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Jackson College of Graduate Studies

THE INVISIBLE JURY MEMBER: CHILDHOOD TRAUMA'S SILENT ROLE IN THE
COURTROOM

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By

Zoey Patterson

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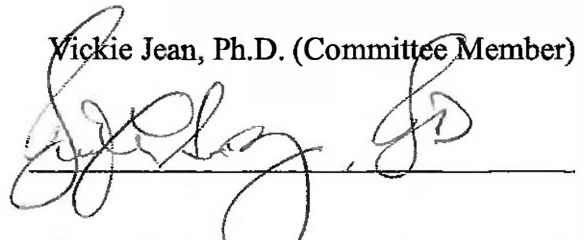
By

A stylized, handwritten signature in black ink, appearing to read 'Jaclyn Maass', written over a horizontal line.

Jaclyn Maass, Ph.D. (Committee Chairperson)

A handwritten signature in black ink, appearing to read 'Vickie Jean, Ph.D.', written over a horizontal line.

Vickie Jean, Ph.D. (Committee Member)

A handwritten signature in black ink, appearing to read 'Jennifer Schmitz, J.D.', written over a horizontal line.

Jennifer Schmitz, J.D. (Committee Member)

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Abstract

This study aimed to provide a better understanding of how a juror's history of childhood trauma may affect their judgment of a defendant's guilt and, as well as their level of empathy toward them. Previous research has indicated that a juror's decision making abilities can be influenced by factors in their personal life. Childhood trauma is one of these factors that can impact decision making as well as empathy. I hypothesized that jurors with a history of childhood trauma would exhibit more empathy toward the defendant, and that it will have a negative relationship with the juror's perception of the defendant's guilt and credibility. Eligible participants for Oklahoma jury duty were invited to participate, disclose their childhood trauma, and give their verdicts and credibility ratings. If participants were eligible for jury duty, they were asked to provide their demographics. After this they were asked to read a case summary detailing the death of a father at the hands of his son. Participants were then given the Revised Adverse Childhood Experiences (ACE) Questionnaire, followed by the shortened form of the Empathy Quotient (EQ-Short). A recording, as well as a typed out version, of the jury instructions was then provided. After this, participants were asked to provide their verdict, culpability ratings, and sentencing recommendations. To ensure the participants read all parts of the study, they were provided with a four question reading check at the conclusion of the survey. This data was collected through a Qualtrics survey. The analyses used were a Pearson Correlation, a Spearman Correlation, and the Hayes PROCESS. This study found no significant results regarding the relationships between participants' trauma and empathy or participant's trauma and guilt rating. Empathy was not found to be a mediator between trauma and guilt or trauma and culpability. There was a significant negative correlation between participant's trauma and their culpability ratings of the defendant. The limitations include a more educated participant pool, the materials used, the participants not

generalizing to the rest of the Oklahoma population, and the use of a mock jury and a generated transcript. Further research should employ a different empathy measure, and use an additional measure to ask participants about their own mental health diagnoses, as well as their stigmas toward mental illness. The right to an unbiased trial is a key principle in the United States justice system. Studying juror biases and what can impact them can lead to more impartial trials for defendants and a more equitable system overall.

Keywords: juror decision-making, empathy, childhood trauma, jury verdicts

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The Invisible Jury Member: Childhood Trauma's Silent Role in the Courtroom

Individuals who are charged with a crime in the United States are granted the right to a trial made up by a jury of their peers. (U.S. Department of Justice, 2023). Juror decision-making is a process influenced by various factors, including individual beliefs, attitudes, emotions, and experiences (Bornstein & Greene, 2011; Carson & Russo, 2001; Curley et al., 2022; Feigenson, 2009). While jurors are instructed to set these personal experiences aside, these experiences still influence their verdict. Jurors are expected to judge the guilt of the defendant at the end of the trial (Higgins et al., 2007; Salekin et al., 1995; Tabak & Klettke, 2014). When they gather to deliberate, and reach a verdict regarding the defendant (U.S. Department of Justice, 2023). The deliberation process is a space where personal factors may influence the outcome.

