored in properly sealed containers or envelopes, and sent to the appropriate lab for analysis.

Cross-examination. Nurse Phillips stated that the trauma to the victim could have been the result of a previous injury, such as a biking injury, or rough housing on the playground. But that the injuries were consistent with the report the victim gave.

Nurse Phillips acknowledged that the 3 hours of sexual abuse crisis intervention training she received is less than a doctor who receives 15 hours of the same training, plus additional training that includes the actual collection of forensic evidence. Her 3 hours of training is also less than a Sexual Assault Nurse Examiner (SANE). A SANE receives at least 40 hours of classroom instruction specializing in the principles of evidence, techniques for its collection, and techniques for dealing with crisis intervention in cases of sexual abuse. Moreover, SANE's receive 60 hours of additional hands-on training.

Lastly, Nurse Phillips stated the extent of her work experience in her profession. Nurse Phillips indicated having a year's worth of experience working as a RN. With the exception of her supervisor who has 10 years of experience, most of Nurse Phillips' colleagues at her place of employment have been RNs for about 7 years. Relatively speaking, then, Nurse Phillips does not have a lot of experience in her profession.

Low-Experience x SANE Conditions Only

Prosecution's Case Continued

Witness No. 3: Gwen Phillips

Direct Examination. Nurse Phillips is a Sexual Assault Nurse Examiner (SANE). First she graduated in 4 years from the University of Kentucky, College of Nursing with a Bachelor of Science in Nursing, then took and passed the examination to be a Registered Nurse (RN). She is SANE certified as a result of being an RN and meeting all eligibility requirements (described below). In addition, Nurse Phillips passed the SANE certification exam developed by the International Association of Forensic Nurses and the Center for Nursing Education and Testing.

Nurse Phillips noted that her training is more extensive than either a registered nurse who receives 3 hours of classroom instruction dealing with crisis intervention in cases of sexual abuse, and a doctor who receives 15 hours of the same training, plus additional training that includes the actual collection of forensic evidence. As a SANE, she received required specialized training. Basic training programs typically consist of at least 40 hours of classroom instruction specializing in the principles of evidence, techniques for its collection, and techniques for dealing with crisis intervention in cases of sexual abuse. Moreover, SANEs receive 60 hours of additional hands-on training.

Finally, Nurse Phillips testified that she met with the complainant, Ms. Stephenson, at approximately 10:00am after Ms. Stephenson was brought in by Detective Perry. During the examination, Nurse Phillips observed bruises and abrasions on Ms. Stephenson's hips, inner thighs, and vaginal region consistent with the history the witness provided. Nurse Phillips also collected pubic hair samples and blood samples. All evidence was labeled, stored in properly sealed containers or envelopes, and sent to the appropriate lab for analysis.

Cross-examination. Nurse Phillips stated that the trauma to the victim could have been the result of a previous injury, such as a biking injury, or rough housing on the playground. But that the injuries were consistent with the report the victim gave.

Lastly, Nurse Phillips stated the extent of her work experience in her profession. Nurse Phillips indicated currently having a year's worth of experience working as a SANE. With the exception of her supervisor who has 10 years of experience, most of Nurse Phillips' colleagues at her place of employment have been SANEs for about 7 years. Relatively speaking, then, Nurse Phillips does not have a lot of experience in her profession.

High-Experience x RN Conditions Only

Prosecution's Case Continued

Witness No. 3: Gwen Phillips

Direct Examination. Gwen Phillips is a Registered Nurse (RN). She graduated in 4 years from the University of Kentucky, College of Nursing with a Bachelor of Science in Nursing (BSN). She then took and passed the examination to be a Registered Nurse (RN). She has had 3 hours of classroom instruction dealing with crisis intervention in cases of sexual abuse.

At trial, Nurse Phillips also stated the extent of her work experience in her profession. She indicated having approximately 7 years of experience working as a certified RN. With the exception of her supervisor who has 10 years of experience, most of Nurse Phillips' colleagues at her place of employment have been RNs for about a year. Relatively speaking, then, Nurse Phillips has a good amount of experience in her profession.

