

**Jurors' Sexual Abuse Experience, Empathy, and Child Sexual Abuse Case Judgments:
Meta-analyses**

BY

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THESIS

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TABLE OF CONTENTS

<u>CHAPTER</u>	<u>PAGE</u>
I. INTRODUCTION	1
A. Factors that Influence Jurors' Reactions to Child Sexual Abuse	2
B. Understanding Why Past Sexual Abuse Might Affect Jurors' Judgments in CSA Cases	4
1. Attitudes	5
2. Hypervigilance, Altruism Born of Suffering, and Protection of Victims	6
3. Empathy	9
a. Empathy as a Predictor of Jurors' Perceptions of CSA Cases	9
b. Evidence Suggesting that Past Abuse Experience Will Lead to Increased Empathy in Victims and in Turn, Efforts to Help Other Victims	10
c. Evidence Suggesting that Past Abuse Experience Will Not Lead to Increased Empathy in Victims	13
d. Motivations to Avoid Empathy for Self-Protection	13
e. Lack of Empathy Due to Trauma's Physiological Damage	15
C. Study Overview and Hypotheses	16
II. METHOD	19
A. Participants	19
B. Materials	19
1. Pattern Jury Instructions	19
2. Demographic Questionnaire	19
3. Abuse Experience Measure	19
4. Child Victim Empathy Scale	20
5. Trial Stimuli	20
6. Case Judgments (Dependent Measures)	20
C. Procedure	21
D. Study Inclusion and Exclusion Criteria	21
E. Analyses	22
1. Stage 1: Analyses of Main Effects and Mediation	22
a. Main Effect Analyses	22
b. Mediation Analyses	22
2. Stage 2: Meta-Analyses	23
III. RESULTS	26
A. Stage 1 of Analyses: Independent Samples T-tests and Mediation	26
1. Effect of Sexual Abuse on Case Judgments and Empathy	26
a. Belief in Abuse	26
b. Victim Credibility	26
c. Degree of Guilt	26
d. Child Victim Empathy	26

2.	Mediating Effect of Empathy.....	27
a.	Belief in Abuse	27
b.	Victim Credibility	27
c.	Degree of Guilt	27
B.	Stage 2 of Analyses: Meta-Analyses	27
1.	Effect of Sexual Abuse on Case Judgments and Empathy	27
a.	Belief in Abuse	28
b.	Victim Credibility	28
c.	Degree of Guilt	28
d.	Child Victim Empathy	29
2.	Mediating Effect of Empathy.....	29
a.	Belief in Abuse	30
b.	Victim Credibility	30
c.	Degree of Guilt	30
IV.	DISCUSSION	32
A.	Theoretical Implications of Findings.....	33
B.	Practical Implications of Findings	36
1.	Implications for Jury Selection	36
2.	Implications for Clinical Treatment.....	38
C.	Contributions and Limitations	39
V.	CONCLUSION.....	42
VI.	REFERENCES	43
VII.	APPENDICES	56
A.	Appendix A: Illinois Pattern Jury Instructions	58
B.	Appendix B: Child Victim Empathy Scale	60
C.	Appendix C: IRB Approval Form.....	61
VIII.	CURRICULUM VITAE.....	63

LIST OF TABLES

<u>TABLE</u>	<u>PAGE</u>
I. Table 1: Explanation of the Three Independent Variables	66
II. Table 2: Sample Description for Each of the Nine Component Studies.....	66
III. Table 3: Details of Methods for Each of the Nine Component Studies.....	67
IV. Table 4: Dependent Variable Scales	78
V. Table 5: Independent Samples <i>T</i> -tests of the Effect of Sexual Abuse History on Belief in Abuse	69
VI. Table 6: Independent Samples <i>T</i> -tests of the Effect of Sexual Abuse History on Victim Credibility	70
VII. Table 7: Independent Samples <i>T</i> -tests of the Effect of Sexual Abuse History on Degree of Guilt	72
VIII. Table 8: Independent Samples <i>T</i> -tests of the Effect of Sexual Abuse History on Child Victim Empathy	74
IX. Table 9: Partially Standardized Indirect Effect (Mediation) of Child Victim Empathy on the Relation between Abuse Experience and Belief in Abuse.....	76
X. Table 10: Partially Standardized Indirect Effect (Mediation) of Child Victim Empathy on the Relation between Abuse Experience and Victim Credibility	77
XI. Table 11: Partially Standardized Indirect Effect (Mediation) of Child Victim Empathy on the Relation between Abuse Experience and Degree of Guilt.....	78
XII. Table 12: Meta-Analyses of Sexual Abuse on Case Judgments and Empathy.....	79
XIII. Table 13: Meta-Analyses of the Indirect Effect (mediation) of Child Victim Empathy on the Relation between Abuse Experience and Case Judgments	81

LIST OF FIGURES

<u>FIGURE</u>	<u>PAGE</u>
I. Figure 1: General Theoretical Model.....	82
II. Figure 2: Forest Plot for the Meta-Analysis of Child Sexual Abuse’s Effect on Victim Credibility	83
III. Figure 3: Funnel Plot for the Meta-Analysis of Child Sexual Abuse’s Effect on Victim Credibility	83
IV. Figure 4: Forest Plot for the Meta-Analysis of Child or Adult Sexual Abuse’s Effect on Victim Credibility	84
V. Figure 5: Funnel Plot for the Meta-Analysis of Child or Adult Sexual Abuse’s Effect on Victim Credibility	84
VI. Figure 6: Forest Plot for the Meta-Analysis of Child or Adult Victim, or Knowing Another Victim’s Effect on Victim Credibility	85
VII. Figure 7: Funnel Plot for the Meta-Analysis of Child or Adult Victim, or Knowing Another Victim’s Effect on Victim Credibility	85
VIII. Figure 8: Forest Plot for the Meta-Analysis of Child Sexual Abuse’s Effect on Degree of Guilt	86
IX. Figure 9: Funnel Plot for the Meta-Analysis of Child Sexual Abuse’s Effect on Degree of Guilt	86
X. Figure 10: Forest Plot for the Meta-Analysis of Child or Adult Sexual Abuse’s Effect on Degree of Guilt	87
XI. Figure 11: Funnel Plot for the Meta-Analysis of Child or Adult Sexual Abuse’s Effect on Degree of Guilt	87
XII. Figure 12: Forest Plot for the Meta-Analysis of Child Sexual Abuse’s Effect on Child Victim Empathy	88
XIII. Figure 13: Funnel Plot for the Meta-Analysis of Child Sexual Abuse’s Effect on Child Victim Empathy	88
XIV. Figure 14: Forest Plot for the Meta-Analysis of Child or Adult Sexual Abuse’s Effect on Child Victim Empathy	89
XV. Figure 15: Funnel Plot for the Meta-Analysis of Child or Adult Sexual Abuse’s Effect on Child Victim Empathy	89
XVI. Figure 16: Forest Plot for the Meta-Analysis of Child or Adult Victim, or Knowing Another Victim’s Effect on Child Victim Empathy	90
XVII. Figure 17: Funnel Plot for the Meta-Analysis of Child or Adult Victim, or Knowing Another Victim’s Effect on Child Victim Empathy	90
XVIII. Figure 18: Forest Plot for the Meta-Analysis of the Indirect Effect of Child Victim Empathy between Child Sexual Abuse and Victim Credibility.....	91
XIX. Figure 19: Funnel Plot for the Meta-Analysis of the Indirect Effect of Child Victim Empathy between Child Sexual Abuse and Victim Credibility.....	91
XX. Figure 20: Forest Plot for the Meta-Analysis of the Indirect Effect of Child Victim Empathy between Child or Adult Sexual Abuse and Victim Credibility	92
XXI. Figure 21: Funnel Plot for the Meta-Analysis of the Indirect Effect of Child Victim Empathy between Child or Adult Sexual Abuse and Victim Credibility	92

XXII.	Figure 22: Forest Plot for the Meta-Analysis of the Indirect Effect of Child Victim Empathy between Child or Adult Sexual Abuse, or Knowing Another Victim and Victim Credibility	93
XXIII.	Figure 23: Funnel Plot for the Meta-Analysis of the Indirect Effect of Child Victim Empathy between Child or Adult Sexual Abuse, or Knowing Another Victim and Victim Credibility	93
XXIV.	Figure 24: Forest Plot for the Meta-Analysis of the Indirect Effect of Child Victim Empathy between Child Sexual Abuse and Degree of Guilt	94
XXV.	Figure 25: Funnel Plot for the Meta-Analysis of the Indirect Effect of Child Victim Empathy between Child Sexual Abuse and Degree of Guilt	94
XXVI.	Figure 26: Forest Plot for the Meta-Analysis of the Indirect Effect of Child Victim Empathy between Child or Adult Sexual Abuse and Degree of Guilt.....	95
XXVII.	Figure 27: Funnel Plot for the Meta-Analysis of the Indirect Effect of Child Victim Empathy between Child or Adult Sexual Abuse and Degree of Guilt.....	95
XXVIII.	Figure 28: Forest Plot for the Meta-Analysis of the Indirect Effect of Child Victim Empathy between Child or Adult Sexual Abuse, or Knowing Another Victim and Degree of Guilt	96
XXIX.	Figure 29: Funnel Plot for the Meta-Analysis of the Indirect Effect of Child Victim Empathy between Child or Adult Sexual Abuse, or Knowing Another Victim and Degree of Guilt	96

Summary

I conducted meta-analyses to examine the effect of mock jurors' sexual abuse experience (i.e., whether they personally were victimized or knew another victim) on child sexual abuse case judgments. I also examined the relation of abuse experience to jurors' child victim empathy, and the potential for empathy to, in turn, explain the relation of abuse experience to case judgments. Participants were 2,447 (53% women) introductory psychology students who, across nine studies, assumed the role of mock juror, reported their empathy for child victims, considered a hypothetical case of child sexual abuse, and made case-related judgments (ratings of the victim's credibility, their level of belief in the sexual abuse allegation, and the degree of guilt they assigned to the defendant). Four hundred and four participants were victims of sexual abuse (17% of sample); 961 participants knew someone who had been sexually abused (39% of sample; individuals who responded to either: $N = 1,094$ (29% of sample women)). Meta-analyses revealed that, compared to others, participants with abuse experience perceived the victim to be more credible. Further, participants with abuse experience had greater victim empathy, which in turn influenced higher perceptions of credibility. Those who had been victimized themselves assigned more guilt to defendants than did non-victims, which was mediated by their greater empathy for child victims. Neither abuse experience nor empathy for child victims affected mock jurors' belief in victims' sexual abuse allegations. These findings are important both for theoretical and practical reasons discussed.

Jurors' Sexual Abuse Experience, Empathy, and Child Sexual Abuse Case Judgments: Meta-analyses

It is important to understand the factors that influence legal decisions in child sexual assault (CSA) cases for a variety of reasons. Child sexual abuse is a prevalent health concern for children, with many serious outcomes (Putnam, 2003). At least one out of ten children will be victimized before age 18 (Putnam, 2003; Finkelhor, Turner, Shattuck, Hamby, 2015), perhaps more, especially girls, for whom the percentage is at least one of four (Andrews, Corry, Slade, Issakidis & Swanston, 2004; Epstein, 2002; Finkelhor, Turner, Shattuck, Hamby, 2015). Still, many cases are never disclosed, or discovered, and of the small number of cases brought to the attention of child protective services, only about two thirds are substantiated (Michovich-Fong & Jaffee, 2010). Child sexual abuse cases are less likely to be charged than most other felonies and violent crimes (e.g., murder, robbery, kidnapping; Cross, Walsh, Simone, & Jones, 2003) – meaning that of the small proportion of cases that come to the attention of legal authorities, an even smaller number of offenders are charged with a crime. Further, even when comparing within types of child abuse cases, child sexual abuse has lower incarceration rates for offenders than child physical abuse.

Only approximately 10% of all CSA cases referred for prosecution are presented to a jury (Cross et al., 2003), although this is still a substantial number of cases. This is perhaps unsurprising in light of the fact that there is often not much physical evidence of child sexual abuse allegations, nor eyewitnesses to testify. In the absence of physical evidence, the word of a child comes to be viewed as the most important piece of evidence in many of these cases (Myers, Redlich, Goodman, Prizmich, & Imwinkelried, 1999), and extralegal factors – those unrelated to legal evidence such as juror gender, experiences, or attitudes – can have a disproportionate

influence on decisions. With these considerations in mind, researchers must understand both the legal and extralegal factors influencing jurors' reactions to these cases.

In this research, I examined the influence of individual differences on mock jurors' decisions in child sexual abuse trials. Specifically, I studied the influence of jurors' experience of sexual abuse on their judgments in child sexual abuse cases. Although researchers have mentioned the importance of studying this (Bottoms, 1993; Haegerich & Bottoms, 2000; Bottoms, Golding, Stevenson, Wiley, & Yozwiak, 2007), only one study reported (briefly) empirical data addressing the issue (Bottoms, 1993). Next, I briefly review the literature on extralegal factors that influence child sexual abuse case outcomes, with a focus on understanding how and why past abuse experiences might affect case judgments.

Factors that Influence Jurors' Reactions to Child Sexual Abuse

A substantial amount of research has examined jurors' responses to child sexual abuse cases, and it continues to be studied heavily (for review, see Bottoms et al., 2007). A variety of victim and defendant factors such as gender, race, and age shape jurors' reactions, as well as defendants' relationship to the victim, sexuality, and reported criminal history (Back & Lips, 1998; Bottoms, Davis, & Epstein, 2004; Bottoms & Goodman, 1994; Gabora, Spanos, & Joab, 1993; Kelley, 1967; Klettke & Mellor, 2017; Maynard & Wideman, 1997; McCoy & Gray, 2007; Pettalia, Pozzulo, & Reed, 2017; Quas, Bottoms, Haegerich, & Nysse-Carris, 2002; Tabak & Klettke, 2014; Wiley & Bottoms, 2009, 2013). Medical evidence, expert witnesses, and eyewitnesses often make a case seem stronger to jurors (Gabora et al., 1993; Golding, Stewart, Yozwiak, Djadali, & Sanchez, 2000; Golding, Wasarhaley, Lynch, Lippert, & Magyarics, 2015; Kovera, Levy, Borgida, & Penrod, 1994; Myers, Redlich, Goodman, Prizmich, & Imwinkelried, 1999), as do courtroom factors such as certain attorney tactics and testimony medium. Inducing

empathy, in particular, is a common practice for attorneys, who encourage jurors to take the perspective of and empathize with how a defendant or the child victim must feel. Haegerich and Bottoms (2000) experimentally showed this to be an effective tactic: Mock jurors primed to empathize with a CSA victim had more empathy for a victim, rated the victim as less responsible for the abuse, and were more likely to believe that the victim was abused.

Of most relevance to the current study, juror individual differences shape perceptions and decisions in CSA cases. Vidmar (1997) argues, for example, that individuals hold a certain prejudice toward sexual abuse cases regardless of the presentation of specific case factors, which makes their personal biases particularly salient. Research has identified a number of attitudinal constructs that are related to more pro-prosecution child sexual abuse case judgments, including jurors' negative attitudes toward pornography and sexual offenders (Cramer et al., 2009), higher levels of sexual conservatism, belief in children's general credibility, negative attitudes toward adult/child sexuality, and failure to endorse myths about abuse (e.g., Bottoms, 1993; Bottoms et al., 2014; Spanos, Dubreuil, & Gwynn, 1991). Higher levels of empathy for child victims are also related to more pro-prosecution judgments in these cases (Bottoms, 1993; Bottoms et al., 2014).

Such attitudinal differences may help explain one of the most pervasive findings in this literature: Women are more likely than men to convict defendants, perceive victims as more credible, and/or assign greater responsibility to the alleged abusers (e.g., Bottoms et al, 2004; Bottoms & Goodman, 1994; Bottoms, Nysse-Carris, Harris, & Tyda, 2003; Bottoms et al., 2014; Devine & Caughlin, 2014; Golding, Bradshaw, Dunlap, & Hodell, 2007; Golding, Fryman, Marsil, & Yozwiak, 2003; Golding, Sanchez, & Sego, 1997; McCauley & Parker, 2001; McCoy & Gray, 2007; Schmidt & Brigham, 1996; Schutte & Hosch, 1997).

Understanding Why Past Sexual Abuse Might Affect Jurors' Judgments in CSA Cases

I predicted that mock jurors who have intimate experience with sexual abuse (i.e., who were and those who know victims) would be more pro-prosecution in child sexual abuse cases than would those with no experience. Further, I predicted that one mediator of this effect would be child victim empathy: Victims and those who know victims would empathize more with child sexual abuse victims and, in turn, be more likely to believe child victims and their allegations and more likely to convict defendants.

No studies have specifically assessed the role of jurors' past sexual abuse on child sexual abuse case judgments with the exception of a brief report by Bottoms (1993), and none has accounted for mediational explanatory factors such as empathy. There are, however, three prior non-mock-trial studies that are relevant. First, Waterman and Foss-Goodman (1984) asked college student participants about their reactions to brief written vignettes describing 7-, 11-, and 15-year-old child victims reporting a case of molestation. Compared to non-victims, participants who reported a history of molestation blamed victims less and had lower sexual conservatism, which was associated with victim blaming. Second, in a study by Ford, Schindler, and Medway (2001), teachers, school psychologists, school counselors, and principals each assessed a brief case vignette of a 10-year-old girl who was fondled by her father. Neither gender nor profession predicted victim blame, but personal CSA experience did, such that former victims (versus non-victims) attributed less blame to the victim. The authors speculated that victims' increased victim empathy partially explained this relation. Third, Goodman, Batterman-Faunce, Schaaf, and Kenney (2002) compared social workers' to students' assessments of the videotaped responses of 7- and 10-year-old children to questions about a non-abusive, documented event that occurred to the children four years previously. Participants were told that the child they saw was involved in

a sexual abuse investigation and given a plausible contextual scenario but were informed that it had not yet been determined if the child had been abused. Among social workers, even after accounting for gender and number of years in their profession, a history of sexual abuse (themselves or to a close other) was associated with greater belief the abuse occurred and that the case should be founded as per social services' definition. The opposite was found within the student group. The authors speculated that prior childhood sexual abuse increased social workers' sensitivity to the dangers of undetected child abuse.

Theoretically, why *would* sexual abuse experience (and perhaps also the experience of knowing close others who have been victimized) lead jurors to be more pro-victim in child sexual abuse cases? What supports this, the focal hypothesis of this research? In her model of jury decision making in child sexual abuse cases, Bottoms (1993) theorized that prior abuse would make people more likely to empathize with child victims, hold negative feelings about adult/child sex, and to be more believing of children generally, which would in turn lead to more pro-victim case judgments. Next, I consider this theory (that victims' unique attitudes and empathy might be reasons behind victims' pro-victim case judgments) and extend it by considering other possible mechanisms (hypervigilance and altruism born of suffering) to provide justification for my hypotheses about the effects of jurors' prior sexual abuse experiences. I focus mainly on the psychological construct of empathy, the mediator that I tested in the current research.

Attitudes. One reason to expect victims to make more pro-victim case judgments than non-victims is because prior sexual abuse might shape individuals' attitudes related to a child sexual abuse case. In fact, across 25 actual sexual abuse cases with different types of abuse charges, Vidmar (1997) found that 36% of jurors reported that they could not make impartial

judgments due to pre-existing “generic” biases toward sexual abuse. Vidmar theorized, but did not directly test, that these biases existed because the jurors themselves were sex abusers, had been accused of sexual abuse or harassment, knew someone who had been accused of sexual abuse, or, most pertinent to this paper, experienced sexual abuse themselves. Finkelhor, Hotelling, Lewis, and Smith (1989) found that compared to non-victims, individuals who were sexually abused as children were less likely to endorse the stranger stereotype, more likely to believe abusers are family members, and more likely to believe that abusers use force.

Findings from literature on perceptions of adult rape are similar. For example, Field (1978a, 1978b) found that knowing a rape victim was related to more negative attitudes toward adult rape, but not to more severe sentencing recommendations for an alleged rapist in a mock trial study, unless participants were primed to imagine an acquaintance as the victim, in which case victims recommended significantly longer sentences for the alleged rapist. Hammond, Berry, and Rodriguez (2011) found that men’s negative attitudes toward rape (i.e., acceptance of rape myths) was associated with the attribution of more blame to an adult rape victim. Even so, Burt (1980) failed to find that abuse experience was significantly associated with attitudes of sex role stereotyping, sexual conservatism, adversarial sexual beliefs, acceptance of interpersonal violence, and rape myth endorsement.

Hypervigilance, altruism born of suffering, and protection of victims. A second reason why it is reasonable to predict that victims might be more likely to render more pro-victim judgments in CSA cases than non-victims is that victims of sexual abuse are more vigilant for abuse directed at themselves and to others, and they feel motivated to be more protective of vulnerable populations (e.g., children, women) (perhaps an example of a positive outcome of trauma, Bloom, 1988; McMillen, Zuravin, & Rideout, 1995). One outcome of that increased

hypervigilance and motivation to protect might be voting guilty in CSA cases, because victims may believe voting guilty will help protect the current as well as future victims from the same fate they themselves suffered. In support, parents who were former CSA victims report being overprotective of their own children and distrusting of adults (McMillen et al., 1995; Stidham et al., 2012). Also, as mentioned earlier, Goodman and colleagues (2002) found that previously abused social workers were more apt than non-victims to believe that children in mock forensic interviews had been sexually abused, which led the authors to theorize that the social workers' sexual abuse experience led them to be hypervigilant for abuse and "err on the side of over-protection."