Childhood trauma may cause a juror to think differently about information presented in a trial. Childhood trauma refers to experiences during one's formative years that are emotionally distressing or harmful, often resulting from events such as abuse, neglect, or witnessing violence. These early adverse experiences can have long-lasting effects on a person's mental, emotional, and physical well-being, influencing their development and shaping their future relationships, behaviors, and decision making (The American Society for the Positive Care of Children, 2018; Brown et al., 2009; Substance Abuse and Mental Health Services Administration, 2023). Childhood trauma is diverse and includes: sexual, emotional, or physical abuse, neglect, domestic violence, parental addiction and substance abuse, as well as parental mental illness (Substance Abuse and Mental Health Services Administration, 2023). This indicates that there is a lot of diversity in terms of childhood trauma, and each individual may be affected differently by their trauma. Childhood trauma has also been linked to the development of several mental health disorders in adulthood such as depression, dissociation, and other behavioral and mental

health issues (Accomazzo & Romney, 2015; Bremner, 1999; Cross et al., 2017; Goodman et al., 2018; Green et al., Maschi et al., 2013; Wiersma et al., 2009). These findings demonstrate the repercussions of childhood trauma and how it can affect an individual's well-being and behaviors. As such, psychological backgrounds are important to consider when addressing how a juror makes their decisions. According to the Substance Abuse and Mental Health Services Administration (2023) over two thirds of children have reported experiencing one event that led to trauma by the age of 16. The American Society for the Positive Care of Children (2018) assessed 10 separate categories of abuse that individuals have reported experiencing in their childhood. With how diverse and common childhood trauma can be, the multifaceted impact warrants further in-depth study to fully comprehend its effects within a courtroom setting, specifically in jury decision making. One of the mental illnesses that can be associated with trauma is post traumatic stress disorder (PTSD). For example, Higgins et al. (2007) found that when defendants used PTSD as an excuse for why they committed the crime, jurors viewed this as a more credible and persuasive excuse than those who used Cocaine Dependency Disorder as an excuse. They felt PTSD was not as much self-inflicted, and they had more sympathy for them.

Trauma survivors may be at a greater risk for committing crimes (Auslander et al., 2016; Baer & Maschi, 2003; Baglivio et al., 2015; Brown et al., 2022; Jackson, 2021; Williams, 2020). Auslander et al. (2016) found that young girls who reported experiencing trauma have a higher level of aggressive behaviors, which may be due to the fact that they witnessed violence within their household during their childhood. Therefore, experiencing the trauma of domestic abuse during childhood may cause a woman to act out violently later in life, putting them at risk of future arrest, compared to those who grew up in a household not witnessing violence. Baglivio et al. (2003) reported that higher adverse childhood experiences (ACE) scores are associated with

an early age of the first offense for juvenile offenders and can contribute to legal issues an individual may face in adulthood. Baer and Maschi (2003) stated that traumatized children are at a higher risk of juvenile delinquency than non traumatized children.

Understanding how empathy and childhood trauma interacts in juror decision-making is crucial for ensuring fair and just outcomes in legal proceedings. Not only does trauma affect the defendant, but it also affects jurors. When jurors are exposed to details of a case, they may interpret and evaluate evidence differently based on their cognitive and affective empathy levels. For example, if a defendant has suffered through similar circumstances as the juror, the juror may feel empathy for them, since they know how it feels to be in a similar traumatic situation (Eklund et al., 2009; Rusting, 1999). Individuals who are more empathetic have more empathy for defendants, assign them less responsibility for their crimes, give them less harsh sentences, and are more apt to consider the circumstances that led them to commit the crime (Haegerich & Bottoms, 2000; Sjöberg, 2015; Wood et al., 2014). Jurors' ability to regulate their emotions and empathize with both the defendant and the victim can impact their decision-making process.

Empathy

Empathy is the ability to understand and share the feelings of another person. It involves not only recognizing and comprehending someone else's emotions but also being able to respond to those feelings with care and concern (Batson et al., 1995; Blair, 2005). Empathy plays a crucial role in building relationships, fostering communication, and promoting compassion and understanding among individuals (Chrysikou & Thompson, 2016; Decety & Moriguchi, 2007). Without empathy, an individual can experience dysfunction in social settings, as it is a crucial social behavior and interpersonal relationships. Specifically, it may affect the way an individual

engages in their decision-making in a courtroom setting, as emotions may be high in these situations.