Finally, Nurse Phillips testified that she met with the complainant, Ms. Stephenson, at approximately 10:00am after Ms. Stephenson was brought in by Detective Perry. During the examination, Nurse Phillips observed bruises and abrasions on Ms. Stephenson's hips, inner thighs, and vaginal region consistent with the history the witness provided. Nurse Phillips also collected pubic hair samples and blood samples. All evidence was labeled, stored in properly sealed containers or envelopes, and sent to the appropriate lab for analysis.

Cross-examination. Nurse Phillips stated that the trauma to the victim could have been the result of a previous injury, such as a biking injury, or rough housing on the playground. But that the injuries were consistent with the report the victim gave.

Lastly, Nurse Phillips acknowledged that the 3 hours of sexual abuse crisis intervention training she received is less than a doctor who receives 15 hours of the same training, plus additional training that includes the actual collection of forensic evidence. Her 3 hours of training is also less than a Sexual Assault Nurse Examiner (SANE). A SANE receives at least 40 hours of classroom instruction specializing in the principles of evidence, techniques for its collection, and techniques for dealing with crisis intervention in cases of sexual abuse. Moreover, SANE's receive 60 hours of additional hands-on training.

High-Experience x SANE Conditions Only

Prosecution's Case Continued

Witness No. 3: Gwen Phillips

Direct Examination. Nurse Phillips is a Sexual Assault Nurse Examiner (SANE). First she graduated in 4 years from the University of Kentucky, College of Nursing with a Bachelor of Science in Nursing, then took and passed the examination to be a Registered Nurse (RN). She is SANE certified as a result of being an RN and meeting all eligibility requirements (described below). In addition, Nurse Phillips passed the SANE certification exam developed by the International Association of Forensic Nurses and the Center for Nursing Education and Testing.

Nurse Phillips noted that her training is more extensive than either a registered nurse who receives 3 hours of classroom instruction dealing with crisis intervention in cases of sexual abuse, and a doctor who receives 15 hours of the same training, plus additional training that includes the actual collection of forensic evidence. As a SANE, she received required specialized training. Basic training

programs typically consist of at least 40 hours of classroom instruction specializing in the principles of evidence, techniques for its collection, and techniques for dealing with crisis intervention in cases of sexual abuse. Moreover, SANEs receive 60 hours of additional hands-on training.

At trial, Nurse Phillips also stated the extent of her work experience in her profession. Nurse Phillips indicated having approximately 7 years of experience working as a certified SANE. With the exception of her supervisor who has 10 years of experience, most of Nurse Phillips' colleagues at her place of employment have been SANEs for about a year. Relatively speaking, then, Nurse Phillips has a good amount of experience in her profession.

Finally, Nurse Phillips testified that she met with the complainant, Ms. Stephenson, at approximately 10:00am after Ms. Stephenson was brought in by Detective Perry. During the examination, Nurse Phillips observed bruises and abrasions on Ms. Stephenson's hips, inner thighs, and vaginal region consistent with the history the witness provided. Nurse Phillips also collected pubic hair samples and blood samples. All evidence was labeled, stored in properly sealed containers or envelopes, and sent to the appropriate lab for analysis.

Cross-Examination. Nurse Phillips stated that the trauma to the victim could have been the result of a previous injury, such as a biking injury, or rough housing on the playground. But that the injuries were consistent with the report the victim gave.

All Conditions

Defense's Case

Witness No. 1: Mr. Charles Harlin

Direct Examination. Mr. Harlin stated that he is an active volunteer in his community, has an exemplary work record, and his volunteer service to his community has been acknowledged by others. Mr. Harlin denied any sexual contact with or attraction toward his 15-year-old stepdaughter, Ms. Stephenson. He has been married to Ms. Stephenson's mother for three years. Mr. Harlin asserted that while Ms. Stephenson has been his stepdaughter for those three years, he had never considered touching her in any sexual manner.