The motivation to watch and protect often results in helping behaviors. Such outcomes appear to be examples of those described by the social cognitive concept known as "altruism born of suffering" (Staub & Vollhardt, 2008), which Stidham and colleagues (2012) expanded to describe their observations that many adult survivors of sexual abuse spontaneously reported increased altruism, defined as "thoughts or behaviors aimed at helping others, expressions of understanding or compassion for others, and feelings of concern for the welfare of others as a result of having experienced sexual violence." They categorized victims' self-reported helping actions into (a) thinking about helping others, (b) citing their personal experiences as making them especially suited to activities where they could help, (c) participating in relevant research as a manner in which to share their experience, (d) providing guidance and advocacy and speaking publicly on their experiences, and (e) stopping perpetrators. The latter category included reporting their own or others violence or abuse to authorities (e.g., police officers, campus security officers, health care workers, and/or school officials) "...to obtain justice for the crimes committed against themselves or others" (p. 152), efforts to keep their perpetrator in prison "so

they could not hurt others,” confronting the perpetrator, and warning the community of the threat the perpetrator posed. Although none of the participants in the study reported acting as a juror in a child sexual abuse case, I propose that such survivors would view convicting an alleged CSA perpetrator as just one more form of helping behavior akin to all the others described by Stidham et al. (2012). This hypothesis is akin to findings by Lambie and Johnston (2016): Men survivors of CSA report one reason they do not perpetuate a cycle of abused-abuser is that they do not wish for others to suffer sexual abuse as they once had. In short, not only are victims more likely to notice CSA, but they are also more likely to want to help victims.

There is also a possible physiological (neural) explanation for such hypervigilance. Compared to non-victims, sexual abuse victims often have smaller, more hyperactive amygdalae (the structure responsible for fear attenuation and response to threat), which may predispose victims to more anxiety than normal (Protopopescu et al., 2005; Rainnie & Ressler, 2009; Weniger, Lange, Sachsse, & Irle, 2009) and to hypervigilant monitoring of potentially threatening environments (Pollak, Vardi, Putzer, Bechner, & Curtin, 2005). In support, child victims are noted to have attention difficulties in school, perhaps due to this hypervigilant monitoring (Kaplow, Hall, Koenen, Dodge, & Amaya-Jackson, 2008). These findings fit with Goodman et al.’s (2002) assertion that sexual abuse experience influences individuals to be more vigilant for, and sensitive to, threatening (potentially abusive) environments. Note that the amygdala is also a structure integral to the empathy circuit, so, this increased vigilance may go hand in hand with increased empathy.

Although hypervigilance and motivation to protect might therefore be mediators of the relation between sex abuse and increased tendency to vote guilty in CSA cases, I have not tested

them in this study, instead, discussing them here as another theoretical reason to support my prediction that victims and non-victims will differ in their CSA case judgments.

Empathy. Another reason victims and non-victims might differ in CSA case judgments is that victims might have more empathy for victims (Bottoms, 1993). Empathy is both affective and cognitive. Davis (1994) defines empathy as “the cognitive act of adopting another’s perspective,” “a cognitively based understanding of others,” and “an affective reaction to the emotions of another” (p. 11). Empathy is more than simply feeling bad for another or demonstrating sympathy (described by Eisenberg & Miller, 1987, as an “emotional state or condition that is not identical to the other’s emotions but consists of feelings of sorrow or concern for another,” p. 292). Instead, empathizing entails experiencing another’s emotions and understanding his or her cognitive perspective as if one is taking that person’s place. Derogation is unlikely when individuals empathize with victims of negative events; they are also more likely to value victims’ wellbeing and help them (e.g., Batson, Duncan, Ackerman, Buckley, & Birch, 1981; Batson, Turk, Shaw, & Klein, 1995; Haegerich & Bottoms, 2000).

Empathy as a predictor of jurors’ perceptions of CSA cases. Bottoms (1993; Bottoms et al., 2014) showed that mock jurors differ in levels of a specific pre-existing type of empathy: Child Victim Empathy (CVE) and that across four child sexual abuse scenarios, mock jurors who were higher in CVE made more pro-victim case judgments (guilt, victim credibility and responsibility, etc.) than did jurors who were lower in CVE. The authors also established that CVE was positively related to, but a separate construct from, general trait empathy, as measured by the Davis (1983) Interpersonal Reactivity Inventory (IRI). Using the same measure of CVE, Bederian-Gardner and Goldfarb (2014) demonstrated that individuals higher in child victim empathy expect a larger range of child victim’s emotional reactions than do individuals who are

low in CVE. This is important because child victims often display a large range of complex emotions during testimony; thus, jurors with more empathy for these victims have more realistic expectations and may be more likely to find victims credible when their affect matches juror expectations.

Haegerich and Bottoms (2000) demonstrated that child victim empathy can also be situationally induced and can affect mock jurors' judgments in a trial. Specifically, they had mock jurors consider a case of patricide in which a teenager was on trial for killing her father and claimed it was in self-defense after years of sexual abuse. (The alleged victim was also the defendant.) The jurors were experimentally induced to feel empathy for the girl via experimental instructions and defense attorney opening and closing trial statements. Compared to others, jurors induced to feel empathy had significantly more empathy for the child victim, were less likely to attribute responsibility for the child victim's role in murdering her perpetrator (because the child's sexual abuse served as a mitigating factor in the murder of her father) and were less likely to convict her. The authors theorized an association but did not report the influence of abuse experience on empathy specifically.

Evidence suggesting that past abuse experience will lead to increased empathy in victims and, in turn, efforts to help other victims. Empathy is sometimes more pervasive in trauma victims than in nonvictims, especially in terms of perspective taking skills (i.e., expressions of pity and compassion and imagining details of other victims' situations; Vollhardt & Staub, 2011). Why would abuse cause victims to have higher levels of empathy? As mentioned previously, trauma has a physiological impact on individuals – often impacting brain structures and function. Further, Tedeschi (1999) theorized that experiencing strong emotions

during and after trauma and recognizing one's vulnerability is perhaps a type of "empathy training."

Empathy occurs at a neurological level. Singer and colleagues (2004) measured empathy to determine individual differences in real-time empathic responses recorded via fMRI. Participants were women who came to the lab with their male partners in man-woman couple dyads. Researchers analyzed the activity of brain structures in each woman's pain matrix (i.e., the area of the brain responsible for registering/processing pain) while each woman received a painful shock or was cued that her significant other would receive a shock. Results indicated women's reported empathy, on the Empathic Concern subscale of the Davis IRI (1980) and the Balanced Emotional Empathy Scale (Mehrabian & Epstein, 1972), was associated with stronger empathic brain responses during the experiment. Further, this pattern of activity occurred despite the women not being able to see their partner's pained reaction – indicating that shared experience induced empathy. Just as these women could accurately anticipate and empathize with the pain their partner would endure upon receiving a shock, I expected the shared experience of child sexual abuse to contribute to empathically responding to another victim.

Similarly, Batson et al., 1996 demonstrated that "shared experience" could induce empathy. Participants were instructed that they would engage in a learning trial, but only half of the participants were primed that they would receive electric shocks for poor performance. No participants actually participated in the task or received shocks, but all participants observed a same-gendered confederate receive shocks (Batson et al., 1996). Women with priming (to the task, shock, fear of the shock, etc.) demonstrated more empathy for the confederates than other women and men did.

The idea that empathy is one of many possible *positive* outcomes of trauma fits with the descriptive theory of post-traumatic growth (PTG; Tedeschi & Calhoun, 1996): “the tendency on the part of some individuals to report important positive changes in perception of self, philosophy of life, and relationships with others in the aftermath of events that are considered traumatic in the extreme” (Tedeschi, 1999, p. 321). Tedeschi (1999) proposed that victims heal and recognize their own resilience when engaging in empathic activities aimed at helping others still struggling with trauma. Tedeschi and Calhoun’s 21-item Post-Traumatic Growth Inventory (PTGI; $\alpha = .90$) measures five distinct categories of perceived growth after trauma, including “relating to others,” a measure of empathy. PTG has been discussed as an outcome of violent interpersonal trauma such as rape and sexual assault (for review, see Ulloa, Guzman, Salazar, & Cala, 2016) and other traumatic experiences (for review, see Michael & Cooper, 2013; Picoraro, Womer, Kazak, & Feudtner, 2014; Wu, Leung, Cho, & Law, 2016). Increased empathy and helping behaviors have been implicated as forms of PTG, particularly when individuals reported more severe trauma. (For full review on survivor individual differences in PTG, see Tedeschi, 1999). Stidham et al. (2012) suggested that empathy is actually a mediator of CSA experience and PTG, as some participants believed that their experiences with sexual assault increased compassion and empathy for other victims, and made them a “better, stronger” person.

Finally, as hinted, empathy might result from abuse because abuse victims feel similar to other abuse victims. Similarity is associated with increased empathy (Archer, Foushee, Davis, & Aderman, 1979) – whether by serving as a mediator or moderator or simply correlate, is unclear. We have increased empathy for those we perceive ourselves more like, such as individuals who are our same race (Gutsell & Inzlight, 2012; Stürmer, Snyder, Kropp, & Siem, 2006). Haegerich and Bottoms (2000) noted that they excluded participants from their study who reported a history

of sexual abuse, as they anticipated (but did not test for) a different pattern of attitudes, empathy, and case judgments as a result of their similarity of experience to the CSA victim. Barnett and colleagues (1986) found that women who reported a prior rape experience responded with greater empathy toward a rape victim in a vignette than did women who had not been raped. Barnett (1987) theorized that nonvictims may be more able than victims to see themselves as dissimilar to a victim, which serves as a distancing mechanism to attenuate their own fear (e.g., “*If I am similar to this person, I can imagine also being a victim*”), which may contribute to decreased empathy within this context for non-victims (see also Lerner & Simmons, 1966). Similarly, Osman (2011) found that women rape victims empathized with a rape victim more than did non-victims, an effect thought to be driven by same-sex and situational similarity. Amacker and Littleton’s (2013) sexually abused women participants reported greater empathy and similarity (which were correlated) for an audio narrative rape victim than did their non-abused counterparts.

In CSA jury studies, mock jurors do not always see the actual child victim and instead are often presented with a written case scenario or trial transcript. Singer et al. (2004) demonstrated that empathy can function without seeing the expressions of someone in pain.

Evidence suggesting that past abuse experience will not lead to increased empathy in victims. Although the rationale for a link between abuse and increased victim empathy seems strong, there are actually two lines of thought that would lead to the competing hypothesis that abuse victims will be *less* likely than non-victims to empathize with other victims and, in turn, less likely to make pro-victim case judgments.

Motivations to avoid empathy for self-protection. First, people sometimes avoid empathizing with others who have suffered similar traumas because doing so would be painful

and they are motivated to protect themselves. Thus, avoiding empathy may be a willful, affective response (Batson & colleagues, 1996; Latt & Gelso, 1995). Batson (1996) and Eizirik (2011) found that personal distress may lead one to avoid empathizing with another. According to Zaki (2014), empathy has two components: experience sharing and mentalizing. Experience sharing is supported as an automatic process that is nearly irrepressible. Mentalizing, however, is not an automatic process, and this is the component that individuals can choose to approach or avoid, with avoidance most likely when one perceives another as an outgroup member in a time of conflict, and when in a position where expertise is required (e.g., a surgeon cannot empathize with the pain of every patient). This latter argument could be extended to the expertise expected of a juror: Perhaps abused jurors would think that empathizing with a victim would impair their objectivity and ability to do what the law requires. Zaki (2014) reports that individuals can redirect their attention (e.g., in a CSA case, not listen to the child victim's tearful testimony and instead think about plans for that evening) or even remove themselves from the empathy-inducing situation to attenuate an empathic response and avoid emotional pain, depression, and a challenge to a person's schema of the world as a just place (Lerner & Simmons, 1966).

Generalizing to the present study, in a CSA case, previously abused jurors might empathize with a child victim based on similarity of experience, but doing so means that the abused jurors would have to perceive themselves as a victim and think about their own abuse, which is potentially emotionally painful and retraumatizing. Because they cannot down-regulate empathy via situation selection, such jurors, intent on avoiding the cost of empathizing with a CSA victim, might modulate their attention and reappraise the child victim's emotional cues (e.g., the child cries because they are hysterical, not sad), or use other strategies that lead to a lack of empathy for the victim.

Lack of empathy due to trauma's physiological damage. Clinical and developmental psychopathology literatures suggest that abuse experiences create biological deficits in structures integral to empathic recognition and response that specifically inhibit the ability to empathize (see literatures on Autism Spectrum Disorder, Antisocial Personality Disorder, and Borderline Personality Disorder; Baron-Cohen, 2011). A large body of literature at the intersection of social and developmental psychology and neuroscience points toward specific deficits in empathy as a result of trauma. Trauma has many long-lasting effects on the brain, and if sexual abuse occurs during a time of active brain development, trauma can inhibit the growth of structures and blunt circuitry; create loss of volume in structures responsible for the detection of physical pain in others; decrease ability to read social cues and detect faux pas, which can inhibit proper empathic responses; decrease gray matter in areas responsible for regulating emotions (e.g., experiencing compassion); and cause brain volume loss in areas responsible for processing complex emotions (e.g., emotions that are cognitive and affective: empathy) (Schmahl, Vermetten, Elzinga, & Bremner, 2004; Seigal, 1999).

This would argue against the hypothesis that abused jurors will be more empathic than non-abused jurors; however, much of this work was conducted specifically with boys and men who experienced physical abuse and/or broad trauma (Kim-Cohen et al., 2006) rather than women, girls, and victims of sexual abuse, and might not therefore be generalizable to the victims (predominantly girls and women) of sexual abuse. Further, it is difficult to generalize these findings to *all* abuse victims because the biological processes disrupted by childhood abuse are differentially dependent upon several factors, including: the age of sexual abuse (Cicchetti, Rogosch, Gunnar, & Toth, 2010), severity and the experience of cumulative abuse (Cicchetti & Rogosch, 2001), and duration of abuse (De Bellis et al., 1999). Further, early emotional and

biological deficits in these victims can be compensated with protective factors (warm parenting, social support) and altered by early intervention (i.e., therapeutic and legal; De Bellis & Zisk, 2014).

In summary, the majority of the evidence I have amassed argues against this theory of blunted empathy occurring within the context of CSA because the population studied (boy and men victims of physical abuse) is not representative of sexual abuse victims, several factors affect the impact of sexual abuse (thus, not all abuse victims' experience is the same – making findings difficult to generalize), and biological deficits incurred can be compensated with protective intervention for these victims. Therefore, I believe that hypervigilance and increased motivation to protect will result from sex abuse experience and, like changed attitudes and, of greatest relevance to the current study, increased empathy, will drive victims to be more prosecution as jurors in CSA cases.

Study Overview and Hypotheses

I examined data collected in nine prior mock trial experiments (see Table 3 described in more detail later). Some data from the initial studies have been published in six publications, but none report analyses using victim abuse experience as a predictor of judgments (Bottoms, Davis, & Epstein, 2004; Bottoms, Nysse-Carris, Harris, & Tyda, 2003; Bottoms et al., 2014; Haegerich & Bottoms, 2000; Wiley & Bottoms, 2009; Wiley & Bottoms, 2013). In all nine studies, individuals participated as mock jurors and made various judgments about an alleged CSA case. I conducted analyses to test the general model (Figure 1) that abuse experience would affect case judgments, and child victim empathy would mediate that effect.

There were three separate dependent measures, analyzed with separate series of analyses: a judgment of whether participants believed that abuse occurred regardless of their legal

judgment of guilt, a rating of victim credibility, and a degree-of-guilt judgment. Child victim empathy was also measured. Pro-child case judgments would be reflected by higher ratings of child credibility, higher ratings of belief abuse occurred, greater belief in the defendant's guilt, and greater victim empathy.

I operationalized my independent variable three different ways (demonstrated in Table 1), tested with three different series of analyses. Specifically,

(1) individuals reported being abused as a child (prior to age 18) -- versus not abused as a child (collapsed across the variables of whether they were abused as an adult and whether they knew other victims);

(2) individuals reported being abused as either a child *or* an adult – versus not as either (collapsed across the variable of whether they knew other victims); and

(3) individuals reported being abused as either a child or adult, *or* they knew someone who was abused as either a child or adult – versus neither abused as a child nor adult nor knew someone who had been abused.

Therefore, there were 9 sets of analyses, crossing the 3 independent and dependent measures, as described in detail later. I made the following hypotheses, which describe the pathways of the model shown in Figure 1.

Hypothesis 1 (Path C'): There would be a main effect of jurors' sexual abuse experience, such that participants with abuse experience (defined in each of the three ways shown in Table 1) would make the most pro-child case judgments.

Hypothesis 2 (Path A): Participants with abuse experience (defined in each of the three ways) would have the highest levels of child victim empathy.

Hypothesis 3 (Path B): Child victim empathy would mediate the relation between juror sexual abuse experience and case judgments, such that models including child victim empathy would have more predictive power (explain more variance) than models not including child victim empathy.

This study is novel because not only is this the first study to examine the effect of juror abuse experience in mock trial literature, but it is also the first meta-analysis. I first tested these relationships and the entire model separately in each of the nine data sets, then performed meta-analyses examining the overall size and stability of the direct and model effects. Meta-analysis is the best type of analysis for the data, because 9 studies included my variables of interest, and preferred over a synthesis, or review of findings, because population parameters (and victims within each sample) varied across studies, and because the number of victims was small in each study (see Table 2) – necessarily so, as this population is not easy to obtain, especially in non-clinical samples. Therefore, erroneous conclusions about the effect of abuse experience on empathy and judgments were possible at the single-study level. The meta-analysis is able to use all subjects and test with the strongest predictive power the effect of abuse without inflating alpha.

Method

Participants

Participants were 2,447 jury-eligible undergraduates (U.S. citizens at least 18 years of age, M age = 20 years; 53% women; 54% Caucasian, 14% Asian/Pacific Islander, 13% Hispanic/Latino, 10% African American, 5% other), with 353 participants (14%) reporting personal experience of CSA (< 18 years), 404 (17%) reporting child or adult abuse experience, and 1,094 (45%) reporting experience of child or adult sexual abuse *or* knowing another victim. All were introductory psychology students attending either the State University of New York at Buffalo ($N = 482$) or the University of Illinois at Chicago ($N = 1,965$). The studies took place from 1990 to 2005. See Table 2 for details about all samples and citations to individual studies, where more detail can be found.

Materials

Pattern Jury Instructions (see Appendix A for an example). Nearly every study included either a full or modified version of the Pattern Jury Instructions for the state in which the study took place (see Table 3). The instructions matched the charges indicated in the case stimulus and instructed jurors about potential verdict decisions (e.g., guilty, not guilty), the role of extraneous factors in determining verdicts, and the burden of proof. The instructions also directed jurors to apply the law to the facts of the case without sympathy or prejudice, that neither opening statements nor closing arguments are evidence, and that any attorney arguments not based on evidence be disregarded, etc.

Demographics questionnaire. Questions assessed participant age, race/ethnicity, gender.

Abuse experience measure. The three questions measuring abuse experience

were “*Have you yourself ever been the victim of child sexual abuse (that is, as a child —under age 18 years— did you have sexual contact that you did not want)?*”, “*Have you yourself ever been the victim of adult sexual abuse (that is, as an adult —over 17 years old— did you have sexual contact that you did not want)?*”, and “*Do you personally know anyone else who was the victim of child (adult) sexual abuse?*”. (Some studies varied from this exact wording, but the intention of the questions was not altered.) Studies ‘8’ and ‘9’ did not assess adult sexual abuse.

Child Victim Empathy scale (See Appendix B; Bottoms, 1993; Bottoms et al., 2014).

The 11-item Child Victim Empathy Scale measures an individual’s empathy for a child victim of CSA. Relevant empirical and theoretical literature contributed to item development; six empathy items were modeled after items from the Rape Empathy Scale (Deitz et al., 1982). It proved internally reliable in prior studies, (α s = .62 - .75; mean inter-item correlations = .17 - .20; Bottoms et al., 2014). As shown in Appendix B, the scale includes items such as “*I can really empathize with the helplessness a child victim might feel during a sexual assault*”) and responses were made on seven-point Likert scales ranging from -3 (“*strongly disagree*”) to 3 (“*strongly agree*”). Six items were reverse-scored to avoid response bias. Responses were recoded for analyses (1 = “*strongly disagree*” to 7 = “*strongly agree*”). Studies ‘6’ and ‘9’ did not measure empathy.