Two different forms of empathy commonly discussed in research are state and trait level empathy. Trait empathy refers to an individual's ability to have empathy across an array of different situations, essentially being a characteristic that they possess (Geiger et al., 2024; Kunyk & Olson, 2001; Netzelek et al., 2007). In contrast, state empathy refers to empathy that varies depending on the context of the situation and is not a constant trait of an individual (Geiger et al., 2024; Netzelek et al., 2007). Both forms of empathy have been studied in courtroom settings. Individuals who are high in trait and/or state level empathy felt that the defendant was remorseful for their actions (Wood et al., 2014). Wood et al. (2014) examined the impact state and trait level empathy have in a courtroom setting. Jurors with higher state level and higher trait empathy were more likely to disagree with guilty verdicts and assign less responsibility to the defendant. The researchers found that there was no interaction in the relationship of state and trait level empathy. When a mock juror felt state empathy, they did not display trait empathy. If they had trait empathy, they did not show state empathy.

There are several factors that influence the empathy a juror will feel toward the defendant. Numerous studies have investigated the complex role that empathy plays in the courtroom and in juror decision making more specifically. Tsoudis (2002) found that when a defendant displayed sadness, the jurors felt empathy for them. The empathy that they felt then changed the way they viewed the personality of the defendant. This increased level of empathy caused the juror to assign a less harsh punishment to the defendant. Empathy impacts not just their overall view of the defendant, but also their judgment of his/her guilt and recommendation of punishment. Sjöberg (2015) found a relationship between increasing levels of empathy and

decreased levels of strict punishment. This study concluded that empathy plays a role when jurors make their decisions regarding a defendant. Similarly, Haegerich and Bottoms (2000) and Ford et al. (2001) found that when jurors felt more empathy for the defendant, they were more compassionate with the way they judged their guilt, and found them less responsible for the crime that they committed. Other factors often interact with empathy. According to Najdowski and Weintraub (2019), the sex of the juror can influence how much empathy is felt toward the defendant. When female jurors perceived that a female defendant had confessed voluntarily they were less empathetic toward her and found her more guilty than male jurors. When jurors empathize with a defendant, they may view them in a more favorable light, which may in turn affect how they come to a decision regarding the defendant's guilt and credibility.

Childhood Trauma and Empathy

Understanding the impacts of childhood trauma is crucial, as it impacts our ability to cultivate empathy. Research on the relationship between previous trauma and empathy is quite mixed. Some research has found evidence that childhood trauma is related to feeling more empathetic towards others as an adult (Greenberg et al., 2018; Lim & DeSteno, 2016). Specifically, Greenberg (2018) studied traumatic events that happened to individuals before they turned seventeen. Empathy was measured through cognitive empathy, affective empathy, and social skills. Adults that had experienced a traumatic event had elevated levels of cognitive and affective empathy, as well as social skills compared to those adults who had not experienced a traumatic event. Lim and DeSteno (2016) found that individuals who have been affected by adversity in childhood have more dispositional compassion for others, which is caused by elevated levels of empathy.

On the other hand, there are some cases in which researchers found traumatized individuals to experience less empathy (Narvey et al., 2020; Parlar et al., 2014). Narvey et al. (2020) and Parlar et al. (2014) suggest that two possible, yet unstudied, explanations for this result include protection against re-experiencing trauma and a sort of normative egocentrism. The lack of empathy may be a way of the participants protecting themselves in that sharing the feelings of others could further cause them hardships, so they choose not to re-experience those negative feelings. Normative egocentrism refers to a person who assumes that their response to an experience could or should be the response of others: “*I experienced X events and I didn’t commit the crime, so there is no excuse.*” At this point, the relationship between adverse childhood events and empathy remains unclear.