Cross-examination. Mr. Harlin indicated that he and Ms. Stephenson were home alone on the day in question. Also, he noted that he and Ms. Stephenson were in the family room at the time in question that afternoon.

Witness No. 2: Paul Franklin

Direct Examination. Mr. Franklin is a cousin of the defendant. Mr. Franklin stated that he knows of no evidence that Mr. Harlin is sexually attracted to or has had sexual relations with children. He stated that Mr. Harlin is a moral person of the utmost character. Mr. Franklin does not believe that the defendant is capable of sexual abuse. Moreover, Mr. Franklin believes that Mr. Harlin would have confided in him if he had committed this sexual abuse.

Cross-examination. Mr. Franklin admitted that Mr. Harlin could have done something outside of his knowledge; Mr. Harlin does not tell him everything that goes on in his life.

Closing Arguments

Prosecution's Closing Argument. Veronica Stephenson is an innocent victim of a terrible crime. Her stepfather, Mr. Harlin deliberately took advantage of Ms. Stephenson by committing a sexual crime that will stay with Ms. Stephenson for the rest of her life. There is clear evidence that puts Mr. Harlin at the scene of the crime and gives him a direct opportunity to commit it without anyone finding out. What he did not realize at the time was that the threats he would impose would be futile as fifteen-year-old Veronica was brave enough to tell someone. That bravery should be rewarded today by the means of convicting her attacker, Mr. Harlin.

Defense's Closing Argument. The defense argued that there was inconclusive evidence to convict Mr. Charles Harlin simply because he was there at the scene of the alleged crime and has direct contact with his stepdaughter on a daily basis. If all cases were taken as such, then every parent

would be guilty in one way or another. It does not make Mr. Harlin a child sexual abuser any more than every other parent who spends time with their children. Mr. Harlin is an exemplary member of his community and the real tragedy would be convicting an innocent man.

Prosecution's Closing Argument. The prosecution argued that it was irrelevant whether or not Mr. Harlin was an exemplary member of his community. Regardless of how much he has done to help others the fact remains the same that he hurt someone who trusted him; he hurt an innocent child. Mr. Harlin must be held accountable for his criminal actions and be found guilty of this horrible crime against this child.

Instructions to Jurors

Judge Albert Graham. Judge Graham charged the jurors with the following instructions: You will find the Defendant guilty of Statutory Sexual Offense with a Person who is 15 Years Old or Younger, a Class B felony, under this Instruction if, and only if, you believe from the evidence beyond a reasonable doubt all of the following:

- A. That in this county on or about April 20, 2007 and before the finding of the Indictment herein, he engaged in sexual intercourse with Ms. Veronica Stephenson.
AND
- B. That at the time of such intercourse Ms. Veronica Stephenson was less than 16 years of age.
AND
- C. That at the time of such intercourse Mr. Charles Harlin was at least 12 years old and at least 6 years older than the complainant, Ms. Veronica Stephenson.

Appendix B: Questionnaire

Trial Summary Questionnaire

1. Is the defendant, Mr. Charles Harlin, guilty or not guilty of Statutory Sexual Offense with a Person who is 15 Years Old or Younger, a Class B felony?
 - Guilty
 - Not Guilty

2. In a few words, what information did you use in deciding your verdict of guilty or not guilty?

--

3. How would you rate the defendant's guilt in this case?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

4. How confident are you in your verdict of guilty or not guilty?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

5. How *credible* was the alleged victim, Ms. Veronica Stephenson?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

6. How *honest* was the alleged victim?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

7. How *believable* was the alleged victim?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

8. How much *sympathy* did you feel for the alleged victim?

None at all									A great deal	
1	2	3	4	5	6	7	8	9	10	

9. How much *compassion* did you feel for the alleged victim?

None at all									A great deal	
1	2	3	4	5	6	7	8	9	10	

10. How much *anger* did you have toward the alleged victim?

None at all									A great deal	
1	2	3	4	5	6	7	8	9	10	

11. How much *frustration* did you feel toward the alleged victim?

None at all									A great deal	
1	2	3	4	5	6	7	8	9	10	

12. What kind of nurse was Nurse Phillips?

- a. A registered nurse (RN)
- b. An emergency room nurse (ERN)
- c. A sexual assault nurse examiner (SANE)