Trial stimuli. The trial evidence was presented in various manners: brief case scenario, trial transcript, audio, and/or video recording. The exact form of stimulus used in each study is presented in Table 3.

Case judgments (dependent measures). The three dependent measures were of (a) belief abuse occurred regardless of the participant’s assessment of legal guilt (included in 6 studies), (b) victim credibility (in 9 studies), and (c) the defendant’s degree of guilt (a measure

combining verdict and confidence-in-verdict; eligible for 8 studies). The exact wording of these items was similar across studies and shown in Table 4.

In all studies, participants made guilt judgments about a perpetrator accused of CSA, with one exception: In one study (Haegerich & Bottoms, 2000), jurors reacted to a patricide case, in which a teenager is on trial herself for killing her father and claims that she did so in self-defense after enduring his sexual abuse. Thus, there was no CSA guilt judgment, but there were still belief in abuse and victim credibility judgments.

Procedure

In all nine studies, participants received case scenario materials, were instructed about and assumed the role of mock juror, were provided pattern jury instructions (*Appendix A*), considered a hypothetical case of child sexual abuse, and made subsequent case-related judgments. In three studies, the mock trial task was counterbalanced in order with the CVE scale; in six studies, scales were completed during an ostensibly unrelated mass testing session one to three months before the mock trial. Demographics were completed during mass testing sessions (if applicable) or after completion of case judgments. All studies were IRB-approved, with consent and debriefing procedures. Participants were given experimental course credit. See Table 3 for a description of methods across studies. Due to the small number of included studies ($k = 9$) in the current meta-analysis and their relative homogeneity, no coding procedures were necessary for this study.

Study Inclusion and Exclusion Criteria

All known studies of mock jurors' perceptions of CSA cases in which mock jurors' sexual abuse experience was reported were included ($N = 9$). All were conducted by Bottoms and colleagues. Thus, there was a high degree of homogeneity in study population, materials,

measures of interest, and procedure. The more similar the studies included in a meta-analysis are to one another, the more stable the effects are assumed to be. Only one of the nine studies was intentionally excluded from three of the 18 meta-analyses, the Haegerich and Bottoms (2000) patricide study in which there was no specific CSA guilt judgment.

Analyses

Stage 1: Analyses of main effects and mediation. The first step of analyses – before the main meta-analyses could be conducted – was to perform analyses testing the relationships in the model within each of the 9 studies separately.

Main effect analyses. I conducted separate independent samples *t*-tests to examine the effect of sexual abuse experience (defined 3 ways) on the continuous outcome variables of degree-of-guilt, victim credibility, and belief of abuse, the latter of which was dichotomous in some studies and continuous in others. This resulted in 69 *t*-test analyses in total, comprising combinations of the three definitions of sexual abuse experience within each of the 9 studies and the three different outcome variables (with degree of guilt missing from one study and belief in abuse not measured in three studies). Twenty-one additional independent samples *t*-tests examined the effect of abuse experience (defined 3 ways) on child victim empathy (which was measured in 7 studies; as demonstrated in Tables 7-9, described in detail later).

Mediation analyses. Sexual abuse experience (defined 3 ways) was the independent variable and child victim empathy the mediator in separate bootstrapping mediation models. This was to test whether the effect of sexual abuse experience on case judgments was mediated by child victim empathy, using the mediation macro developed by Preacher, Rucker, and Hayes (2007), conceptual Model 4, set at 5,000 bootstraps. This resulted in 54 total mediation analyses

across the 7 studies that measured child victim empathy (as demonstrated in Tables 10-12, described in detail later).

Stage 2: Meta-analyses. The main analyses (meta-analyses) were conducted to understand the robustness of the effect of abuse experience and the mediated effect of empathy on case judgments across the 9 studies. The meta-analyses were conducted using the metafor package for R (R Development Core Team, 2010; Viechtbauer, 2010). I conducted a total of 21 meta-analyses – one set of 9 meta-analyses examined the direct effect of sexual abuse experience (defined 3 ways) on the three case judgments; a second set of 9 meta-analyses examined the mediating effect of empathy on case judgments, and 3 meta-analyses examined the effect of sexual abuse experience on child victim empathy.

Cohen's d (Cohen, 1988), which measures standardized mean differences between groups, is a common effect size used in meta-analyses and is reported for all of my direct effect analyses. The partially standardized indirect effect (mediation) beta coefficient was entered into the meta-analyses examining the mediational effect of child victim empathy; this value was transformed and is reported as a correlation coefficient, r (see Peterson & Brown, 2005). Forest plots display individual study effect sizes and their confidence intervals. From these plots, one can determine whether one or more studies appear to substantially differ with the other studies included in the meta-analysis, and from the overall meta-analytic effect (Siddaway, Wood, & Hedges, 2019). Rosenthal's (1979) fail-safe N is reported as an indication of the likelihood that findings are “true” effects. The computed failsafe number is the number of missing studies averaging a z -value of zero that would need to be added to a meta-analysis to make the effect size statistically insignificant; thus, it demonstrates the stability of a meta-analysis' effect size.

Because social science has variable population parameters, effect sizes are often quite variable across studies (Field, 2003, 2005; Field & Gillett, 2010; Hunter & Schmidt, 2000). For this reason, and so that the results can be generalized beyond the studies included in the meta-analysis (Hedges & Vevea, 1998), a random-effects meta-analysis was used; the random effects model (versus a fixed-effects model) does not assume that variation across studies is only attributed to chance.

Q tests were calculated for each meta-analysis. A statistically significant Q value indicates that the effect sizes of all included studies were heterogeneous. Another estimate of heterogeneity is the I^2 statistic, which indicates the percentage of total variation across studies due to heterogeneity (rather than chance; Higgins, Thompson, Deeks, & Altman, 2003), with a value of 0 indicating relative homogeneity of studies (which is desired), 25% or less indicating low levels of heterogeneity, 50% indicating medium-sized levels, and 75% or greater, large levels, indicating that the studies included in the meta-analysis are heterogeneous (Higgins et al., 2003). Significant Q tests and I^2 values exceeding 75% indicate that studies are perhaps too different from one another for appropriate comparisons.

I examined publication bias with funnel plots. The plot is symmetrical when all of the included studies are give random assessments of the same unbiased mean value. Publication bias is not present when funnel plots are symmetrical and have the individual studies with effect sizes closest to the meta-analysis effect size at the top. If publication bias is present, for example, there are too few, small studies, with positive results and large effect sizes, then the funnel plot will be asymmetrical with a deficit near the bottom. These findings can be estimated by simply examining the graph, but asymmetry was tested with regression (Egger, Smith, Schneider, &

Minder, 1997). A significant regression test indicates that the funnel plot is asymmetrical and suggests publication bias. When this is the case, follow-up trim and fill analyses are required.

Results

Stage 1 of Analyses: Independent Samples *T*-tests and Mediation

Effect of sexual abuse experience on case judgments and empathy. Tables 5 through 8 contain individual means, standard deviations, *t*-values, and significance values, along with sample size of each analysis.

Belief in abuse. Of the 18 independent-samples *t*-tests, means in 9 of the analyses were in the expected direction, with sexually abused individuals reporting more belief in the abuse than did individuals who did not report a similar abuse experience; however, only one *t*-test of the 18 was significant. Only in study 7 did individuals who were abused as a child have greater belief in the abuse ($M = .77, SD = .42$) than did individuals who were not abused as children ($M = .69, SD = .46$); $t(773) = 2.05, p < .05$. See Table 5.

Victim credibility. Of the 27 independent samples *t*-tests, the means in 23 were in the predicted direction and 9 tests across four studies (especially studies 1-3) were statistically significant. As predicted, participants with abuse experience attributed more credibility to the child victim than did non-abused individuals. See Table 6.

Degree of guilt. Of 24 *t*-tests on degree-of-guilt judgments, means from 18 were in the predicted direction. Three tests across two studies (3 and 5) were statistically significant and in the opposite direction of hypotheses – individuals who did not experience CSA or have any abuse experience endorsed greater degree of guilt than did individuals with abuse experience. See Table 7.

Child victim empathy. Of 21 *t*-tests assessing child victim empathy, means from 17 were statistically significant and in the predicted direction. Individuals with abuse experience had more empathy for child victims than did individuals without abuse experience. See Table 8.

Mediating effect of empathy. Tables 9 through 11 contain beta values, standard deviations, confidence intervals, and the sample size for each analysis. Although several direct effect analyses failed to reach significance, mediation might still be present (Preacher & Hayes, 2004), so I examined the potential indirect effect of child victim empathy in all previously explored sex abuse experience-case judgment relationships.

Belief in abuse. Four studies included sexual abuse experience assessment, child victim empathy, and belief in abuse, which yielded 12 mediation analyses. Most of the beta values were small; only one analysis was significant – participants with child and child or adult abuse experience endorsed greater child victim empathy, which fully mediated their greater belief in abuse, $\beta = .26 (.16)$, 95% CI [.04, .66], $p < .01$. See Table 9.

Victim credibility. Of 21 mediation analyses on participants' victim credibility judgments, 15 analyses were significant. Individuals with abuse experience endorsed more victim empathy, which explained greater attributions of credibility to child victims. See Table 10.

Degree of guilt. Of 18 mediation analyses examining degree of guilt, 15 were statistically significant. Only one study ('7') did not yield significant findings. Overall, individuals with abuse experience had greater child victim empathy, which explained their greater degree-of-guilt ratings. See Table 11.

Stage 2 of Analyses: Meta-analyses

Effect of sexual abuse experience on case judgments and empathy. To preview, hypotheses were predominantly supported for the dependent variables of victim credibility attributions and less so for degree-of-guilt ratings, but not for belief in abuse – meta-analyses are further explained below and in Tables 12-13. Forest and funnel plots and Rosenthal fail-safe N_s

are reported for all significant meta-analyses. Rosenthal fail-safe N s are reported in order of abuse experience definition (1: child, 2: child/adult, 3: child/adult/knew victim).

Belief in abuse. Six studies were included in the three meta-analyses examining sexual abuse experience's effect on belief in sexual abuse claims. Sexual abuse experience did not predict belief in abuse no matter how abuse experience was defined: child victims ($d = .06, p = .43$), child or adult victims ($d = .07, p = .25$), child or adult victims, and individuals who reported personal sexual abuse or knowing a victim ($d = .05, p = .28$). See Table 12.

Victim credibility. Nine studies were included in the three meta-analyses examining sexual abuse experience's effect on child victim credibility. Abuse experience (defined all three ways) predicted credibility judgments: child victims ($d = .21, p < .001$), child or adult victims ($d = .19, p < .001$), and individuals who reported personal abuse or knowing a victim ($d = .15, p < .01$). See Table 12. The maximum-likelihood forest plots (Figures 2, 4, 6) demonstrate that most of the studies are in the predicted direction. Further, the studies containing the largest sample sizes rarely cross the null line, indicating they strongly contribute to the significance of the overall meta-analysis and are in the expected direction. The funnel plots (Figures 3, 5, 7) are in a symmetrically inverted funnel shape, which indicates that publication bias is unlikely. This is consistent with the Rosenthal fail-safe N s of 31 ($p < .001$; child victim analysis), 26 ($p < .001$; child or adult victim analysis), and 30 ($p < .001$; victim or knew victim analysis), which mean that 31 (26, 30) similar studies with null findings would be required to make the currently significant meta-analyses nonsignificant.

Degree of guilt. Eight studies were included in the three meta-analyses examining sexual abuse experience's effect on degree-of-guilt judgments. Sex abuse experience predicted greater degree-of-guilt for jurors who were child victims versus not ($d = .12, p = .04$), and among those

who were child or adult victims versus not ($d = .12, p = .04$), but not when defined as personal sex abuse or knowing another victim ($d = .19, p = .17$). See Table 12. Again, the forest plots (Figures 8, 10) demonstrate that most of the studies in both meta-analyses are in the predicted direction. The funnel plots (Figures 9, 11) are in a symmetrically inverted funnel shape, which indicates that publication bias is unlikely; however, there is one outlier in both plots. These findings should be interpreted with caution -- the Rosenthal fail-safe N s indicate that the results of these meta-analyses are unstable, with values of 0 for the first analysis ($p = .06$) and 1 for the second ($p = .05$), meaning that (a) the effect size for the first IV (child sex abuse) predicting degree of guilt is unstable and (b) it would take one study with null findings to make the analysis of the second IV (child or adult sex abuse) nonsignificant.

Child victim empathy. Seven studies were included in the three meta-analyses examining the effect of sexual abuse experience on one's child victim empathy. Abuse experience (defined in each of the three ways) predicted greater empathy for jurors: child victims versus not ($d = .49, p < .001$), child or adult victims versus not ($d = .42, p < .001$), and victims or knowing a victim ($d = .41, p < .001$). See Table 12. The forest plots (Figures 12, 14, 16) demonstrate that most of the studies in the meta-analyses are in the predicted direction. The funnel plots (Figures 13, 15, 17) are in a symmetrically inverted funnel shape, which indicates that publication bias is unlikely; however, there is one outlier in two plots. The Rosenthal fail-safe N s indicate that the results of these meta-analyses are extremely stable, with fail-safe N values of 103, 88, and 145 (all $p < .001$).

Mediating effect of empathy. Finally, a series of three meta-analyses examined the partially standardized indirect effect of child victim empathy on the relationship between sex abuse experience and judgments, and therefore tested my full model. Beta values were converted

to correlation coefficients and are the reported effect sizes. To preview, the model was supported for the dependent variables of victim credibility and degree of guilt. See Table 13.

Belief in abuse. Four studies were eligible for inclusion in the meta-analysis examining the mediational effect of child victim empathy between sexual abuse experience and belief in abuse. Child victim empathy did not mediate the relationship between abuse experience and belief in abuse, no matter how it was defined: child victim ($r = .05, p = .19$), child/adult victim ($r = .08, p = .11$), or individuals who reported personal sex abuse or knowing a victim ($r = .06, p = .10$). See Table 13.

Victim credibility. There were 7 studies in the meta-analyses of the mediational effect of child victim empathy between sexual abuse experience and victim credibility judgments. Child victim empathy significantly mediated the relationship between abuse experience (defined all three ways) and victim credibility: child victims ($r = .12, p < .001$), child and adult victims ($r = .13, p < .001$), and victims or knowing a victim ($r = .08, p < .01$). See Table 13. The forest plots (Figures 18, 20, 22) demonstrate that the majority of the studies are significant (i.e., have a confidence interval that does not cross '0'). The funnel plots (Figures 19, 21, 23) are in a symmetrically inverted funnel shape, which indicates that publication bias is unlikely; there are a few borderline outlier studies represented on the funnel plot. The Rosenthal fail-safe N s indicate that the results of these meta-analyses are stable, with fail-safe N values of 58 ($p < .001$), 56 ($p < .001$), and 16 ($p < .01$).

Degree of guilt. The meta-analysis examining the effect of child victim empathy as a mediator between sex abuse history and degree-of-guilt judgments included six studies. Child victim empathy mediated the relationship between sexual abuse experience (defined each way) and degree-of-guilt judgments: child victims ($r = .12, p < .001$), child or adult victims ($r = .12, p$

$< .001$), and victims or knowing another victim ($r = .08, p < .01$). See Table 13. The forest plots (Figures 24, 26, 28) demonstrate that the majority of the studies are significant. The funnel plots (Figures 25, 27, 29) are in a symmetrically inverted funnel shape (no publication bias); there was one borderline outlier study represented on the funnel plot. The Rosenthal fail-safe N s indicate that the results of these meta-analyses are stable, with fail-safe N values of 40 ($p < .001$), 38 ($p < .001$), and 14 ($p < .01$).

Discussion

This is the only meta-analysis examining the influence of jurors' sexual abuse experiences on their child victim empathy and case judgments in the context of child sexual abuse cases. The meta-analyses largely supported my predictions: (a) Participants with sexual abuse experience had greater empathy for child sexual abuse victims than did others; (b) Participants with abuse experience believed the child victim to be more credible than did others; (c) individuals who were sexually abused endorsed greater degree-of-guilt did the comparison groups; and (d) most importantly, my model was supported: Child victim empathy mediated the relationship between sexual abuse experience and the case judgments of victim credibility and degree of guilt (but not belief in abuse).

The series of individual *t*-tests presented before the meta-analyses largely trended in the hypothesized direction, but few were statistically significant – indicating unstable effects. If this study had been conducted examining only individual effects (as would be done in a synthesis) rather than as a meta-analysis, or if results from studies had been reported individually, erroneous conclusions would have been drawn about the effect of sexual abuse on child victim empathy and case judgments; thus, meta-analyses best demonstrated the pattern of effects for these data.

The meta-analyses revealed several specific patterns – being personally sexually abused as a child more strongly predicted empathy and case judgments as compared to being abused later in life or merely knowing a sexual abuse victim. Further, meta-analytic effects differed between direct models (i.e., abuse experience affecting empathy, abuse experience predicting case judgments) and the complete mediation model (i.e., empathy as the mediator of the relation between sex abuse experience and judgments). Specifically, when comparing direct effects (of

sexual abuse experience only) with the full model (including empathy as a mediator) for the judgment of victim credibility, effects were similar, but effect sizes for the complete model were smaller than the direct effect meta-analyses, indicating that greater empathy for child victims doesn't necessarily strengthen the relation between having sexual abuse experience and attributing credibility to a child victim, but it does help to explain this relation (because the model did not fail).

Regarding degree-of-guilt judgments, there is a suppressor effect. The direct effects analyses indicated no significant relationship between sexual abuse experience and jurors' degree-of-guilt judgments. Yet, including child victim empathy in the model demonstrated that there *is* a reliable relationship between personal sexual abuse and degree-of-guilt judgments, which is explained via jurors' empathy for child victims (direct effects were nonsignificant or unstable, but the mediation model had stable and significant effects).

Both individual *t*-tests and meta-analyses revealed that sexual abuse experience failed to reliably predict belief in abuse occurrence. This seems surprising given the other effects. Presumably, one would believe sexual abuse occurred if one also perceived the child victim as credible and attributed guilt to the defendant. Possible explanations are discussed below.

Theoretical Implications of Findings

One pattern of results that was not hypothesized specifically, but is understandable theoretically, and was predicted by Goodman (2017), is that the meta-analyses illustrated that the largest effects were associated with defining abuse as being abused as a child, rather than being abused as a child or adult, or being abused as a child or adult or knowing other victims. That is, the effect weakened as adult victims and acquaintances of victims were included in the predictor, from (a) the baseline definition of the independent variable as having experienced child abuse

versus not, to (b) the more inclusive definitions of the independent variable as either those who were abused as a child OR an adult, or, those who were abused as a child OR adult OR who knew other victims. This fits with findings that child victims are more (biologically) affected by their abuse experiences than are older victims (Cicchetti et al., 2010). Perhaps child sexual abuse is more severe (suggested by Cicchetti et al., 2010) compared to adult sexual abuse or knowing a victim (e.g., due to disruptions in neurological development that children incur, whereas adults' brains are typically fully developed; children have lesser cognitive coping strategies than do adults; and child victims have the potential to have been abused with greater frequency and duration than those who were not victimized until adulthood)—and greater severity fosters more empathic concern and helping behaviors [supporting the literature on PTG (Tedeschi & Calhoun, 1996)]. Alternatively, or perhaps in addition, being abused as a child (rather than as an adult or knowing other victims) could make one feel more similar to the child victims portrayed in all of these studies. Greater perceived similarity drives greater empathy (Amacker & Littleton, 2013; Barnett, 1986, 1987; Haegerich & Bottoms, 2000; Osman, 2011; Singer, 2004). Mock jurors who experienced childhood sexual abuse might draw more similarities between their experience and the child victim's and be more capable of putting themselves “in the shoes” of the victim than the other groups of victimized and non-victimized individuals. Thus, it is logical to conclude that jurors who have experienced child sexual abuse themselves would be the most influenced by their experience compared to those abused as an adult or those who know a victim.

Sexual abuse experience predicted helping actions – defined as pro-child attributions and case judgments. This study complements work by Goodman (2002), who theorized that social workers with a personal history of abuse might be more hypervigilant for abuse than others, as well as work on altruism born of suffering (Staub & Vollhardt, 2008). As noted earlier, those

with sexual abuse experience are more likely than others to monitor for abuse (Goodman et al., 2002), to desire helping others (Staub & Vollhardt, 2008), and will do so by several means of intervention (McMillen et al., 1995; Stidham et al., 2012). The “need to protect” held by the individuals with abuse experience in my study appeared to be manifested in their greater attributions of credibility to child victims portrayed in child abuse cases, and their greater tendency to convict the defendant (but legal judgments were only influenced when these individuals also empathized with the child victim, as revealed by the meta-analysis of the full model for degree of guilt). Thus, finding other victims to be more credible and seeking to convict perpetrators can be added to the list of ways that victims help others found by other researchers such as McMillen, Stidham, and their colleagues.

The current work also demonstrated that there is a relatively moderate effect of sexual abuse status on empathy – providing further support for the work on PTG: Suffering, in a sense, has contributed to greater empathic responding for these sexual abuse victims and their acquaintances. As stated previously, minimal work has investigated how sexual abuse impacts empathy development. This study contributes to that literature, demonstrating that at least within a legal context, sexual abuse experience has a positive influence on specific empathy for child victims.