Culpability

Culpability refers to the degree to which a person can be assigned blame or be considered responsible for their actions. Robinson (1980) explains the five levels of culpability as defined by the 1953 Model Penal Code, purposely, knowingly, recklessly, negligently, and absolute liability, also known as faultlessly. This code is used in legal settings in order to determine a defendant’s culpable mental state. A newer study narrowed down these categories. Brink (2018) explains that there are three concepts of culpability within criminal law, narrow culpability, broad culpability, and inclusive culpability. Narrow culpability relates back to the Model Penal Code. It identifies which of the five levels that the individual engaged in when committing the crime. Broad culpability refers to the condition of responsibility that renders a wrongful act blameworthy; without it, the act is excused. Inclusive culpability combines the wrongful act with this responsibility, forming the basis for deserved punishment.

Overall, culpability is used to justify the level of punishment that is handed down to a defendant. Based on previous research studying jury decision making, jurors view culpability in a way that is comparable to blameworthiness. Jurors tend to think: how responsible is the defendant for the crime, what was their intent, and what are the circumstances surrounding the offense. This is where a juror's empathy may come into play. The more empathy they might have, the less blameworthy they could potentially find the defendant. If a juror believes that a defendant is guilty, culpability serves as a framework for jurors to assess the extent of a defendant's responsibility for a crime.

Mitigating evidence is one factor that jurors use in assessing culpability. Mitigating evidence refers to psychological and psychosocial information presented during the sentencing phase of a trial, with the aim of reducing the penalties for criminal offenses (Barnett et al., 2004; Espinoza & Willis-Esqueda, 2015; Tetterton & Brodsky, 2007). This information allows the defense team to share background information that may impact the jurors' assessment of culpability. When mitigating evidence is strong (e.g., supports the idea that the defendant had a legitimate reason for committing the crime), jurors are more likely to give a less severe sentence to the defendant (Espinoza & Willis-Esqueda, 2015). In other words, when jurors understand that there are other circumstances that may have played a role in the defendant committing the crime, they find them less culpable, and therefore lessen the punitive actions taken against them.

Common forms of mitigating evidence that can influence perceptions of culpability are adverse childhood experiences, mental health issues, and the presence of genuine remorse (Justia, 2023). When an individual experiences trauma in their childhood this can lead to defenses for the crimes that they have committed (Hiromoto, 2020). These defenses include insanity and reduced capacity for specific intent crimes. It can also lead to mitigation at

sentencing, which is not a defense, but more so a way to help determine the severity of the punishment handed down to the defendant. This is where hearing mitigating evidence becomes crucial for the jurors, as it provides them with a deeper understanding of the underlying motivations and contributing circumstances.

Research has indicated that childhood trauma can help to explain aspects of criminal behavior, and therefore help to determine culpability in the crime as well help to establish what level of punishment is just for the defendant (Gohara, 2013; 2018). But it is not just the defendant's past that can influence judgements of culpability, but also attributes of the juror. As mentioned previously, empathy can also play a role in a juror's assessment of culpability (Ford et al., 2001; Haegerich & Bottoms, 2000). In the case of research on Battered Women's Syndrome, when participants actively imagined themselves in the defendant's position, they tended to empathize more with the defendant and viewed her as less culpable of the crime (Holloway & Weiner, 2018). The defendant's past and the juror's current state may interact to influence judgments of culpability.

The existing literature has provided an understanding of the role that childhood trauma can have on a person's adult life. Of particular importance is how it is related to an adult's behavior, decision-making, and empathy. Previous research has shown that when an individual experiences trauma, the way they express empathy is different than those who have not experienced trauma. Those who experience childhood trauma tend to either feel much more empathy than those who did not experience trauma, or feel an extreme lack of empathy. There is currently a gap in the literature specifically addressing how a history of childhood trauma influences jurors' empathy towards defendants and their perceptions of guilt and credibility in legal cases.