13. How *credible* was Nurse Phillips' testimony?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

14. How much *expertise* would you say Nurse Phillips had?

None at all									A great deal	
1	2	3	4	5	6	7	8	9	10	

15. How much *experience* did Nurse Phillips have in her profession?

None at all									A great deal	
1	2	3	4	5	6	7	8	9	10	

16. How much did Nurse Phillip's years of work experience influence your opinion of her credibility?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

17. How much academic training did Nurse Phillips receive?

None at all									A great deal	
1	2	3	4	5	6	7	8	9	10	

18. How much did Nurse Phillips' academic training influence your opinion of her credibility?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

19. How *strong* was the Prosecution's case (i.e., the case that was brought against the defendant, Mr. Charles Harlin)?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

20. How *logical* was the Prosecution's case?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

21. How *persuasive* was the Prosecution's case?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

22. How *credible* was the defendant, Mr. Charles Harlin?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

23. How *honest* was the defendant?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

24. How *believable* was the defendant?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

25. How much *sympathy* did you have for the defendant?

None at all									A great deal	
1	2	3	4	5	6	7	8	9	10	

26. How much *compassion* did you have for the defendant?

None at all									A great deal	
1	2	3	4	5	6	7	8	9	10	

27. How much *anger* did you have toward the defendant?

None at all									A great deal	
1	2	3	4	5	6	7	8	9	10	

28. How much *frustration* did you feel toward the defendant?

None at all									A great deal	
1	2	3	4	5	6	7	8	9	10	

29. How *strong* was the Defense's case (i.e., the case that argued in favor of the defendant, Mr. Charles Harlin)?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

30. How *logical* was the Defense's case?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

31. How *persuasive* was the Defense's case?

Not at all									Completely	
1	2	3	4	5	6	7	8	9	10	

32. What is your age in years?: _____

33. Please indicate your gender.

- a. Male
- b. Female
- c. My identification is not listed.
- d. I prefer not to answer.

34. Please indicate your race/ethnicity.

- a. White/non-Hispanic
- b. White/Hispanic
- c. Black
- d. Asian
- e. My racial/ethnic identification is not listed.
- f. I prefer not to answer.

35. Have you previously served on a jury?

- a. Yes
- b. No

Appendix C: Informed Consent Form

Consent Form

Consent to Participate in Research

Information to Consider About this Research

Juror Decision-Making in Child Sexual Abuse Trials

Principal Investigator: Patricia A. Ferreira

Department: Psychology

Contact Information: ferreirapa@appstate.edu

Faculty Advisor: Twila Wingrove

Department: Psychology

Contact Information: Smith-Wright Hall 112C, (828) 262-8965, wingroveta@appstate.edu

You are being invited to take part in a research study about child sexual abuse trials. If you partake in this study, you will be one of about 500 people to do so. By doing this study we hope to learn how people evaluate evidence presented at these trials. There may be no personal benefit from your participation but the information gained by doing this research may help others in the future by helping courts understand how people reach verdicts in these kinds of cases. You will be asked to read a summary of a child sexual abuse trial and then answer some questions about it.

To the best of our knowledge, the risk of harm for participating in this research study is no more than you would experience in everyday life. However, some people may find the subject material and some of the language upsetting. Participating in this study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. You may choose not to answer any survey question for any reason.

You will not be paid for your participation in this study. However, you can earn 1 ELC credit for your participation. There are other research options and non-research options for obtaining extra credit or ELC's. One non-research option to receive 1 ELC is to read an article and write a 1-2 page paper summarizing the article and your reaction to the article. More information about this option can be found at: psych.appstate.edu/research. You may also wish to consult your professor to see if other non-research options are available.