Empathy was integral to explaining the relationship between sexual abuse experience and judgments because a suppressor effect was present. Only after including child victim empathy in the model as a mediator did sexual abuse experience influence degree of guilt. Thus, it is necessary for an abuse victim to empathize with a child victim for their abuse experience to influence their degree-of-guilt judgments. Work by Field (1978b) offers further insight for this effect – although knowing a victim leads one to have negative perceptions of rape, one will not

necessarily make legally condemning judgments (e.g., guilt verdicts). Attitudes toward rape, toward women, and toward individuals' responsibility in rape served as more consistent links with case judgments than did knowing a victim. Although Field did not test mediational effects of attitudes, his study does illustrate that other factors (which are often associated with sexual abuse experience – e.g., anti-rape attitudes) can have better explanatory power for case decisions than does abuse experience alone – akin to my findings.

Practical Implications of Findings

Implications for jury selection. This study does supply evidence that abuse experience predicts more pro-victim judgments, supporting attorney's intuitive biases. This effect was relatively small-moderate in size, indicating that other not-yet-assessed factors also affect these judgments, but the effect is statistically significant and stable across a number of studies and many participants. It can be concluded that, yes, one's sexual abuse status or familiarity with a victim can influence their empathy (quite strongly) and behaviors in a legal context, but other factors must continue being investigated.

Attorneys often assume that jurors with sexual abuse experience [CSA, adult sexual abuse, or even reporting knowing someone who has been victimized (and women; Brownmiller, 1975)] will be biased. During jury selection and the associated voir dire questioning, prosecutors intuitively want these jurors on the case, and defense attorneys attempt to ensure these individuals do not serve as jurors (see Cramer et al., 2009, for discussion). Does my work indicate that their practices are strategically accurate? Maybe, over the course of many trials, but maybe not for any one particular trial, for several reasons.

First, there is the problem of trying to predict individual behavior from research illustrating group trends (Poldrak et al., 2018). Even though, in aggregate, individuals with abuse

experience were statistically more likely than those with no experience to favor the prosecution, not every victim or individual who knows a victim will think a certain way or vote a certain way on a jury. Over time, and in the face of nothing more than intuition, however, it might be a better-than-chance strategy, especially if combined with voir dire questions that are very specific. Attorneys should continue to ask potential jurors about their abuse experience. The effect was largest for child victims (which could be explained by multiple theories outlined above), but they should also be aware of individuals who were abused as adults and potential jurors who report knowing a victim. Specificity is important in this context (despite all abuse experience predicting judgments to some degree).

Second, there is the issue (as for any voir dire questions) of whether jurors will or can answer truthfully. Disclosure of abuse is low (Bottoms et al., 2016) due to shame, normal forgetting, not understanding an assault as such, and abuse occurring prior to memory consolidation (Fergusson, Horwood, & Woodward, 2000; Hardt & Rutter, 2004). So, consider a defense attorney's attempt to get prospective jurors to admit their abuse experience during a public voir dire session, in order to remove them from the jury pool: Some individuals with sexual abuse experience are unlikely to admit it and will likely serve as a jury member anyway. This is a strong probability considering the frequency (approximately 1/5) of individuals who reported child or adult abuse within these 9 studies. Further, the category of being a child or adult victim or even knowing another victim was quite large in size – often exceeding the number of individuals in the comparison group who reported no experience with sexual abuse – so it is impractical to remove all individuals with sexual abuse experience from a jury.

If indeed it is “the norm” to have sexual abuse experience to some degree, and if the aim is to create a jury of peers, that does mean including individuals with abuse experience. How do

attorneys then cope with the knowledge that sexual abuse experience predicts legally relevant judgments? I believe they should turn their focus to juror empathy. The intuition for attorneys to induce empathy within the context of the courtroom is well-founded, as mock jurors in my study who reported more target specific (child victim) empathy made more pro-child victim case judgments (see also Bottoms et al., 2014, Haegerich & Bottoms, 2000). Discussed by both Bottoms (1993) and Field (1978b), empathy and attitudes (towards women, children's believability, rape) are often stronger predictors of case judgments than demographics. My study demonstrates that empathy helps to explain how a juror individual difference affects a legal judgment. Although it is certain that being victimized shapes one's attitudes and empathy towards sexual abuse (Hotaling et al., 1989), it does not necessitate that a juror will vote guilty – empathy for a victim, however, might be more likely to, as revealed by the model-testing meta-analyses of degree-of-guilt judgments.

Implications for clinical treatment. Regarding clinical work with abuse survivors, there is a societal myth that abused individuals (particularly boy and men victims) will perpetuate the “cycle of violence” and become perpetrators of sexual abuse themselves (for discussion, see Widom, 1989; Jespersen, Lalumiere, & Seto, 2009); however, the current study demonstrates that these individuals possess a great amount of empathy for child victims, which is consistent with the work by Lambie and Johnston (2016), whose participants reported that their experience greatly shaped the warmth and care they hold for other victims. Instead of focusing clinical intervention on preventative efforts (i.e., viewing the individual as a high-risk potential abuser) for these individuals, clinicians can focus on growth for these individuals, as the literature on PTG demonstrates that trauma can be reappraised and treated as an opportunity for personal growth (Tedeschi & Calhoun, 1996).

Contributions and Limitations

This meta-analysis is the first of its kind. I analyzed data from 9 homogeneous studies where individuals acted as mock jurors, examined a child sexual abuse case, and made case judgments. Although 9 studies is not a large pool of data for a meta-analysis, it is adequate, supported by Valentine, Pigott, and Rothstein (2010) and by the findings of nonsignificant Rosenthal fail-safe N statistics (indicating low publication bias) across the meta-analyses. In any case, the 9 studies are the entire population of known studies containing mock juror sexual abuse experience data, so the meta-analyses contained all possible data. The meta-analysis was also a good choice for representing this data because considering each study separately or in aggregate in more simplistic ways (stage 1 t -tests) would have led to the conclusion that the effect of abuse experience is small and unstable. Instead, the meta-analysis aggregated these findings and demonstrated that abuse experience does have a relatively stable and small-moderate effect on empathy and case judgments. Cohen's (1988) conventions for effect sizes would lead one to believe that the effect of abuse experience is mostly trivial (except for its effect on empathy). These effects provide context to immediate attitudes individuals hold towards those with sexual abuse experience. He describes small effect sizes as demonstrating a phenomena that occurs in the world -- but which you can only see through careful study, whereas a large effect size tends to describe a phenomena you can see 'with the naked eye' -- this has practical implications because it is a tendency to believe wholeheartedly that sexual abuse experience affects empathy, perceptions of victims, and judgments; however, other factors are apparently influential.

Within psychological research, it is common to determine if one thing affects another, and a little less common to ask the important question of "why" something occurs, which requires examination of indirect effects through mediation analyses. It is quite rare to go even

one step further to conduct meta-analyses of mediational factors, as I have done. This is likely attributed to differences in measurement of constructs across studies, which would make studies too dissimilar (heterogeneous) for a meta-analysis. Because my data came from the same research lab, measurement of constructs was relatively unchanged across the span of 15 years, which contributed to ease of comparison. Therefore, another strength of this study is its ability to test a sophisticated mediational theory, illustrating not only that prior abuse experience affects case judgments, but also why it does.

Further, testing for the mediation of empathy revealed a relationship that otherwise would not have been seen without accounting for empathy: Abuse experience affects degree-of-guilt judgments, but only when simultaneously accounting for individuals' empathy for the child victim. This analysis bridges the theoretical and practical applications of this research – intuitively, victims will overall be more pro-child (due to several theories outlined in this paper), but will this individual difference factor influence their legal judgments? Yes, but only if they experience heightened empathy for the victim.

The studies were conducted 13 to 28 years ago, with no similar studies conducted within the past decade. One might wonder if societal views toward child rape (and perceptions of the credibility of cases) have been susceptible to change over time. For example, there was heightened paranoia of sexual abuse, followed by suspicion of false cases in the 1980s and 1990s (Cheit, 2014). It does not appear that this issue negatively affected my data – it is apparent when examining forest plots that discrepancies in effect sizes do not trend by study year (if it were the case, the effect of victimization would become larger for each more recent study).

Methodological concerns could be raised about the individual studies that composed the meta-analyses. For example, all participants were students, and it has been argued that students

do not behave in the same manner as “real” jury members would (Wiener, Krauss, & Lieberman, 2011; Weiten & Diamond, 1979). A growing body of research is beginning to reveal that this concern may be unmerited (for review, see Bornstein et al., 2017; Devine & Caughlin, 2014). Specifically, Bornstein et al. (2017) demonstrated in a meta-analysis that student samples do not differ greatly in verdicts and other case judgments from nonstudents. Also, most relevant, in a publication that included two of the studies used in the current meta-analyses, Bottoms et al. (2014) included an additional, comparable community member sample (which was not included in my meta-analyses because juror sexual abuse history was not measured). Effects were generally similar between the community and student samples – these samples had similar levels of victim empathy, held relatively similar attitudes, and had the same pattern of case judgments.

There might also be concern regarding the sampling of victims and definitional issues regarding sexual abuse and the construction of the independent variables. Regarding the former, all participants reported their abuse in a confidential manner – this ensures more accuracy of reporting for such a sensitive topic; in fact, the percentage of victims in the component studies is comparable to population standards (Finkelhor et al., 2015).

Conclusion

This research has theoretical implications for the fields of social and clinical psychology, providing new information on an individual difference, sexual abuse experience, that affects empathy and judgments in a legal case of child sexual abuse. Further, it demonstrated in a series of three meta-analyses that sexual abuse experience predicts increased child victim empathy, which is informative for both the field of clinical neuroscience and clinical practice with sexual abuse victims. It also informs practice within the field of law, primarily in terms of jury selection, resulting in an interdisciplinary understanding of human behavior within the context of a legal setting.

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*Indicates studies included in the current meta-analyses.

Appendix A
Illinois Pattern Jury Instructions

Members of the jury, the evidence and arguments in this case have been completed, and I will now instruct you as to the law. The law that applies to this case is stated in these instructions and it is your duty to follow all of them. You must not single out certain instructions and disregard others.

It is your duty to determine the facts and to determine them only from the evidence in this case. You are to apply the law to the facts and in this way decide the case. Neither sympathy nor prejudice should influence you. You should not be influenced by any person's race, color, religion, or national ancestry. The evidence that you should consider consists only of the testimony of the witnesses that the court has received. You should consider all the evidence in the light of your own observations and experience in life. By these instructions I do not mean to indicate any opinion as to the facts or as to what your verdict should be.

Faithful performance by you of your duties as jurors is vital to the administration of justice. Only you are the judges of the believability of the witnesses and of the weight to be given to the testimony of each of them. In considering the testimony of any witness, you may take into account his or her ability and opportunity to observe; his or her age; his or her memory; any interest, bias, or prejudice he or she may have; and the reasonableness of his or her testimony considered in the light of all the evidence in the case.

The defendant is presumed to be innocent of the charge against him. This presumption remains with him through every stage of the trial and during your deliberations on the verdict and is not overcome unless from all the evidence in this case you are convinced beyond a reasonable doubt that the defendant is guilty.

The State has the burden of providing the guilt of the defendant beyond a reasonable doubt, and this burden remains on the State throughout the case. The defendant is not required to prove his innocence.

A person commits the offense of predatory criminal sexual assault of a child when he or she commits an act of sexual penetration with a victim; and is 17 years of age or older and the victim is under 13 years of age when the act is committed.

To sustain the charge of predatory criminal sexual assault of a child, the State must prove the following prepositions:

- (1) That the defendant committed an act of sexual penetration upon the victim (the term "sexual penetration" means any contact, however slight, between the sex organ of one person and any part of the body of another person), AND
- (2) That the defendant was 17 years of age or older and the victim was under 13 years of age when the act was committed.

- ➔ If you find from your consideration of all the evidence that both of these propositions have been proved beyond a reasonable doubt, you should find the defendant GUILTY.
- ➔ If you find from your consideration of all the evidence that any one of these propositions has not been proved beyond a reasonable doubt, you should find the defendant NOT GUILTY.

Appendix B

Child Victim Empathy Scale

I can understand how someone could be emotionally scarred by a childhood incident of sexual abuse.

It makes me sad to hear about children who have been sexually molested.

*If I were a member of the jury in a child sexual abuse trial, I would probably be more likely to believe the adult's testimony than the child's, since child sexual abuse is a charge that is difficult to defend against, even if the adult is innocent.

*I would find it easier to imagine how an adult might feel during an act of child sexual abuse than how the child victim might feel.

*Testifying in court about child sexual abuse probably isn't really painful for a child.

I would find it easier to empathize with the shame and humiliation a child victim might feel during a child sexual abuse trial than with the feelings a child molester might have during the trial.

*It's hard for me to understand why people get so upset when they hear about children being molested.

*I do not really feel sorry for a child who has to testify in court.

I can really empathize with the helplessness a child victim might feel during a sexual assault. *Children would recover quickly from sexual abuse if people didn't make such a big deal about it.

I can understand what it must feel like for a child to testify against an adult who has molested him or her.

*Items were reverse-scored.

Appendix C
IRB Approval Form

UNIVERSITY OF ILLINOIS
AT CHICAGO

Office for the Protection of Research Subjects (OPRS)
Office of the Vice Chancellor for Research (MC 672)
203 Administrative Office Building
1737 West Polk Street
Chicago, Illinois 60612-7227

Determination Notice
Research Activity Does Not Involve “Human Subjects”

February 13, 2017

Bette Bottoms, PhD
Psychology
1007 W. Harrison St
1046B B.S.B, M/C 285
Chicago, IL 60612
Phone: (312) 413-2300 / Fax: (312) 413-4122

RE: **Research Protocol # 2017-0137**
“Jurors’ Experiences, Attitudes, and Judgments in Sexual Abuse Cases”

Sponsor: None

Dear Dr. Bottoms:

The above proposal was reviewed on February 13, 2017 by OPRS staff/members of IRB #7. From the information you have provided, the proposal does not appear to involve “human subjects” as defined in 45 CFR 46.102(f).

The specific definition of human subject under 45 CFR 46.102(f) is:

Human subject means a living individual about whom an investigator (whether professional or student) conducting research obtains

- (1) data through intervention or interaction with the individual, or
- (2) identifiable private information.

Intervention includes both physical procedures by which data are gathered (for example, venipuncture) and manipulations of the subject or the subject’s environment that are performed for research purposes. *Interaction* includes communication or interpersonal contact between investigator and subject. *Private information* includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking

place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator or associated with the information) in order for obtaining the information to constitute research involving human subjects.

Specifically, this research will involve a secondary analysis of de-identified datasets initially collected under separate IRB-approved and now completed research protocols.

All the documents associated with this proposal will be kept on file in the OPRS and a copy of this letter is being provided to your Department Head for the department's research files.

If you have any questions or need further help, please contact the OPRS office at (312) 996-1711 or me at (312) 355-2908.

Sincerely,
Charles W. Hoehne, B.S., C.I.P.
Assistant Director, IRB #7
Office for the Protection of Research Subjects

cc: Michael E. Ragozzino, Psychology, M/C 285

CURRICULUM VITAE

Tayler M. Jones

EDUCATION

Ph.D., Clinical Psychology University of Illinois at Chicago, Chicago, IL Advisor: Bette L. Bottoms	May 2021 (expected)
M.A., Clinical Psychology University of Illinois at Chicago, Chicago, IL Advisor: Bette L. Bottoms	May 2019
B.A., Psychology Oklahoma State University, Stillwater, OK Cum Laude Honors' College Degree	May 2016

GRANTS & AWARDS

- American Psychology-Law Society Grant-in-Aid. *"Jurors' Abuse History, Empathy, and Child Sexual Abuse Case Judgments."* \$86, 2018-2019, PI.
- American Psychology-Law Society Student Travel Award. *"Juror Gender, Fear of Being Falsely Accused, and Perceptions of Child Sexual Abuse."* \$500, 2018.
- Psi Chi International Honor Society in Psychology Unrestricted Winter Travel Grant. *"Mock Jurors' Past Abuse Affect Empathy and Child Sexual Abuse Case Judgments: A Meta-analysis."* \$743, 2019.

RESEARCH EXPERIENCE

Psychology and Law Research Lab Department of Psychology, University of Illinois at Chicago, Chicago, IL <i>Graduate Research Assistant</i> Supervisor: Dr. Bette L. Bottoms	August 2016 - present
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Projects overview: Examining factors relevant to jury decision making, perceptions of children and victims in child cases, and developmental factors relevant to children's reactions to transgressions.

CURRENT PROJECTS

- Jurors' Experiences, Empathy, Attitudes, and Judgments in Child Sexual Abuse Cases (Thesis)
Aims: To examine the influence of jurors' experiences of sexual victimization on specific child victim empathy and judgments in child sexual abuse cases via meta-analysis. Defended September 2018.
- Promises to Keep a Secret, Promises to Tell the Truth: Understanding the Promise-Honesty Effect
Aims: To determine the role of self-regulation, social, and moral evaluations in children's perceptions and predictions of another child's honesty when in a secrecy pact with a friend and/or under an oath to tell the truth to an authority figure.
- Jurors' Perceptions of Animal Abuse
Aims: To understand individuals' perceptions of and attitudes towards animal abuse broadly and in relation to a variety of abuse cases, including domestic violence and child abuse; the influence of perpetrator's intent and victim outcomes are also examined.
- Jurors' Fear of False Accusation
Aims: To develop a scale measure of a psychological construct, fear of false accusation of child sexual abuse, and determine its influence in juror decision making in child sexual abuse cases.
- Public Perceptions of Stroke
Aims: To test individual differences and psychological mechanisms underlying delays in seeking medical attention when experiencing life-threatening symptoms.

PUBLICATIONS

6. Bottoms, B. L., **Jones, T. M.**, Sachdev, K., Aniciete, J., & Gorak, K. (in preparation). Gender differences in fears of being falsely accused of child sexual abuse.
5. Burke, K. C., Petty, T., **Jones, T. M.**, Stevenson, M. C., Silberkleit, G., Bottoms, B. L. (in preparation). Adults' perceptions of law-involved minority children and youth. In Stevenson, M. C., Bottoms, B. L., & Burke, K. C. (Eds.) *The legacy of race for children: Psychology, public policy, and law*. Oxford University Press.
4. Golding, J., Malik, S., **Jones, T. M.**, Burke, K. C., & Bottoms, B. L. (in preparation). Jurors' perceptions of child sexual assault victims and offenders. In Pozzulo, J., Pica, E. & Sheahan, C. (Eds.), *Memory and sexual misconduct: psychological research for criminal justice*. Taylor & Francis.
3. **Jones, T. M.**, Bottoms, B. L., & Stevenson, M. C. (in review). Jurors' sexual abuse experience explains empathy and child sexual abuse case judgments: Meta-analyses.
2. Nysse-Carris, K., **Jones, T. M.**, & Bottoms, B. L. (in preparation). Promises to keep a secret, promises to tell the truth: Understanding the promise-honesty effect in children.
1. Richardson, K. S., Burke, K. C., Brazley, K. N., **Jones, T. M.**, & Bottoms, B. L. (in review). Understanding African American's attitudes toward animals: Historical and psychological perspectives.