The Current Study

The current study investigated the role of a mock juror's childhood trauma on their decision making and judgements of culpability in criminal cases. This study also tested whether those relationships were mediated (i.e., driven by) the mock juror's degree of empathy. The following hypotheses about the basic relationships with juror trauma were tested:

1. A mock juror's trauma will be positively related to their feelings of empathy.
Those who have experienced more childhood trauma will report more empathy in the context of the criminal case.
2. There will be a negative relationship between the amount of trauma they have experienced and their perceptions of the defendant's guilt. Those who experienced less trauma in childhood will be more likely to find the defendant guilty.
3. There will be a negative relationship between the mock juror's degree of trauma and their assessments of the defendant's culpability or degree of responsibility for the crime. This means that the more trauma the juror has experienced, the less responsible they will consider the defendant to be for the crime.

The next set of hypotheses regarded possible mediation, bringing together the relationships tested in the first set of hypotheses.

4. Empathy will mediate the relationship between mock juror's trauma and perceptions of defendant guilt. This means that those who experienced more trauma in childhood would feel more empathy toward the defendant, which is why they would be less likely to see the defendant as guilty.
5. Empathy will similarly mediate the relationship between a mock juror's trauma and their assessments of the defendant's culpability. It is predicted that those who

experienced more trauma in childhood would feel more empathy toward the defendant, which is why they would view the defendant as less culpable for the crime.

Method

Participants

The population of interest for this study were those who are eligible for jury duty in the state of Oklahoma. The rules for eligibility were based on the Oklahoma Statutes Title 38 (Jurors Qualifications & Exemptions, 2024). Reasons for ineligibility included: those who are not residents or registered voters, under the age of 18, convicted felon who has not completed all parts of their sentence, serving in any form of law enforcement or legislation, and being licensed attorneys. Those who were not eligible to serve on a jury were excluded. Participants were recruited through a global email blast at the University and social media posts. At the conclusion of the survey, all participants were asked to share a link to the survey with any friend, family, or colleague in Oklahoma who might be willing to participate. The demographic information that was collected was age, gender, race/ethnicity. The age range for this study was 18 to 73. The average age was 33.82 ($SD = 13.42$). When asked to identify their gender, 31% of participants identified as men, 62% identified as women, 4% identified as non-binary/third gender, and 3% preferred not to say. The most common race/ethnicity of participants was White or Caucasian (72%), followed by mixed race (14.4%), Hispanic/Latinx (5.6%), Native American or Alaska Native (3.2%), Asian (2.4%), and black/African American (1.6%). The participant was also asked if they were currently in college or if they had completed a degree, with 41% of participants currently working on a college degree, 45% previously completed a college degree, and 13% answered neither. Thirteen participants (10.4%) reported having served on a jury

previously. See Appendix A for all demographic and screening items. There were no incentives offered to participants.

Materials

Case Summary

A mock case/trial summary of a criminal case was used for the purpose of this study (Appendix B). This was developed by the primary researcher through a process of reading previous case summaries in the media and from past research. From this, the following parameters were selected for the case study to be used in this research: a young adult is being accused of murdering a parent, defendant has experienced trauma as a child at the hands of said parent, this verbal and/or physical trauma was directly inflicted or witnessed, guilt and culpability of the defendant is debatable. The primary researcher used the artificial intelligence agent, Chat GPT-5, to then generate sample mock summaries given these parameters. For full disclosure, the complete “chat” is [available here](#). The resulting case summary that was used in the current study was 246 words long, which includes a brief summary of the event in question with key points brought up from the prosecution and defense. The crime involved a 27 year old man who was being charged with second degree murder against his father. The defense argued that the defendant’s history of childhood trauma played a significant role in shaping the events of the crime.

Empathy

Empathy was measured through the shortened form of the Empathy Quotient (EQ-Short). The EQ-Short (Wakabayashi et al., 2006) is a 22-item measure with participants responding to each statement on a 4-point Likert scale (Strongly disagree, slightly disagree, slightly agree, strongly agree). Scores range from 0-44, with higher scores indicating more empathy. For

positively phrased items (e.g., “I really enjoy caring for other people”), responses of slightly agree and strongly agree receive 1 and 2 points, respectively. Either of the disagree answer options receive 0 points. For negatively phrased items (e.g., “Seeing people cry doesn't really upset me”), responses of slightly disagree and strongly disagree receive 1 and 2 points, respectively. This measure is available in Appendix C. The average score was 24.26 and the standard deviation was 7.77

Participant's Childhood Trauma

Childhood trauma was measured through the Revised Adverse Childhood Experiences (ACE) questionnaire which is a self report measure. The ACE consists of 14 questions that are either a checked box for yes or an empty box for no. A score is calculated based on how many boxes were checked. Higher scores therefore indicate more trauma the person has experienced. This measure is included in Appendix D. The average ACE score was 3.65 and the standard deviation was 3.53.