Once we have collected all the data, we will make the dataset publicly available by posting on our project page on the Open Science Framework (<https://osf.io/yx69m/>). Your name will not be in this dataset, but your responses to the survey will be.

The people conducting this study will be available to answer any questions concerning this research, now or in the future. You may contact the Principal Investigator at ferreirapa@appstate.edu or the faculty advisor for this project at (828) 262-8965 or wingroveta@appstate.edu. If you have questions about your rights as someone taking part in research, contact the Appalachian Institutional Review Board Administrator at (828) 262-2692 (days), through email at irb@appstate.edu or at Appalachian State University, Office of Research and Sponsored Programs, IRB Administrator, Boone, NC 28608.

By continuing to the research procedures, I acknowledge that I am at least 18 years old, have read the above information, and agree to participate.

Appendix D: Debriefing Statement

Debriefing Statement

Thank you for participating. This study is now complete. **In order to get granted ELC credit, you must click the arrow below to be taken to a separate page where you will enter your name.** This way, your name will not be connected with your responses. We understand that this study contains sensitive material that may lead to feelings of distress. If you feel distressed after your participation today or in the coming days, please feel free to take advantage of the resources listed below.

The Counseling Center (On Campus)
1st Floor, Miles Annas Building
614 Howard Street
Boone, NC 28608
(828) 262-3180

Or

OASIS (Off Campus)
225 Birch St.
Boone, NC 28607
(828) 264-1532

Appendix E: IRB Approval*IRB Approval*

To: Patricia Ferreira
Psychology
CAMPUS EMAIL

From: Nat Krancus, IRB Administrator
Date: 7/09/2020
RE: Notice of Exempt Research Determination

STUDY #: 20-0226

STUDY TITLE: An Assessment of Sexual Assault Nurse Examiner Experience and Training on Mock Jurors' Decisions in a Child Sexual Abuse Trial

Exemption Category: 3. Benign Behavioral Intervention

This study involves no more than minimal risks and meets the exemption category or categories cited above. In accordance with the 2018 federal regulations regarding research with human subjects [45 CFR 46.101(b)] and University policy and procedures, the research activities described in the study materials are exempt from IRB review. If this study was previously reviewed as non-exempt research under the pre-2018 federal regulations regarding research with human subjects, the Office of Research Protections staff reviewed the annual renewal and the initial application and determined that this research is now exempt from 45 CFR 46.101(b) and thus IRB review.

Vita

Patricia A. Ferreira was born on November 29, 1991 in Lowell, MA, to Margareth S. Ferreira and Jarbas F. Filho. Patricia graduated from Nashua High School North in 2010. After taking a few years off, she began her undergraduate career at Nashua Community College. She earned an Associate of Arts degree in psychology in spring 2017. The following fall, Patricia transferred to University of MA Lowell, where she first became involved in forensic and legal psychology research in Dr. Miko Wilford's lab. In spring 2019, she graduated with a Bachelor of Arts degree in psychology and a minor in criminal justice. Throughout her undergraduate career, Patricia earned various distinguished awards, including the Chancellor's Award for Distinguished Academic Achievement at the University of MA Lowell.

Immediately after earning her bachelor's degree, Patricia enrolled in Appalachian State University's Experimental Psychology Master of Arts program. She is expected to graduate in spring 2021. During her time at Appalachian State, Patricia researched juror decision-making in sexual abuse trials under the guidance of Dr. Twila Wingrove. She presented her research at national conferences, published a paper, received internal and external research and travel grants, and won research awards from American Psychology-Law Society and Cratis D. Williams School of Graduate Studies. In fall 2021, Patricia will begin her studies toward a doctorate degree in social psychology at Iowa State University. She will be co-mentored by Drs. Stephanie Madon and Max Gyll. Her research will focus on false confessions and forensic expert decision-making.