PRESENTATIONS

19. Jaramillo, N. M., **Jones, T. M.**, Brazley, K., Jahangir, A., Richardson, K., Burke, K. C., & Bottoms, B. L. (April, 2019). *Factors affecting persistence in seeking medical attention for stroke*. Poster presentation submitted to the Midwestern Psychological Association Conference, Chicago, IL.
18. **Jones, T. M.**, Bottoms, B. L., & Stevenson, M. C. (March, 2019). *Meta-analyses show that sexual abuse experience and empathy affect mock jurors' child sexual abuse judgments*. Paper presentation submitted to the American Psychology-Law Society Conference, Portland, OR.
17. Sachdev, K., **Jones, T. M.**, & Bottoms, B. L. (2019, March). *Experience with children is related to fear of being falsely accused of child sexual abuse*. Poster presentation at the annual meeting of the American Psychology-Law Society, Portland, OR.
16. Aniciete, J. & **Jones, T. M.** (April, 2018). *Men are more likely than women to fear being falsely accused of child sexual abuse*. Poster presentation at the University of Illinois at Chicago Annual Student Research Forum, Chicago, IL.
15. Garcia, B., Burke, K. C., & **Jones, T. M.** (April, 2018). *The effects of political orientation on reactions to animal abuse*. Poster presentation at the University of Illinois at Chicago Annual Student Research Forum, Chicago, IL.
14. Richardson, K. S. C., Burke, K. C., & **Jones, T. M.** (April, 2018). *The effects of race on attitudes toward animal abuse*. Poster presentation at the University of Illinois at Chicago Annual Student Research Forum, Chicago, IL.
13. Sachdev, K. & **Jones, T. M.** (April, 2018). *Experience with children is related to fearing being falsely accused of child sexual abuse*. Poster presentation at the University of Illinois at Chicago Annual Student Research Forum, Chicago, IL.
12. Burke, K. C., Peter-Hagene, L. C., **Jones, T. M.**, Bottoms, B. L., Amaravadi, S., Garcia, B., Richardson, K., & Sachdev, K. (March, 2018). *Harming cats and dogs: People are as morally outraged, but not as punitive, in animal vs. human abuse cases*. Poster presentation at the American Psychology-Law Society Conference, Memphis, TN.
11. **Jones, T. M.**, Stevenson, M. C., Bottoms, B. L. (March, 2018). *Sexual victimization affects jurors' empathy and child sexual abuse case judgments across 9 studies*. Paper presentation at the American Psychology-Law Society Conference, Memphis, TN.
10. **Jones, T.M.**, Sachdev, K., Aniciete, J., Gorak, K., Bottoms, B. L. (March, 2018). *Juror gender, fear of being falsely accused, and perceptions of child sexual abuse*. Paper presentation at the American Psychology-Law Society Conference, Memphis, TN.
9. Amaravadi, S., Burke, K. C., **Jones, T. M.**, Bottoms, B. L. (April, 2017). *Perceptions of animal abuse*. Poster presentation at the University of Illinois at Chicago Annual Student Research Forum, Chicago, IL.
8. Stevenson, M., **Jones, T.**, Peter-Hagene, L., Bottoms, B. L. (March, 2017). *Sexual victimization predicts victim empathy and verdicts in child sexual assault cases*. Paper presentation at the American Psychology-Law Society Conference, Seattle, WA.
7. Harrington, E. E., **Jones, T. M.**, Kytola, K. L., & Reese-Melancon, C. (August, 2016). *The effects of social familiarity on prospective memory performance*. Poster presentation at the American Psychological Association Conference, Denver, CO.
6. Kytola, K. L., **Jones, T. M.** Reese-Melancon, C., & Terry, C. (August, 2016). *Can performance predictions improve prospective memory and does type of prediction matter?* Poster presentation at the American Psychological Association Conference, Denver, CO.
5. **Jones, T. M.**, Reece, C. C., Roberts, G., Anderson, K., Espeleta, H. C., Daer, J. L., & Beasley, L. O. (November, 2015). *Intergenerational transmission of harsh parenting*. Paper presentation at the Oklahoma Psychological Association Conference, Shawnee, OK.
4. Cockrell, A., **Jones, T. M.**, Watson, S., Blankenship, M., Espeleta, H. C., Daer, J. L., & Beasley, L. O. (November, 2015). *Rumination as a moderator between anxiety symptoms and bodily pain*. Poster presentation at the Oklahoma Psychological Association Conference, Shawnee, OK.

3. Espeleta, H. C., Jones, T.M., Daer, J. L., Schmauch, V., Maye, C., & Beasley, L. O. (November, 2015). *Optimism and posttraumatic stress symptoms: The role of social support*. Poster presentation at the Oklahoma Psychological Association Conference, Shawnee, OK.
2. Jones, T.M., Reece, C., Espeleta, H.C., Daer, J.L., Ridings, L.E., & Beasley, L. (February, 2015). Assessing the relationship between early childhood maltreatment and empathy in adults. Poster presentation at the 26th Annual Research Symposium at Oklahoma State University, Stillwater, OK.
1. Reece, C., Jones, T.M., Espeleta, H.C., Daer, J.L., Ridings, L.E., & Beasley, L. (February, 2015). Adverse childhood experiences (ACEs) and related protective factors in a college-aged sample. Poster presentation at the 26th Annual Research Symposium at Oklahoma State University, Stillwater, OK.

CLINICAL EXPERIENCE

Office of Applied Psychological Services (OAPS) August 2016 - present
 University of Illinois at Chicago, Chicago, IL
 Therapy Supervisors: Drs. Jenna Rowen, Sally Weinstein
 Assessment Supervisors: Drs. Amanda Lorenz, Alessandra Passarotti
 Intake Supervisors: Drs. Jenna Rowen, Bibiana Adames

- Intake Clinician December 2016 - present
- Neuropsychological and Psycho-diagnostic Assessment Clinician April 2017 - present
- Therapy Clinician December 2017 - present

Parents and Offspring Depression Study August 2018 - present
 Institute for Juvenile Research, University of Illinois at Chicago, Chicago, IL
 Therapy Supervisors: Drs. Katie Burkhouse (UIC) and Bruce Compas (Vanderbilt)

- Research Clinician August 2018 - present

TEACHING EXPERIENCE

Clinical Psychology Lab Spring 2018, Fall 2018, Spring 2019
 University of Illinois at Chicago, Chicago, IL
Graduate Teaching Assistant
 Instructor: Dr. Ellen Herbener

Psychology of Women and Gender Summer 2017 - Fall 2017, Summer 2018
 University of Illinois at Chicago, Chicago, IL
Graduate Teaching Assistant
 Instructor: Dr. Karina Reyes

Introduction to Psychology Fall 2016 - Spring 2017
 University of Illinois at Chicago, Chicago, IL
Graduate Teaching Assistant
 Instructors: Drs. Eric Leshikar, Julie Chen

Abnormal Psychology Fall 2015
 Oklahoma State University, Stillwater, OK
Undergraduate Teaching Assistant
 Instructor: Dr. Misty Hawkins

Quantitative Methods in Psychology Spring 2014
 Oklahoma State University, Stillwater, OK
Undergraduate Teaching Assistant
 Instructor: Dr. DeMond Grant

PROFESSIONAL AFFILIATIONS

The Society for Research in Child Development Spring 2019 - present
 The Society for the Psychological Study of Social Issues Fall 2018 - present
 American Psychology-Law Society Spring 2017 - present
 Psi Chi Spring 2016 - present
 American Psychological Association Fall 2015 - present

Tables

Table 1

Explanation of the three independent variables

Variable	Definition	
Independent variable 1	Was a child victim ($N = 353$)	Was not a child victim ($N = 2,094$)
Independent variable 2	Was a child or adult victim ($N = 404$)	Was not a child or adult victim ($N = 2,043$)
Independent variable 3	Was a child or adult victim or knew someone who was a child or adult victim ($N = 1,094$)	Was neither a child nor adult victim nor knew someone who was a child or adult victim ($N = 1,353$)

Table 2

Sample description for each of the nine component studies

	Study								
Demographics	1	2	3	4	5	6	7	8	9
N	130	352	240	249	154	93	789	237	203
% women	49	48	54	51	49	65	57	50	49
Age range (years)	18-30	18-43	18-30	18-47	18-49	18-31	18-46	18-42	18-29
Mean age (years)	19	19	19	20	20	19	20	20	19
Race/Ethnicity									
Caucasian	81%	81%	45%	100%	40%	100%	34%	43%	66%
Asian	5%	5%	0%	0%	24%	0%	23%	22%	18%
Hispanic	0%	0%	21%	0%	21%	0%	23%	14%	8%
African American	9%	10%	15%	0%	11%	0%	13%	1%	5%
Other	4%	4%	19%	0%	3%	0%	6%	4%	2%
Was a child victim (n)	10	42	44	26	20	14	150	36	11
% total	7.7%	11.9%	18.3%	10.4%	13%	15.1%	19%	15.2%	5.4%
Was child or adult victim	11	53	50	27	26	16	174	36	11
% total	5.4%	15.1%	20.8%	10.8%	16.9%	17.2%	22.1%	15.2%	5.4%
Was a child or adult victim or knew a child or adult victim	50	143	136	99	62	48	412	94	50
% total	24.6%	40.6%	56.7%	39.8%	40.3%	51.6%	52.2%	39.7%	24.6%

Notes. Study references in order: 1-2: Bottoms et al., 2014; 3-4: Bottoms, Davis, & Epstein, 2004; 5: Bottoms, Nysse-Karris, Harris, & Tyda, 2003; 6: unpublished Davis Master's; 7: Bottoms, Epstein, & Salerno (in prep); Haegerich & Bottoms, 2000; Wiley & Bottoms, 2009; 2013 (full citations are denoted in the references with '*').

Table 3

Details of methods for each of the nine component studies

Method details	Study								
	1	2	3	4	5	6	7	8	9
Year of study	1990	1991	1992	1995	1992	1996	1996	1999	2005
Pattern jury instructions	None	None	Illinois	Illinois	Illinois	None	New York	Illinois (modified)	Illinois
Trial stimuli	Written scenario	Written scenario	Written scenario	Written scenario	Written scenario + videotaped testimony	Written scenario	Written scenario + videotaped testimony + 20-page mock trial transcript	Written transcript	Written scenario
Legal charge	Child abuse	Child sexual abuse	Child sexual assault	Aggravated criminal sexual assault	Child sexual abuse	Child sexual assault	Second degree sexual abuse	*Patricide (murder)	Predatory criminal sexual assault
Crime context	Incest, Teacher/school, daycare, stranger abduction	Teacher/school daycare, stranger abduction	Teacher/school	Teacher/school	Incest	Teacher/school	Stranger abduction	Incest	Teacher/school
Victim factors									
Age (years)	5, 10	5, 14	12	12	16	12	13	15	10
Gender	F	F	F	F	F	F	F	F, M	F, M
Independent variables (collapsed across for current analyses)	Case context, juror gender, victim age	Case context, case strength, juror gender, victim age	Juror gender, juror prejudice, victim race, defendant race	Juror gender, juror prejudice, victim race, defendant race	Victim disability status, juror gender	Juror gender, juror prejudice, victim race, defendant race	Juror gender	Empathy induction, juror gender, defendant gender, victim gender	Juror gender, victim gender, defendant sexual orientation, victim gender

Notes. * In this case, the crime of abuse was not charged per se, but a judgment about its veracity was required of mock jurors, see text.

[illegible]

Table 5

Independent samples t-tests of the effect of sexual abuse history on belief in abuse

IV	Study					
	4	5	6	7	8	9
IV 1: Abused as a child vs. not abused as a child						
Abused as a child						
<i>n</i>	26	19	14	149	35	11
<i>M (SD)</i>	3.81 (1.55)	.37 (.50)	.71 (.47)	.77 (.42)	3.49 (1.22)	3.0 (.89)
Not abused as a child						
<i>n</i>	167	129	79	626	197	189
<i>M (SD)</i>	3.74 (1.54)	.49 (.50)	.66 (.48)	.69 (.46)	3.51 (1.36)	3.52 (1.33)
<i>t</i>	.22	-.98	.41	2.05*	-.09	-1.29
IV 2: Abused as a child or adult vs. not abused as a child or adult						
Abused as a child or adult						
<i>n</i>	27	25	16	173	35	11
<i>M (SD)</i>	3.81 (1.52)	.44 (.51)	.69 (.48)	.76 (.43)	3.49 (1.22)	3.0 (.89)
Not abused as a child or adult						
<i>n</i>	160	124	77	603	198	190
<i>M (SD)</i>	3.69 (1.55)	.48 (.50)	.66 (.48)	.69 (.46)	3.50 (1.36)	3.54 (1.34)
<i>t</i>	.38	-.33	.19	1.74	-.06	-1.314
IV 3: Abused as a child or adult or know another victim vs. not abused as a child or adult or know another victim						
Abused as a child or adult or know another victim						
<i>n</i>	91	60	48	410	93	50
<i>M (SD)</i>	3.91 (1.50)	.42 (.50)	.69 (.47)	.73 (.44)	3.47 (1.36)	3.36 (1.08)

Table 5 continued

IV	Study					
	4	5	6	7	8	9
Not abused						
<i>n</i>	85	89	45	368	140	151
<i>M (SD)</i>	3.51 (1.60)	.51 (.50)	.64 (.48)	.68 (.47)	3.51 (1.33)	3.56 (1.39)
<i>t</i>	1.74	-1.06	.44	1.60	-.23	-.91

Note. * $p < .05$

Table 6

Independent samples t-tests of the effect of sexual abuse history on victim credibility

IV	Study								
	1	2	3	4	5	6	7	8	9
IV 1: Abused as a child vs. not abused as a child									
Abused as a child									
<i>n</i>	10	42	43	26	20	14	150	36	11
<i>M (SD)</i>	4.70 (.45)	4.31 (.85)	4.63 (1.11)	4.12 (1.18)	3.75 (1.33)	4.64 (1.01)	4.28 (1.24)	4.25 (1.71)	5.0 (.77)
Not abused as a child									
<i>n</i>	120	305	192	175	133	79	634	198	186
<i>M (SD)</i>	4.30 (.83)	3.96 (.84)	4.27 (1.34)	4.01 (1.19)	4.07 (1.10)	4.19 (1.12)	4.05 (1.25)	4.07 (1.67)	4.51 (1.14)
<i>t</i>	2.46*	2.53**	1.85	.42	-1.16	1.41	2.04*	.59	1.42

Table 6 continued

IV	Study								
	1	2	3	4	5	6	7	8	9
IV 2: Abused as a child or adult vs. not abused as a child or adult									
Abused as a child or adult									
<i>n</i>	15	53	49	27	26	16	174	36	11
<i>M (SD)</i>	4.70 (.50)	4.25 (.82)	4.67 (1.07)	4.11 (1.22)	3.81 (1.23)	4.31 (1.35)	4.24 (1.28)	4.25 (1.71)	5.0 (.77)
Not abused as a child or adult									
<i>n</i>	115	297	186	167	127	77	611	199	187
<i>M (SD)</i>	4.28 (.83)	3.95 (.85)	4.24 (1.36)	4.0 (1.18)	4.07 (1.12)	4.25 (1.07)	4.05 (1.25)	4.08 (1.67)	4.50 (1.13)
<i>t</i>	2.75**	2.36*	2.37*	.45	-1.07	.21	1.73	.56	1.43
IV 3: Abused as a child or adult or know another victim vs. not abused as a child or adult or know another victim									
Abused as a child or adult or know another victim									
<i>n</i>	55	142	134	93	61	48	413	94	50
<i>M (SD)</i>	4.55 (.75)	4.12 (.86)	4.54 (1.22)	4.0 (1.19)	3.92 (1.08)	4.29 (1.11)	4.15 (1.23)	4.15 (1.77)	4.78 (1.06)
Not abused									
<i>n</i>	60	208	101	89	92	45	374	141	148
<i>M (SD)</i>	4.16 (.85)	3.90 (.84)	4.06 (1.38)	4.04 (1.16)	4.10 (1.18)	4.22 (1.13)	4.03 (1.29)	4.08 (1.61)	4.45 (1.13)
<i>t</i>	2.55**	2.41*	2.81**	-.26	-.95	.30	1.32	.32	1.83

Note. * $p < .05$ ** $p < .01$ *** $p < .001$

Table 7

Independent samples t-tests of the effect of sexual abuse history on degree of guilt

IV	Study							
	1	2	3	4	5	6	7	9
IV 1: Abused as a child vs. not abused as a child								
Abused as a child								
<i>n</i>	10	42	43	26	20	13	150	10
<i>M (SD)</i>	4.24 (1.03)	3.86 (1.07)	4.47 (1.78)	9.92 (6.83)	5.65 (5.51)	13.92 (5.95)	13.48 (6.60)	11.80 (8.31)
Not abused as a child								
<i>n</i>	120	305	193	174	132	78	632	188
<i>M (SD)</i>	3.99 (.95)	3.59 (.94)	4.41 (1.69)	9.41 (6.64)	8.62 (7.07)	10.92 (5.87)	12.38 (6.84)	12.46 (8.06)
<i>t</i>	.78	1.74	.19	.36	-2.16*	1.70	1.78	-.25
IV 2: Abused as a child or adult vs. not abused as a child or adult								
Abused as a child or adult								
<i>n</i>	15	53	49	27	26	15	174	10
<i>M (SD)</i>	4.23 (.86)	3.82 (1.06)	4.55 (1.72)	9.85 (6.69)	6.42 (6.04)	13.07 (6.03)	13.33 (6.67)	11.80 (8.31)

Table 7 continued

IV	Study							
	1	2	3	4	5	6	7	9
Not abused as a child or adult								
<i>n</i>	115	297	187	166	127	76	609	189
<i>M (SD)</i>	3.98 (.97)	3.58 (.94)	4.39 (1.70)	9.35 (6.66)	8.55 (7.07)	11.01 (5.91)	12.36 (6.84)	12.40 (8.08)
<i>t</i>	.92	1.73	.61	.36	-1.59	1.23	1.65	-.23
IV 3: Abused as a child or adult or know another victim vs. not abused as a child or adult or know another victim								
Abused as a child or adult or know another victim								
<i>n</i>	55	142	135	93	61	46	412	49
<i>M (SD)</i>	4.19 (.99)	3.67 (1.02)	4.62 (1.62)	9.63 (6.41)	6.38 (5.71)	12.48 (5.88)	12.84 (6.69)	13.27 (7.88)
Not abused								
<i>n</i>	60	208	101	88	92	45	373	150
<i>M (SD)</i>	3.86 (.91)	3.57 (.92)	4.15 (1.79)	9.72 (6.91)	9.39 (7.43)	10.20 (5.84)	12.34 (6.95)	12.08 (8.14)
<i>t</i>	1.89	.91	2.13*	-.08	-2.83**	1.85	1.03	.89

Note. * $p < .05$ ** $p < .01$ *** $p < .001$

Table 8

Independent samples t-tests of the effect of sexual abuse history on child victim empathy

IV	Study						
	1	2	3	4	6	7	8
IV 1: Abused as a child vs. not abused as a child							
Abused as a child							
<i>n</i>	10	42	44	20	21	58	32
<i>M (SD)</i>	6.30 (.45)	6.25 (.55)	6.14 (.68)	5.66 (.54)	4.84 (.45)	5.28 (.72)	6.36 (.55)
Not abused as a child							
<i>n</i>	120	306	196	129	156	226	172
<i>M (SD)</i>	5.89 (.62)	5.83 (.63)	5.77 (.67)	5.50 (.56)	4.63 (.41)	5.18 (.82)	6.0 (.62)
<i>t</i>	2.05*	4.16***	3.33***	1.25	2.15*	.82	3.05**
IV 2: Abused as a child or adult vs. not abused as a child or adult							
Abused as a child or adult							
<i>n</i>	15	53	50	26	22	68	32
<i>M (SD)</i>	6.25 (.43)	6.23 (.53)	6.13 (.67)	5.74 (.55)	4.82 (.46)	5.21 (.74)	6.36 (.55)
Not abused as a child or adult							
<i>n</i>	115	298	190	123	149	217	173
<i>M (SD)</i>	5.88 (.62)	5.81 (.63)	5.76 (.67)	5.47 (.55)	4.63 (.41)	5.20 (.82)	6.01 (.62)
<i>t</i>	2.23*	4.51***	3.49***	2.26*	1.95*	.14	2.99**

Table 8 continued

IV 3: Abused as a child or adult or know another victim vs. not abused as a child or adult or know another victimAbused as a child
or adult or know
another victim

<i>n</i>	55	143	136	57	81	156	81
<i>M (SD)</i>	6.08 (.53)	5.98 (.61)	5.99 (.65)	5.64 (.60)	4.72 (.42)	5.25 (.76)	6.26 (.55)

Not abused

<i>n</i>	60	208	104	92	78	131	124
<i>M (SD)</i>	5.74 (.64)	5.81 (.64)	5.64 (.68)	5.45 (.52)	4.59 (.42)	5.16 (.84)	5.93 (.63)

<i>t</i>	3.10**	2.57**	4.06***	2.06*	1.97*	.99	3.86***
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Note. * $p < .05$ ** $p < .01$ *** $p < .001$

Table 9

Partially standardized indirect effect (mediation) of child victim empathy on the relation between abuse experience and belief in abuse

	Study			
	4	6	7	8
IV 1: Abused as a child vs. not				
n	144	149	280	201
β	.14	.02	.00	.06
SE	.15	.04	.03	.05
95% CI	-.14, .50	-.05, .13	-.03, .09	-.01, .18
IV 2: Abused as a child or adult vs. not				
n	144	164	281	202
B	.26**	.01	.00	.07
SE	.16	.04	.02	.05
95% CI	.04, .66	-.05, .12	-.04, .04	-.00, .18
IV 3: Abused as a child or adult or know another victim vs. not				
n	144	153	283	202
B	.19	.01	.01	.07
SE	.13	.03	.02	.04
95% CI	-.00, .52	-.05, .08	-.02, .09	.00, .17

Note. ** $p < .01$

Table 10

Partially standardized indirect effect (mediation) of child victim empathy on the relation between abuse experience and victim credibility

	Study						
	1	2	3	4	5	7	8
IV 1: Abused as a child vs. not							
n	130	347	235	177	149	284	203
<i>B</i>	.22***	.23***	.16***	.16***	.06*	.00	.04
<i>SE</i>	.10	.06	.06	.09	.05	.01	.05
95% CI	.06, .46	.11, .31	.06, .31	.00, .36	-.02, .20	-.01, .05	-.03, .16
IV 2: Abused as a child or adult vs. not							
n	130	350	235	171	149	285	204
<i>B</i>	.20***	.22***	.16***	.14***	.10**	.00	.05
<i>SE</i>	.08	.05	.06	.09	.06	.01	.05
95% CI	.07, .40	.12, .34	.06, .30	-.01, .33	.01, .25	-.01, .03	-.03, .16
IV 3: Abused as a child or adult or know another victim vs. not							
n	115	350	235	159	149	287	204
<i>B</i>	.19***	.10***	.14***	.11***	.07*	.01	.05
<i>SE</i>	.08	.04	.05	.06	.04	.01	.04
95% CI	.06, .39	.03, .17	.07, .25	-.00, .23	.00, .18	-.01, .05	-.02, .15