Guilt

Jury instructions were presented before the verdict. A typed version of the jury instructions was provided as well as an audio recording reading the instructions aloud (Appendix E). Guilt was measured through a guilty or not guilty verdict and on a continuous scale of one to ten (1 = not guilty, 10 = extremely guilty), which is provided in Appendix F. For this measure, there was a mean of 5.17 and a standard deviation of 2.42.

Culpability

Culpability was measured two ways. All participants rated culpability on a scale of 1-7 based on the measurement used by Ford et al. (2007). This measure asked, “To what extent do you think the defendant is to blame for the death of his father?” with 1 being “not at all to blame”

and 7 being “completely to blame.” The second measure of culpability was given to those who selected guilty for their verdict. This measure was a sentencing recommendation, on a scale from ten years to life in prison without the possibility of parole (see Appendix G for both measures of culpability). While sentencing is not asked of jurors in a real criminal trial, it served as an additional, more applied, measure of culpability for research purposes. The average score was 4.47 and $SD = 1.69$.

Other Measures

There was also a demographic questionnaire about age, gender, race/ethnicity, the relationship the participant has to the school (faculty, staff, student, or combination), and college major. To validate whether participants are reading the case summary, we will record the amount of time participants spend on that page on Qualtrics and include a brief reading quiz. This reading quiz will include four multiple choice items about facts presented in the case summary. The demographic questions are provided in Appendix A and the reading check is provided in Appendix H.

Procedure

Participants received an email containing a Qualtrics survey link via global email blast at the University of Central Oklahoma. It was sent out to everyone with an email address, including students, faculty, and staff. A Qualtrics link was also shared to the social media of the researchers. Informed consent was obtained at the beginning of the survey. First participants answered all demographic questions and items to assess eligibility for jury duty (as described in the Participants section). Next, participants completed the ACEs measure and read the mock trial transcript. After reading, participants completed the EQ-Short. Participants then read jury instructions in order to make an informed decision. There was also an audio recording included

to read the jury instructions aloud. After the instructions, participants rated guilt, gave their verdict, rated culpability, and gave their sentencing recommendations if they found the defendant to be guilty. At the conclusion of the survey participants were given a reading check.

Results

Descriptive Statistics

Descriptive statistics were calculated for the main variables. The average guilt rating (on a scale of 1-10) was 5.17 ($SD = 2.42$), with 46 participants voting ‘not-guilty’ and 79 voting ‘guilty’ for the dichotomous measure of guilt. The average assessment of culpability, as measured by the continuous rating of blame (on a scale of 1-7), was 4.47 ($SD = 1.69$). For ACE scores, which ranged from 0-14, participants averaged 3.65 ($SD = 3.53$). Finally, the EQ-Short average was 24.26 ($SD = 7.77$), with possible scores ranging from 0-44.

Inferential Statistics

Hypothesis 1 regarded the relationship between the participants’ level of trauma experience and empathy experienced toward the defendant. A Pearson correlation was conducted to correlate ACE scores and Empathy Quotient scores, which revealed a non-significant effect, $r(123) = 0.02, p = .85$.

Hypothesis 2 regarded the relationship between the participants’ trauma and their assessment of the defendant’s guilt. In order to test this hypothesis, two correlations were conducted. The first was a point-biserial correlation between the ACE scores and the guilty/not guilty verdict, which was not significant, $r_{pb}(123) = -.10, p = .25$. A Pearson correlation between ACE scores and guilt ratings was also not significant, $r(123) = -.15, p = .09$.