Note. * $p < .05$ ** $p < .01$ *** $p < .001$

Table 11

Partially standardized indirect effect (mediation) of child victim empathy on the relation between abuse experience and degree of guilt

	Study					
	1	2	3	4	5	7
IV 1: Abused as a child vs. not						
n	130	347	236	177	148	284
<i>B</i>	.21***	.18***	.12***	.18***	.06**	.01
<i>SE</i>	.10	.05	.05	.09	.05	.01
95% CI	.05, .43	.10, .29	.04, .26	-.00, .37	-.02, .20	-.01, .06
IV 2: Abused as a child or adult vs. not						
n	130	350	236	171	148	285
<i>B</i>	.19***	.18***	.12***	.15***	.10**	.00
<i>SE</i>	.08	.05	.05	.09	.06	.01
95% CI	.06, .38	.10, .28	.04, .25	-.01, .33	.02, .24	-.02, .04
IV 3: Abused as a child or adult or know another victim vs. not						
n	115	350	236	159	148	287
<i>B</i>	.16**	.08***	.10**	.11***	.08**	.01
<i>SE</i>	.07	.03	.04	.06	.05	.01
95% CI	.05, .34	.02, .16	.03, .20	.01, .25	.00, .19	-.01, .05

Note. ** $p < .01$ *** $p < .001$

Table 12

Meta-analyses of sexual abuse on case judgments and empathy

IV grouped by dependent measure	Meta-analysis statistics				
	<i>k</i>	<i>d</i> (<i>SE</i>)	95% CI	<i>X</i> ²	<i>I</i> ²
Dependent Measure 1: Belief in abuse					
IV 1: Abused as a child vs. not	6	.06 (.07)	-.09, .20	5.18	0
IV 2: Abused as a child or adult vs. not	6	.07 (.07)	-.05, .20	3.95	0
IV 3: Abused as a child or adult or know another victim vs. not	6	.05 (.05)	-.04, .15	6.37	.01
Dependent Measure 2: Victim credibility					
IV 1: Abused as a child vs. not	9	.21 (.06)***	.09, .32	8.24	0
IV 2: Abused as a child or adult vs. not	9	.19 (.06)***	.08, .29	8.71	0
IV 3: Abused as a child or adult or know another victim vs. not	9	.15 (.05)**	.05, .26	14.01	29.31

Table 12 continued

Meta-analysis statistics					
Dependent Measure 3: Degree of guilt					
IV grouped by dependent measure	<i>k</i>	<i>d</i> (<i>SE</i>)	95% CI	<i>X</i> ²	<i>I</i> ²
IV 1: Abused as a child vs. not	8	.12 (.06)*	.00, .25	8.84	.01
IV 2: Abused as a child or adult vs. not	8	.12 (.06)*	.01, .24	6.04	0
IV 3: Abused as a child or adult or know another victim vs. not	8	.19 (.07)	-.04, .24	16.53*	53.38
Child Victim Empathy					
IV 1: Abused as a child vs. not	7	.49 (.10)***	.30, .68	10.92	39.57
IV 2: Abused as a child or adult vs. not	7	.42 (.10)***	.24, .61	12.62*	45.34
IV 3: Abused as a child or adult or know another victim vs. not	7	.41 (.07)***	.28, .53	10.09	32.41

Note. * $p < .05$ ** $p < .01$ *** $p < .001$

Table 13

Meta-analyses of the indirect effect (mediation) of child victim empathy on the relation between abuse experience and case judgments

IV grouped by dependent measure	Meta-analysis statistics				
	<i>k</i>	<i>r</i> (<i>SE</i>)	95% CI	<i>X</i> ²	<i>I</i> ²
Dependent Measure 1: Belief in abuse					
IV 1: Abused as a child vs. not	4	.05 (.04)	-.02, .12	1.98	0
IV 2: Abused as a child or adult vs. not	4	.08 (.05)	-.02, .18	7.89*	48.93
IV 3: Abused as a child or adult or know another victim vs. not	4	.06 (.04)	-.01, .13	3.91	.01
Dependent Measure 2: Victim credibility					
IV 1: Abused as a child vs. not	7	.13 (.03)***	.06, .19	12.26	43.31
IV 2: Abused as a child or adult vs. not	7	.13 (.03)***	.06, .19	10.22	35.19
IV 3: Abused as a child or adult or know another victim vs. not	7	.08 (.03)**	.03, .13	2.92	0
Dependent Measure 3: Degree of guilt					
IV 1: Abused as a child vs. not	6	.12 (.03)***	.06, .18	7.28	21.64
IV 2: Abused as a child or adult vs. not	6	.12 (.03)***	.06, .18	6.24	16.18
IV 3: Abused as a child or adult or know another victim vs. not	6	.08 (.03)**	.02, .13	2.49	0

Note. * $p < .05$ ** $p < .01$ *** $p < .001$

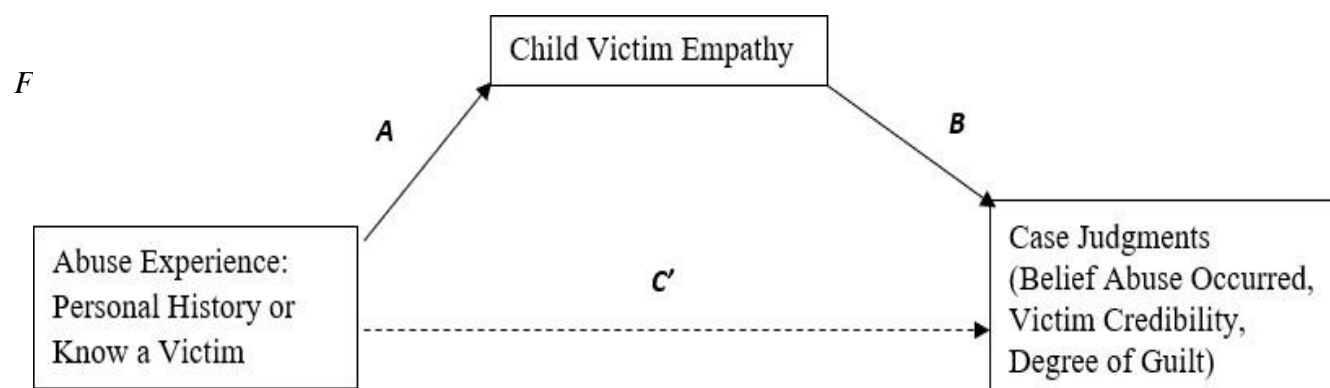
Figures

Figure 1. General theoretical model

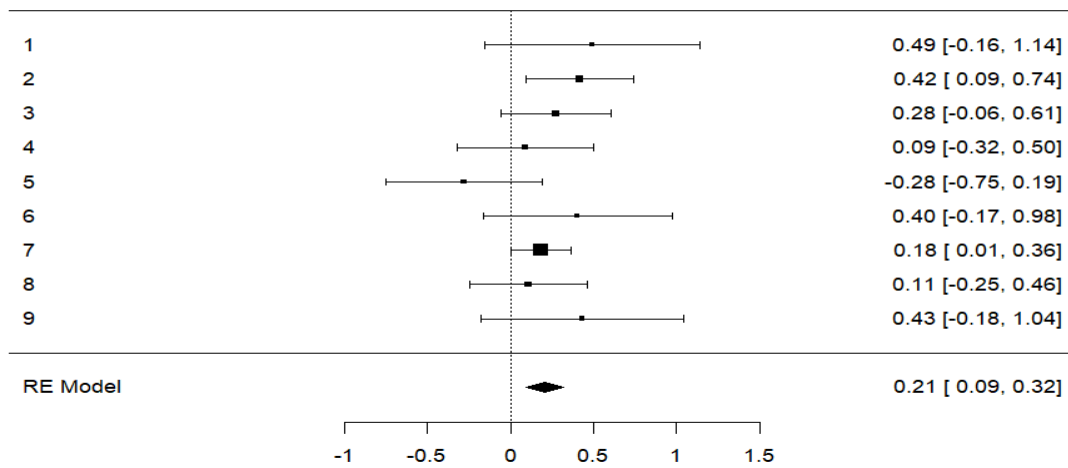


Figure 2. Forest plot for the meta-analysis of child sexual abuse's effect on victim credibility

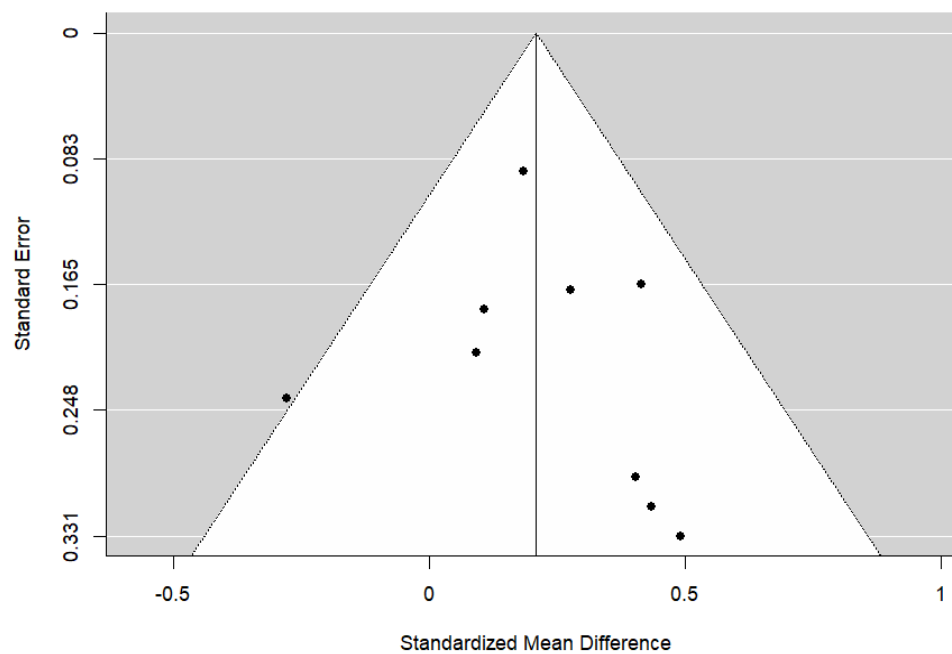


Figure 3. Funnel plot for the meta-analysis of child sexual abuse's effect on victim credibility

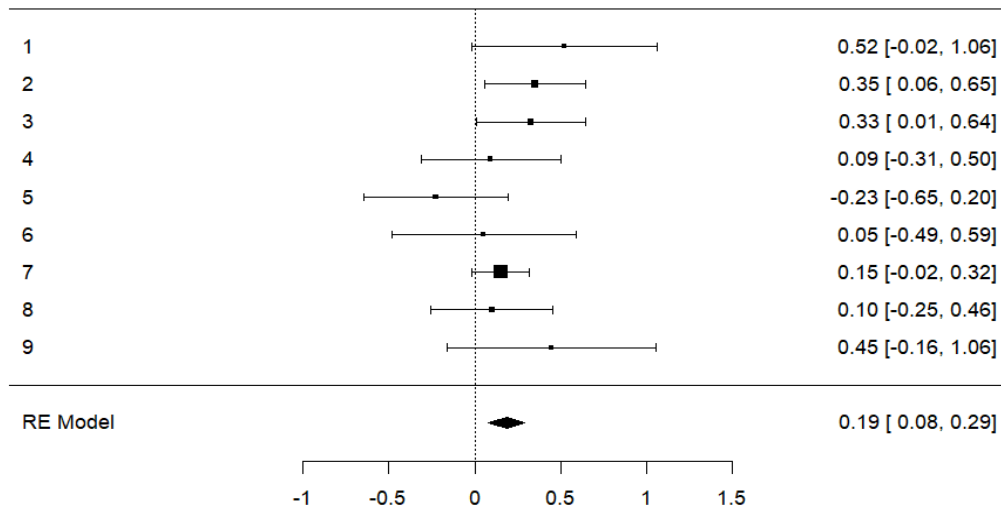


Figure 4. Forest plot for the meta-analysis of child or adult sexual abuse's effect on victim credibility

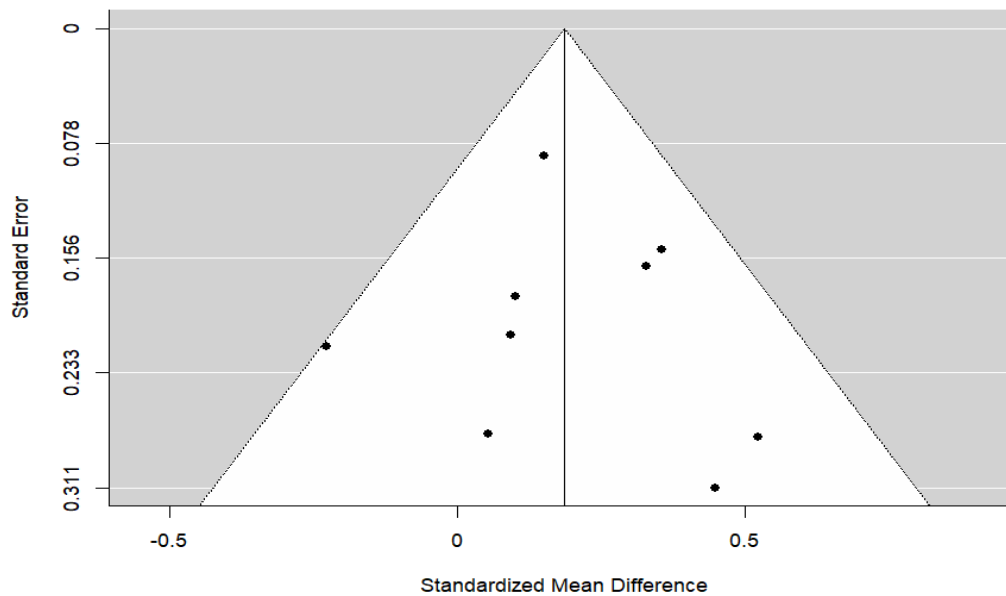


Figure 5. Funnel plot for the meta-analysis of child or adult sexual abuse's effect on victim credibility

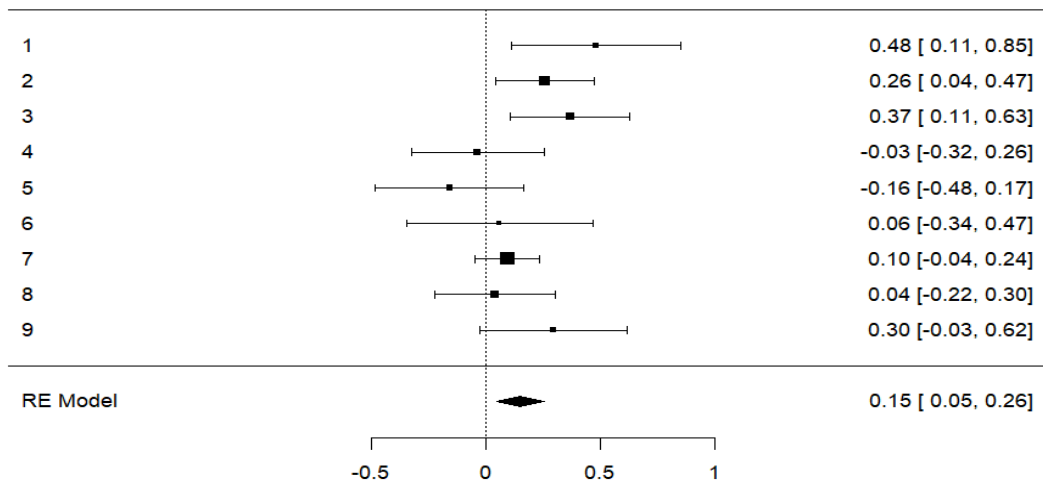


Figure 6. Forest plot for the meta-analysis of child or adult victim, or knowing another victim's effect on victim credibility

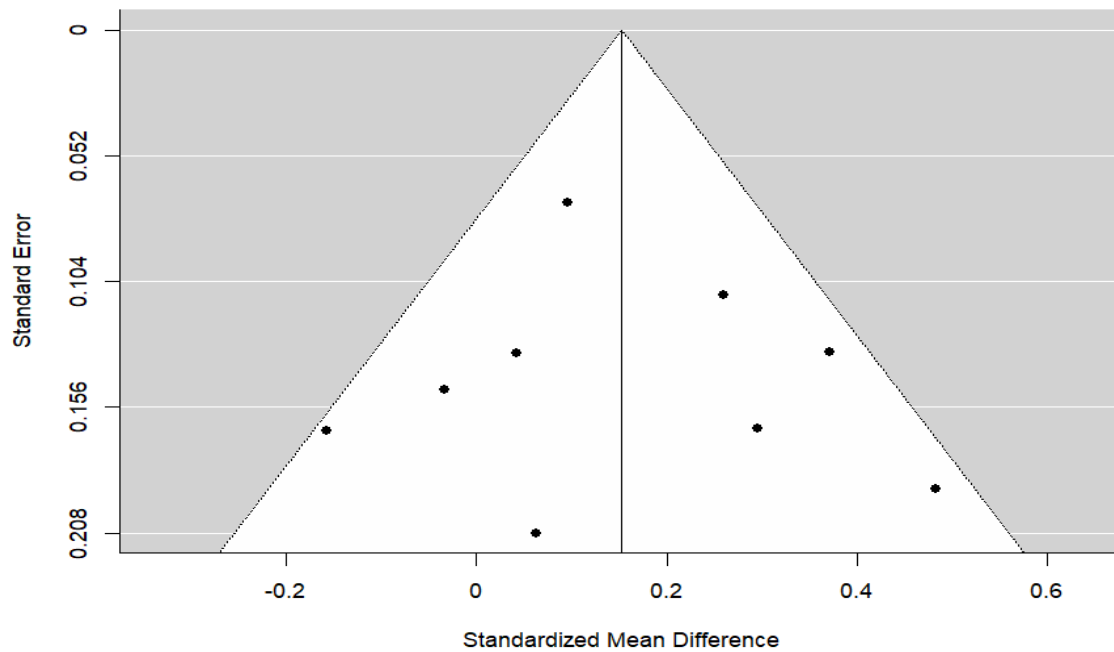


Figure 7. Funnel plot for the meta-analysis of child or adult victim, or knowing another victim's effect on victim credibility

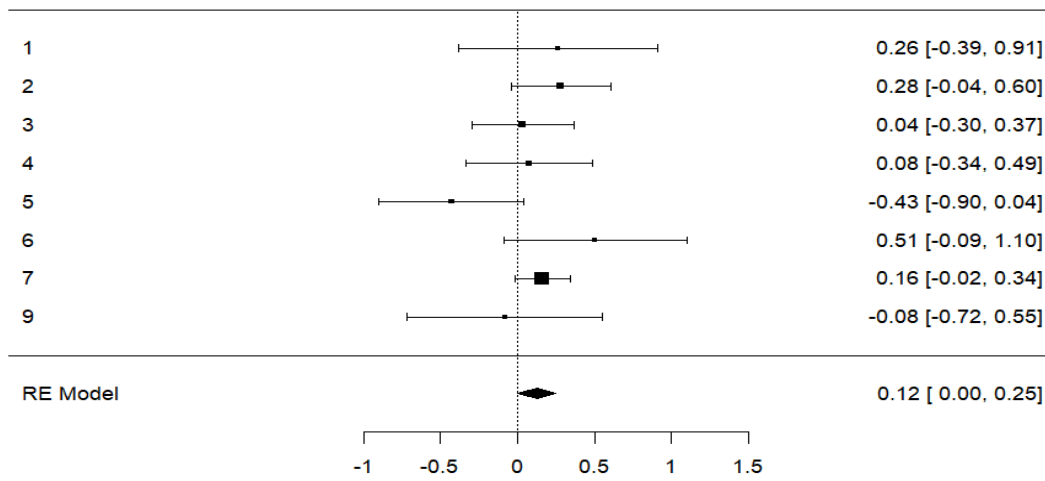


Figure 8. Forest plot for the meta-analysis of child sexual abuse's effect on degree of guilt

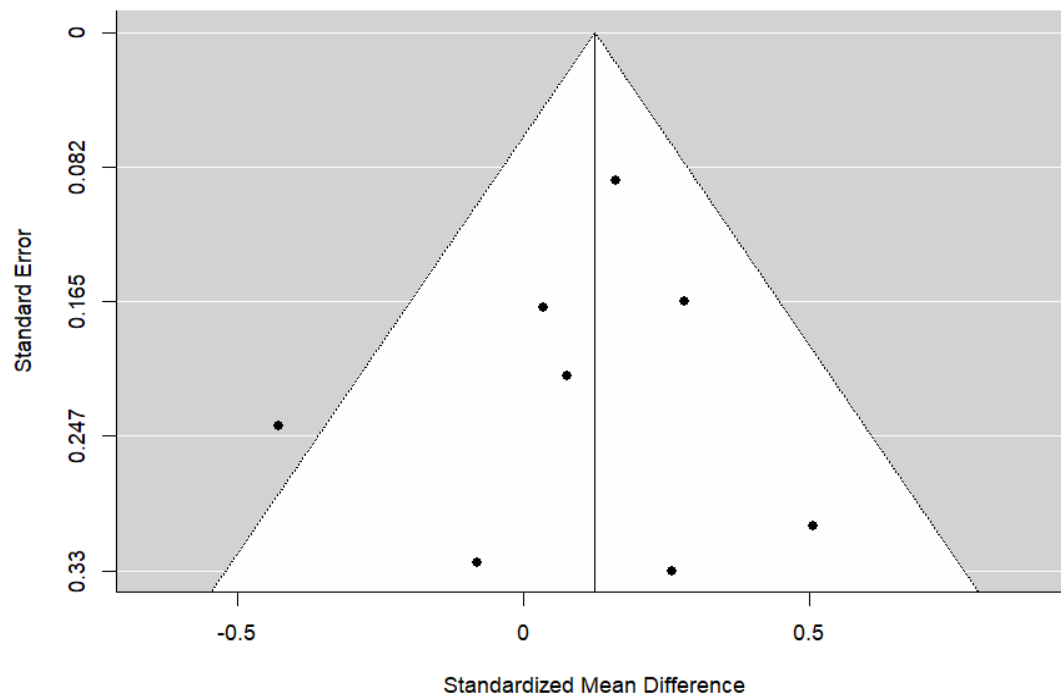


Figure 9. Funnel plot for the meta-analysis of child sexual abuse's effect on degree of guilt

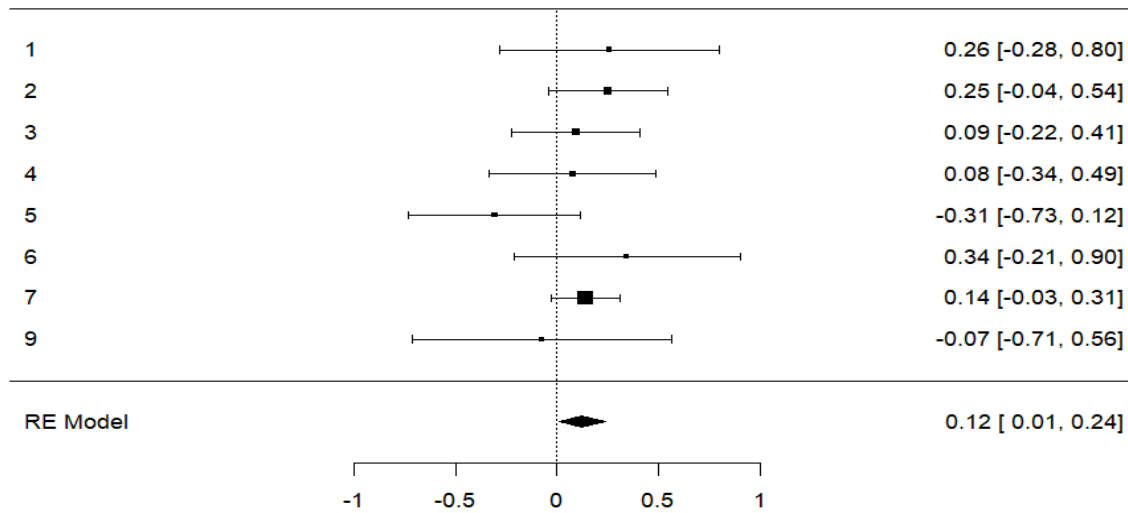


Figure 10. Forest plot for the meta-analysis of child or adult sexual abuse's effect on degree of guilt

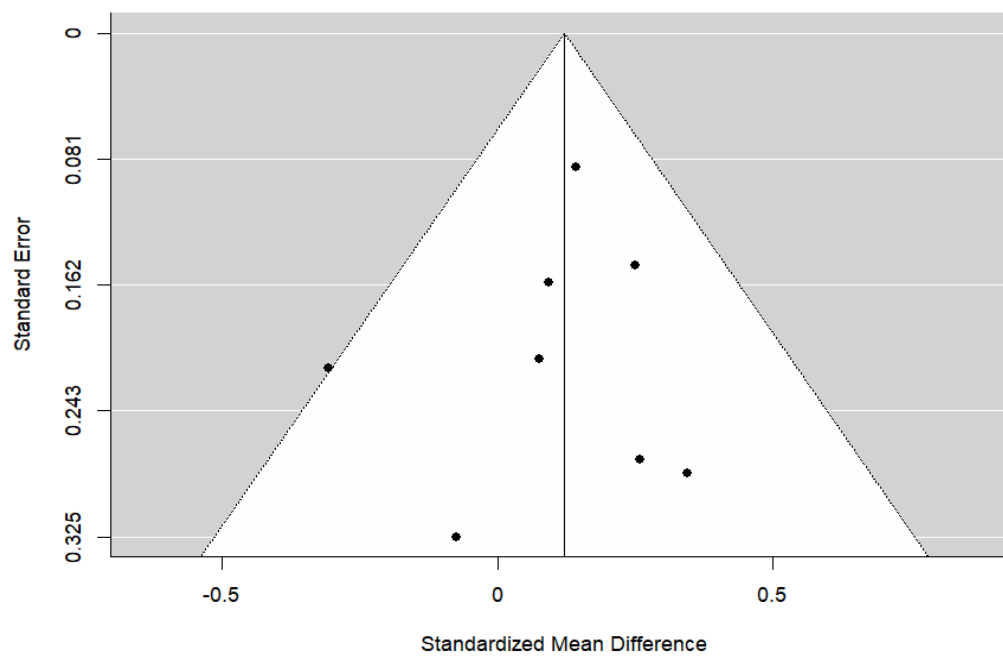


Figure 11. Funnel plot for the meta-analysis of child or adult sexual abuse's effect on degree of guilt

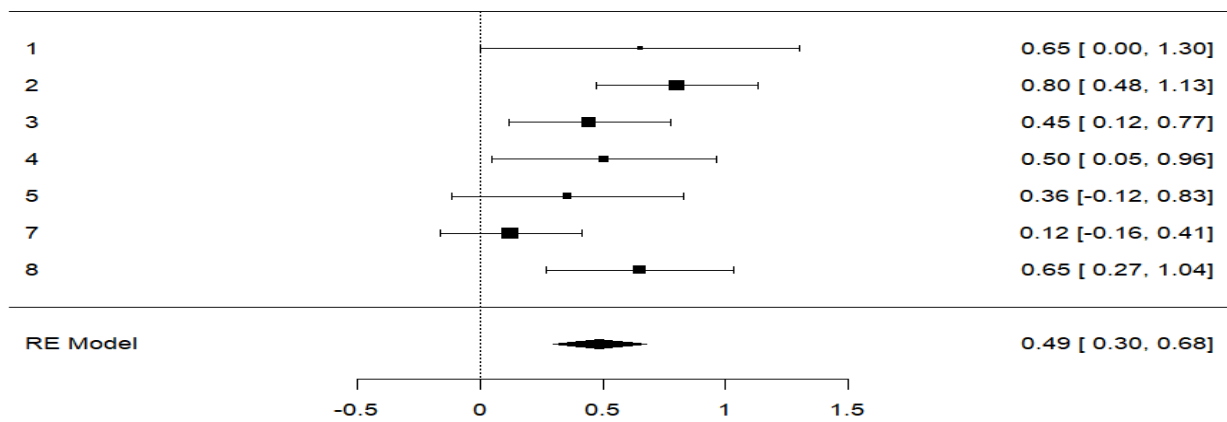


Figure 12. Forest plot for the meta-analysis of child sexual abuse's effect on child victim empathy

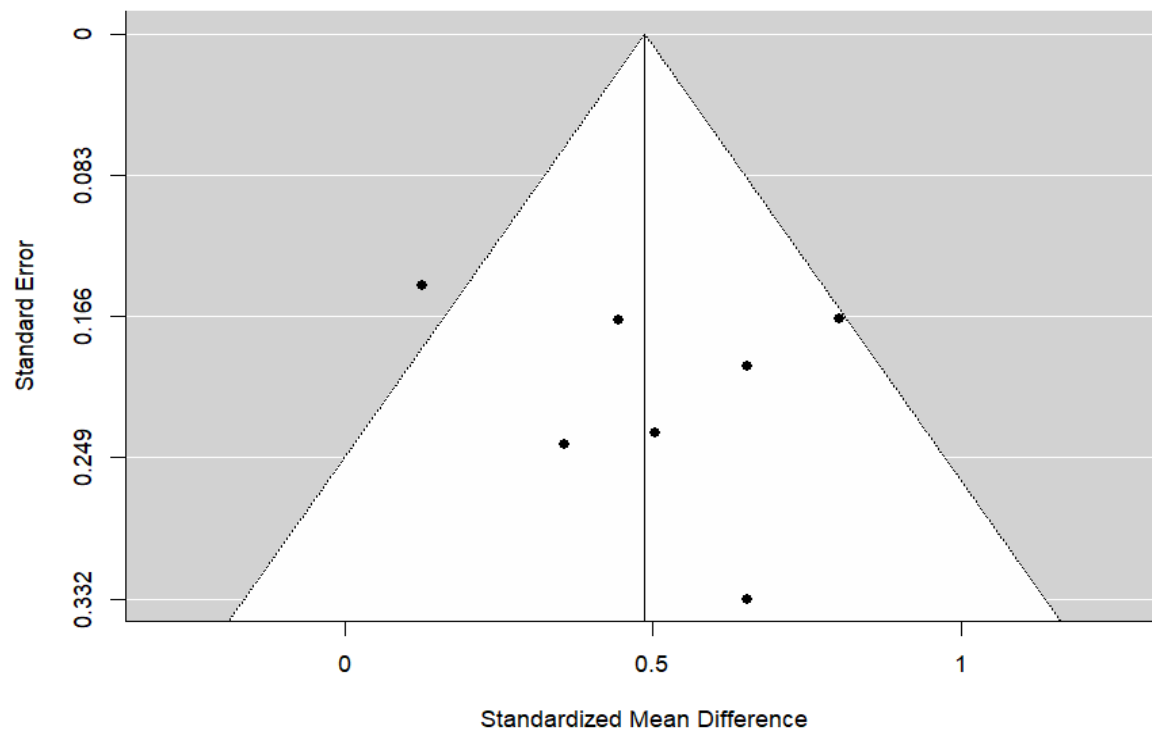


Figure 13. Funnel plot for the meta-analysis of child sexual abuse's effect on child victim empathy

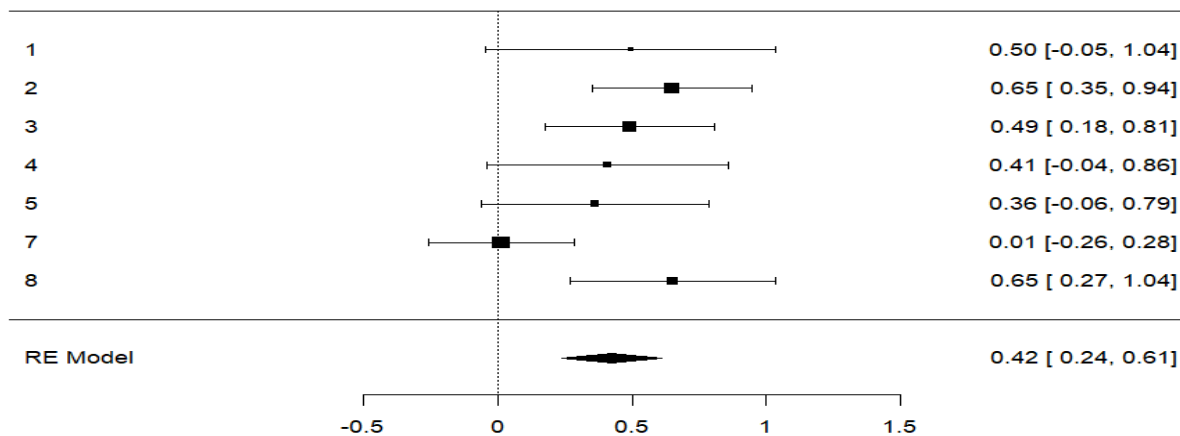


Figure 14. Forest plot for the meta-analysis of child or adult sexual abuse's effect on child victim empathy

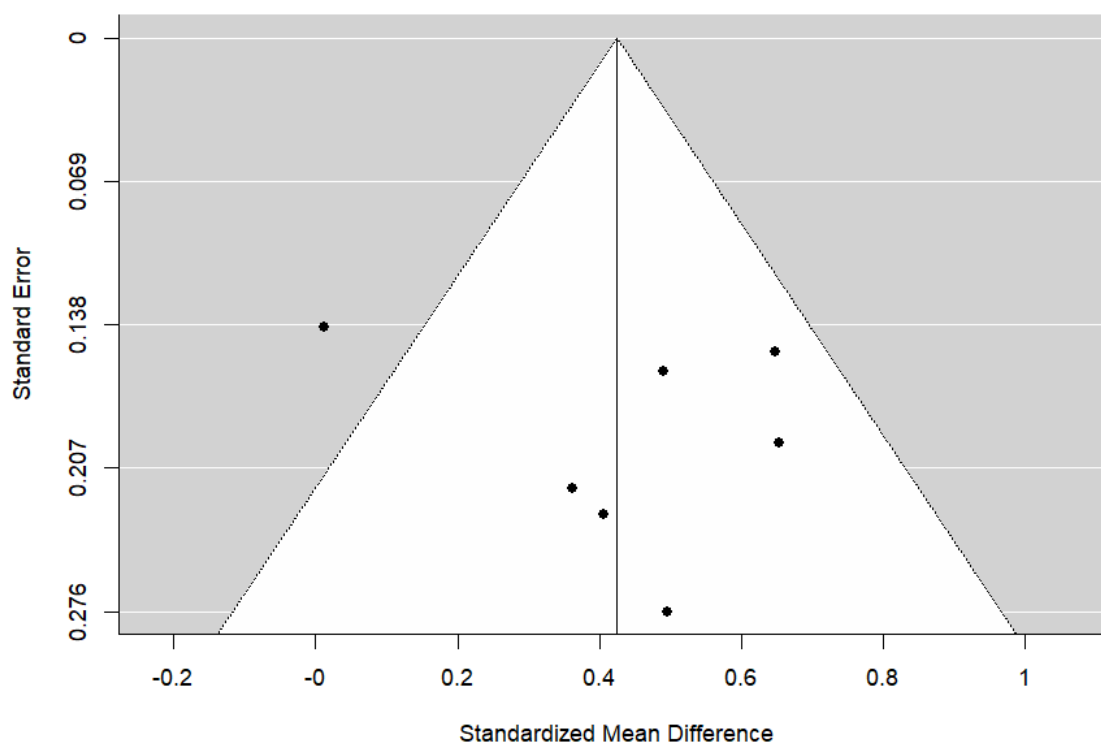


Figure 15. Funnel plot for the meta-analysis of child or adult sexual abuse's effect on child victim empathy

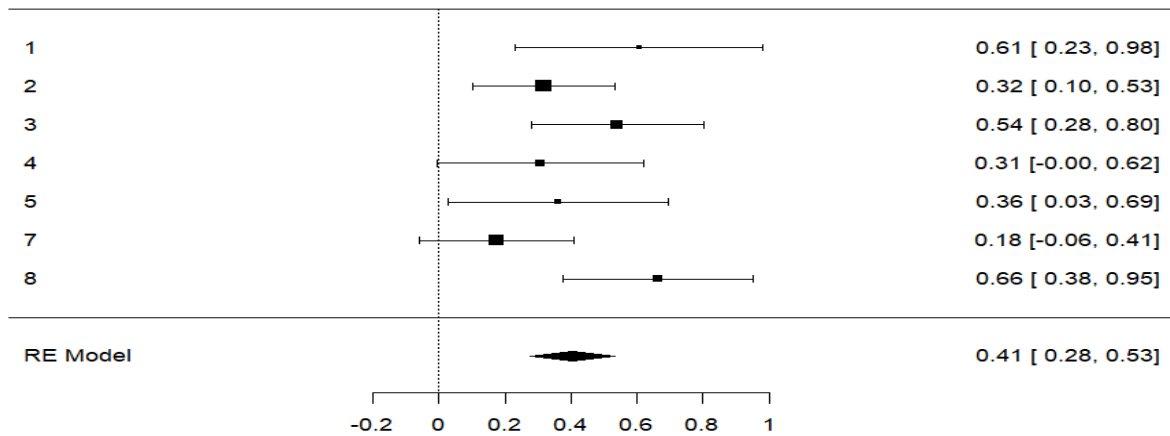


Figure 16. Forest plot for the meta-analysis of child or adult victim, or knowing another victim's effect on child victim empathy

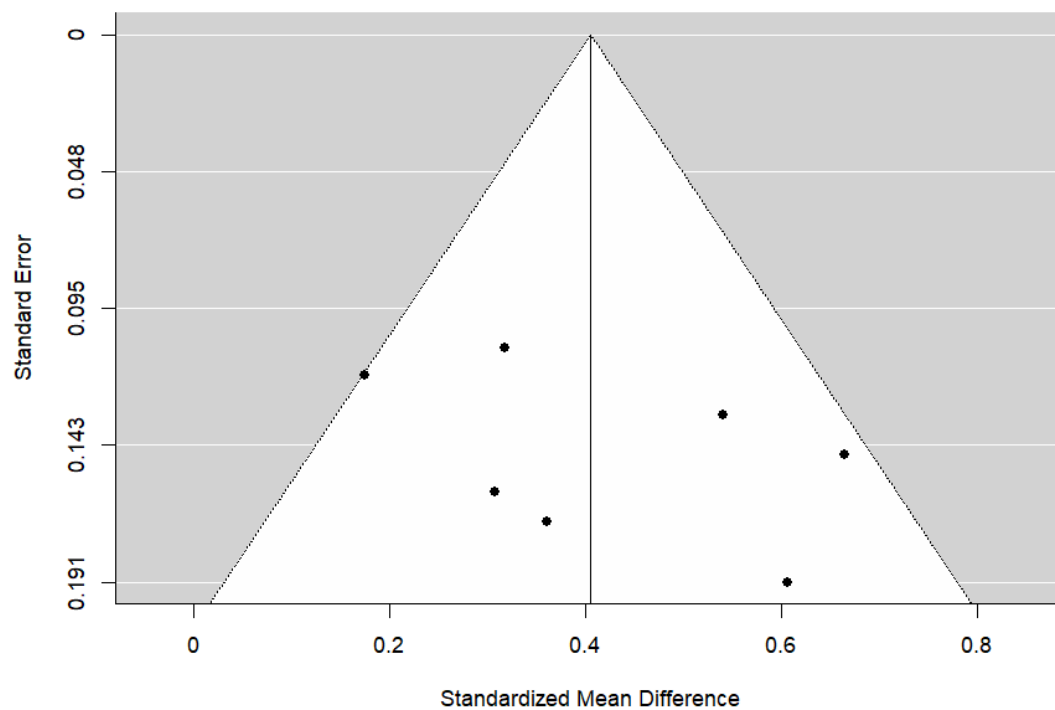


Figure 17. Funnel plot for the meta-analysis of child or adult victim, or knowing another victim's effect on child victim empathy

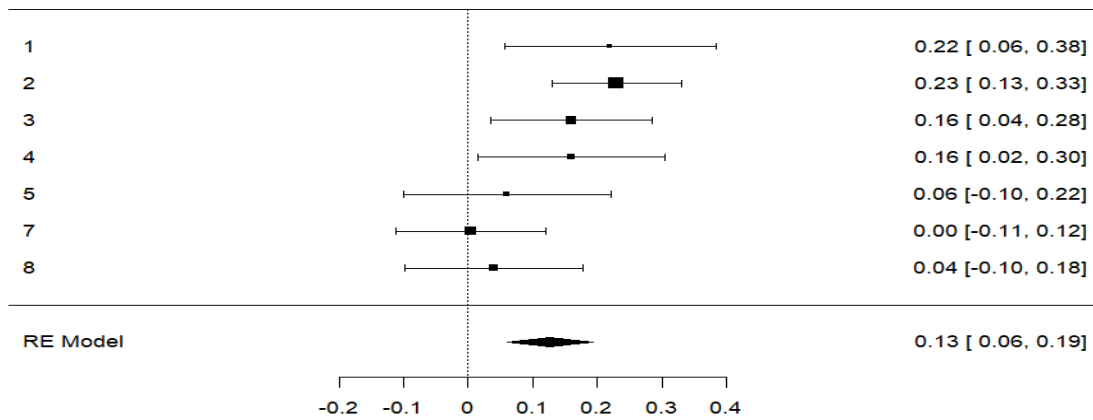


Figure 18. Forest plot for the meta-analysis of the indirect effect of child victim empathy between child sexual abuse and victim credibility