Hypothesis 3 concerned the relationship between participants’ trauma and assessment of defendant culpability for violent crimes. A Pearson correlation found a significant, negative

correlation between ACE scores and culpability ratings, $r(123) = -.22, p = .02$. A Spearman correlation was used to test for a correlation between ACE scores and sentencing (a second measure of culpability given to those who chose a guilty verdict). This test was not significant, $r(44) = -.17, p = .27$.

Hypotheses 4 and 5 regarded empathy as a mediator for the relationship between trauma and guilt and between trauma and culpability, respectively. Both mediation tests were conducted using the Hayes PROCESS macro (Hayes, 2017) in SPSS, which uses 5,000 bootstrap samples to test the indirect effect of the independent variable (trauma) on the dependent variable (guilt or culpability), through the mediator (empathy). The Hayes PROCESS model provides a confidence interval for that indirect effect. The results are interpreted that if the interval contains a zero, there is no evidence of a significant (mediation) effect. This was the case for this research study for both analyses. For Hypothesis 4, empathy did not significantly mediate the relationship between trauma and perceptions of guilt, 95% CI $[-.0009, .0125]$. For Hypothesis 5, empathy did not significantly mediate the relationship between trauma and assessments of culpability, 95% CI $[-.0086, .0094]$.

Discussion

The goal of this work was to investigate whether there was a relationship between childhood trauma, empathy, and jury-decision making. Jury decision making was studied in terms of the defendant's guilt and culpability. Overall, I predicted that the greater childhood trauma that a juror had experienced should predict more empathy felt toward the defendant, leading to assigning less guilt and less culpability.

Most of the hypotheses in the current study were not supported. Hypothesis 1, that there would be a negative relationship between an individual's trauma and their level of empathy, was

not supported. Hypothesis 2, which predicted that the level of trauma an individual experienced in their childhood would be negatively related to their perceptions of guilt, was also not supported. It may be worth noting that although not statistically significant, the correlation between childhood trauma and ratings of guilt did approach significance and was in the predicted direction. Hypotheses 4 and 5, which predicted that empathy would mediate the relationships between trauma and guilt, and trauma and culpability, respectively, were not supported.

There was support for Hypothesis 3, indicating a negative relationship between trauma and culpability. When measuring culpability through the more restricted measure of sentencing recommendations, there was no significant relationship. However, when measuring culpability with the more fine-grained continuous rating of culpability, there was a statistically significant negative correlation. The more trauma participants reported, the less blame they placed on the defendant for his actions. The lack of significant results with the sentencing measure was likely due to the ordinal nature of the variable and having less data to analyze (since only those who voted guilty were asked for sentencing evaluations).

Overall the results of the study show evidence for a relationship between jurors' experiences of childhood trauma and their perceptions of criminal *culpability*, but not guilt. However, there was no evidence that this relationship was mediated by empathy. This means that the participants with more traumatic experiences in their past did view the defendant as less responsible for his actions, but this was *not* being driven by increased feelings of empathy toward the defendant. Previous research has indicated a correlation between trauma and culpability. When jurors are presented with strong mitigating evidence (i.e. a history of childhood trauma), they are more likely to give the defendant a lighter sentence (Espinoza & Willis-Esqueda, 2015). When jurors are presented with a circumstance that may have led the

defendant to commit the crime they did, they view them as less culpable. Another example of this is Battered Women's Syndrome. Battered Women's Syndrome refers to women who act out toward their abusive partner (Dutton & Painter, 1993). This type of trauma that a partner can experience has led jurors to be less culpable for their crimes, as previously studied by Holloway and Weiner (2018). With this past research in mind, there can be a relationship between culpability and trauma. A juror's past relationship with trauma can cause them to view the defendant as less culpable of their crimes.

Most of the predictions of the current study, particularly those concerning empathy as a crucial mediator, were not supported. One theory that may explain this lack of mediation may be the link between childhood trauma and resilience. Studies have shown that when resilience is fostered in a child who has experienced trauma, they have more long term psychological resilience (Dong et al., 2022; Roy et al., 2011; Schulz et al., 2014). These studies concluded that individuals who are more resilient are less likely to succumb to the effects of childhood trauma. So, while increased empathy is often found as an effect of experiencing childhood trauma (Greenberg et al., 2018; Lim & DeSteno, 2016), if participants developed strong resilience in response to their trauma, they may not have seen this effect on empathy. In other words, a resilient individual may be less susceptible to the consequences of childhood trauma, such as increased empathy, and therefore that increased empathy may not be present in their decision making.