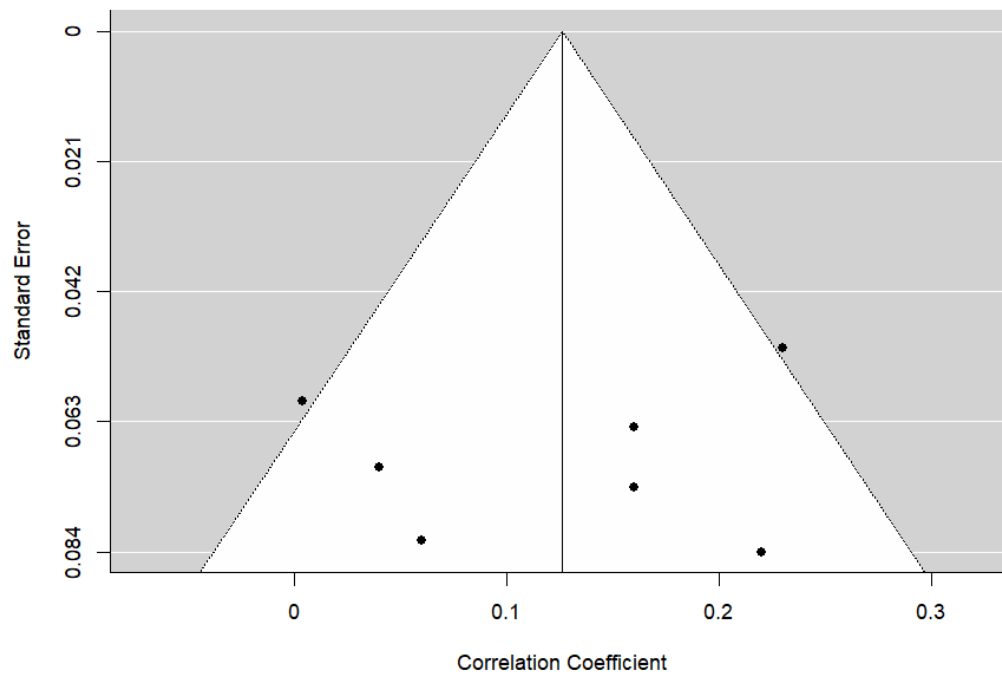


Figure 19. Funnel plot for the meta-analysis of the indirect effect of child victim empathy between child sexual abuse and victim credibility

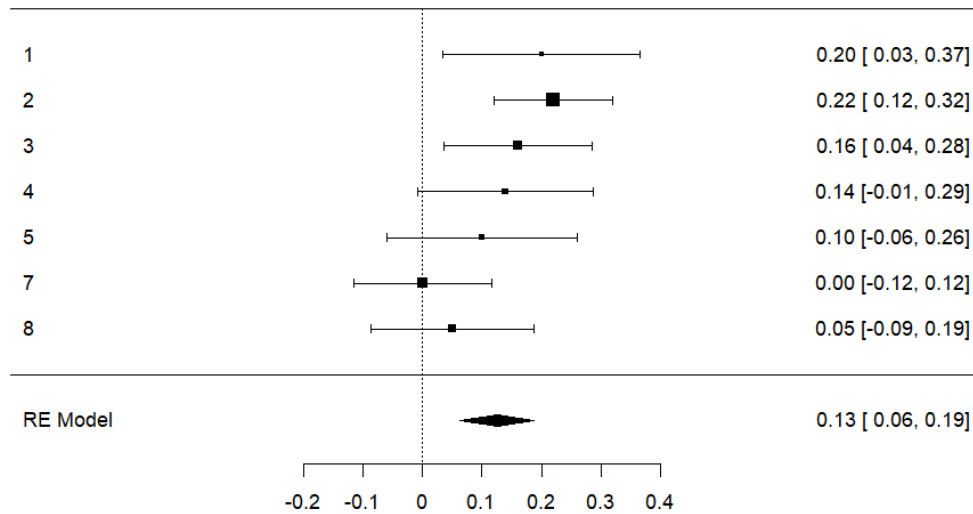


Figure 20. Forest plot for the meta-analysis of the indirect effect of child victim empathy between child or adult sexual abuse and victim credibility

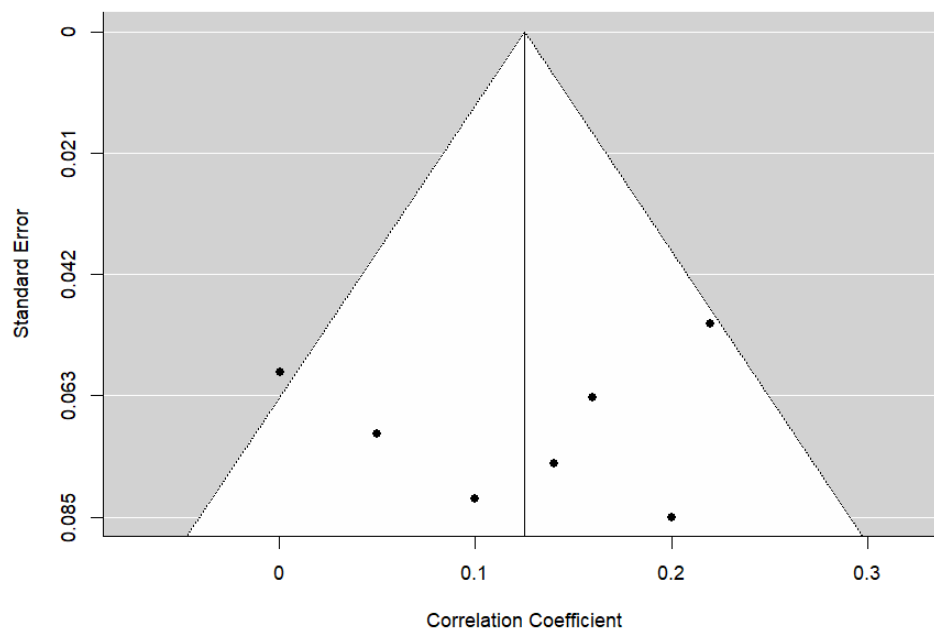


Figure 21. Funnel plot for the meta-analysis of the indirect effect of child victim empathy between child or adult sexual abuse and victim credibility

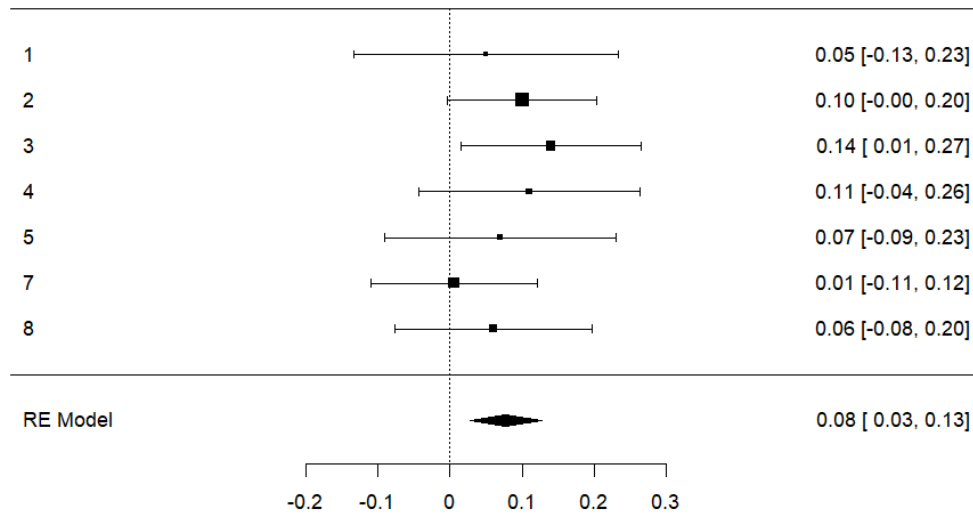


Figure 22. Forest plot for the meta-analysis of the indirect effect of child victim empathy between child or adult sexual abuse, or knowing another victim and victim credibility

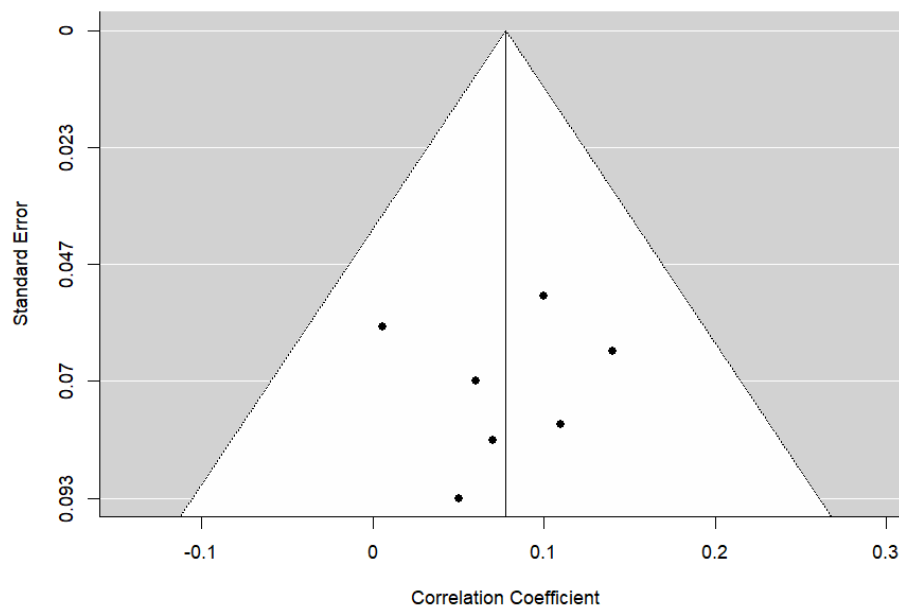


Figure 23. Funnel plot for the meta-analysis of the indirect effect of child victim empathy between child or adult sexual abuse, or knowing another victim and victim credibility

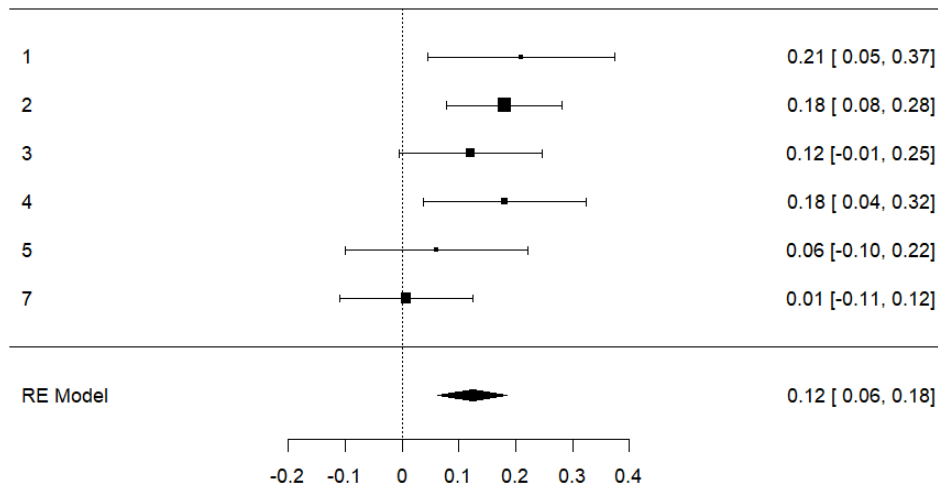


Figure 24. Forest plot for the meta-analysis of the indirect effect of child victim empathy between child sexual abuse and degree of guilt

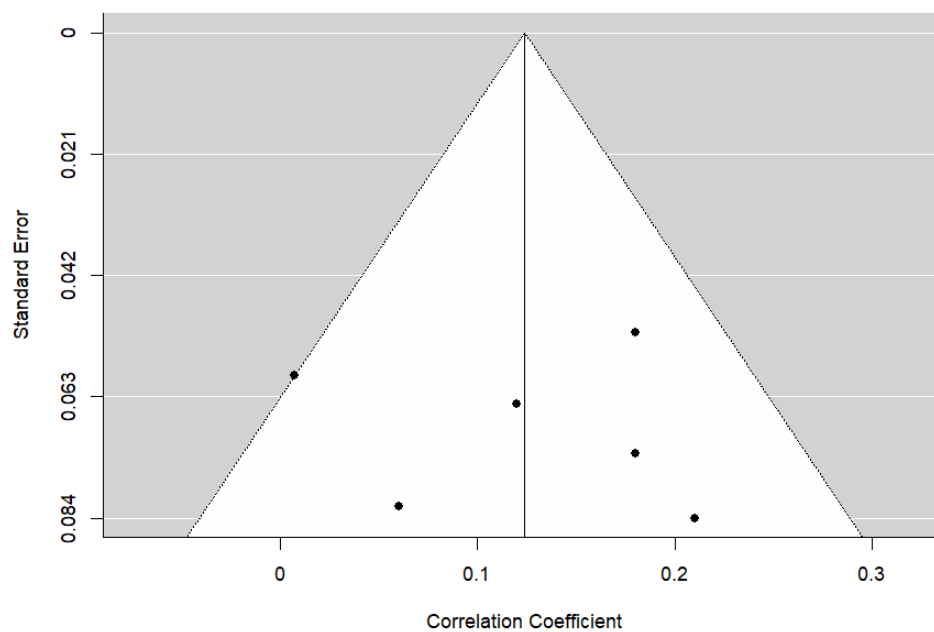


Figure 25. Funnel plot for the meta-analysis of the indirect effect of child victim empathy between child sexual abuse and degree of guilt

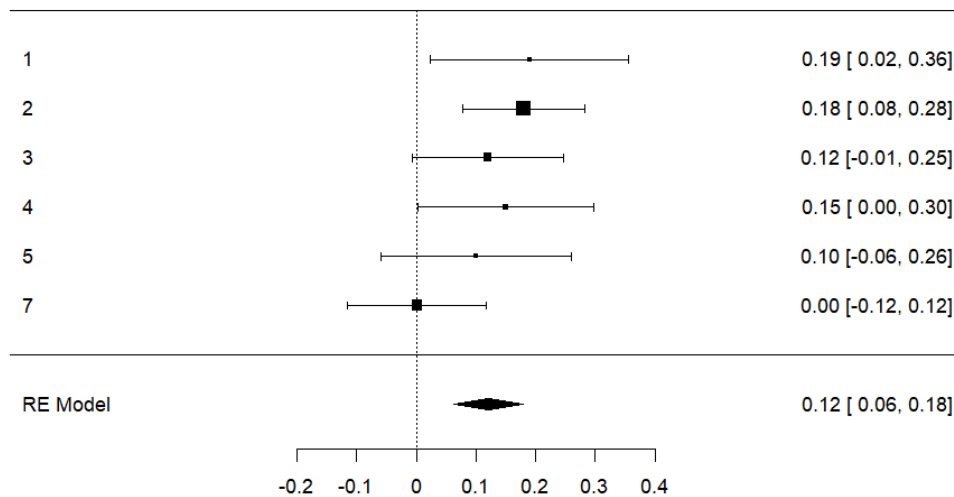


Figure 26. Forest plot for the meta-analysis of the indirect effect of child victim empathy between child or adult sexual abuse and degree of guilt

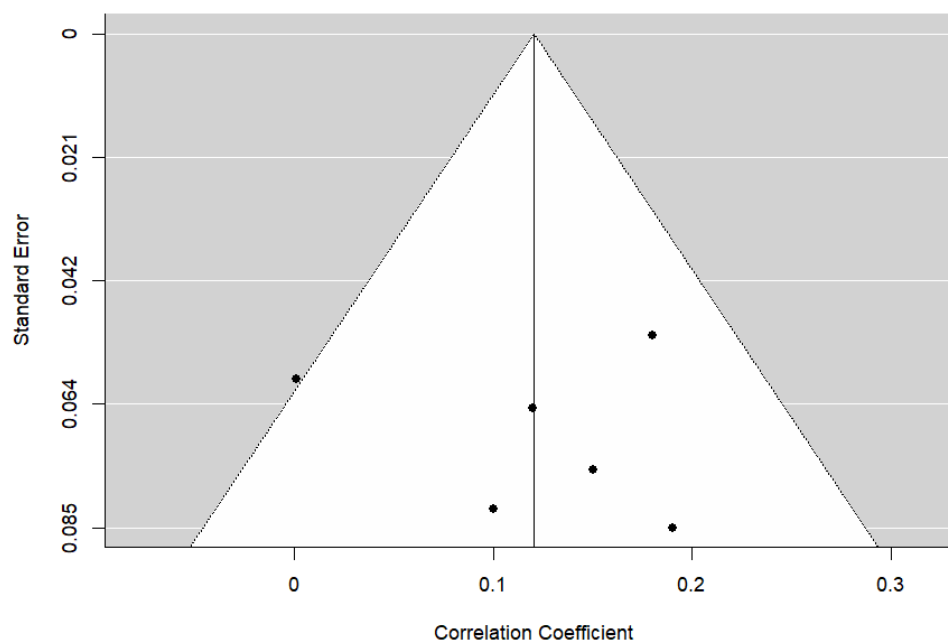


Figure 27. Funnel plot for the meta-analysis of the indirect effect of child victim empathy between child or adult sexual abuse and degree of guilt

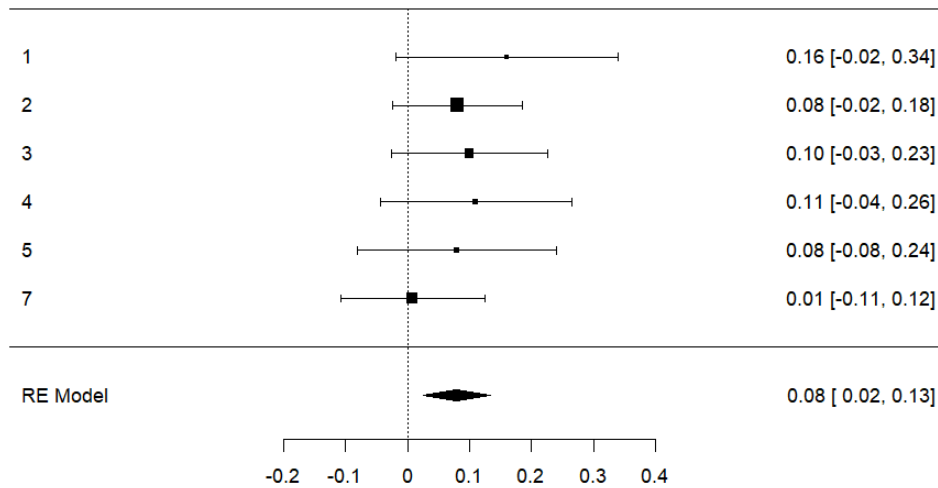


Figure 28. Forest plot for the meta-analysis of the indirect effect of child victim empathy between child or adult sexual abuse, or knowing another victim and degree of guilt

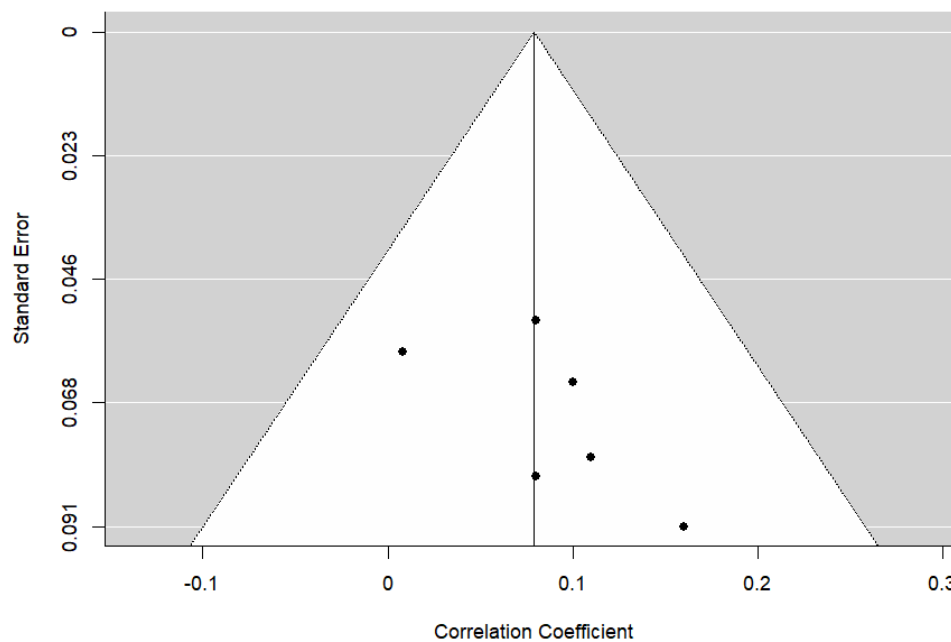


Figure 29. Funnel plot for the meta-analysis of the indirect effect of child victim empathy between child or adult sexual abuse, or knowing another victim and degree of guilt.