The lack of significant results in this study may also be due to limitations in the study. The current sample consisted primarily of college students or people who had already received a college degree. Research has shown that those with higher socio-economic status (SES) are more likely to achieve a college education (Doershuk et al., 2016; Reardon et al., 2013), and that

higher SES is correlated with less experience of childhood trauma (Assari, 2020; Misiak et al., 2022). Therefore, the current sample may not have had a sufficient number of participants who experienced high amounts of trauma to fully capture an effect.

Another aspect of the current study that may have played a role is the nature of the materials used. Participants read a summary of a trial instead of seeing the defendant in person. The lack of face to face contact between the juror and the defendant may have led to feeling less empathy toward them. Previous research has found that seeing the emotions displayed by the defendant can have an impact on juror decision making (Nuñez et al., 2015; Phalen et al., 2025). Seeing a defendant and their emotions may elicit more of an emotional response compared to just reading a short case summary. The participants in the current study not being able to see the defendant may have lowered the likelihood of their empathy and decisions being affected.

This study used a measure that focused on empathy as a broad term. However, there is an important distinction between state and trait level empathy. As mentioned in Wood et al. (2014), jurors who had high trait-level empathy did not necessarily show high state-level empathy. Collapsing across the two types of empathy could have lessened the likelihood of seeing a significant result in the current study.

There are other limitations of the current study which are worth addressing. The high percentage of participants in the sample who had or were working on college degrees, as mentioned previously, is also not representative of the population of Oklahoma citizens. While 86% of the participants in this study had obtained or were working toward college degrees, across the state of Oklahoma, only 28.3% of residents above 25 years of age have a bachelor's degree or higher (U.S. Census Bureau). This study had a much higher representation of educated

people compared to the actual population of Oklahoma. Not only might this have affected the results, but the sample may not generalize to the broader population of Oklahoma jurors.

Another limitation of this study was the use of a mock jury and a generated transcript. Emotions would run much higher in a real courtroom compared to in a mock setting. When jurors are tasked with coming to a verdict in a real court case, there is much more weight to their decision; their decision determines the course of somebody's life. In this study, the scenario and people involved were entirely fictional. With the participants being aware of this, there was much less emotion and pressure involved in making their decision. This lowers the ecological validity of the study as it is unlikely to perfectly translate to the real world. Additionally, some of the wording in the case summary was unclear and may have caused confusion for the participants. It first states that the father picked up a fireplace poker, but then later mentions that it was the defendant who picked it up. This wording may have made it confusing as to what exactly transpired between the victim and the defendant. It is possible that the confusion influenced participants' perceptions of guilt and/or culpability.

The significant relationship identified in this work between trauma and culpability ratings may have important implications that could extend to many areas of the courtroom. During the jury selection process, lawyers may consider asking jurors about any trauma they may have experienced during their childhood. This may be particularly important in cases that involve a defendant who has also experienced childhood trauma. The results of this study show that a juror who has more trauma may find a defendant less culpable for their crimes.

In the investigative phase, this may also apply to detectives who are on cases that involve the perpetrator having childhood trauma. Although detectives are taught to be impartial and stick to the facts of the case, if they also experienced similar trauma to the perpetrator, it may play a

role in their investigation. They may view the perpetrator as less culpable. If they are summoned to testify during the trial, they may speak in ways that paint the defendant in a more favorable light compared to detectives that did not have a traumatic childhood. Prosecutors who have experienced trauma may also wind up filing less severe charges against the defendant. For example, a prosecutor may have to decide to pursue a first degree murder, second degree murder, or manslaughter charge (a killing committed with intent) or third degree murder or involuntary manslaughter (a killing committed without intent). The charge that the prosecutor decides to file could potentially be biased based on the experiences they had in childhood.

The summoning of an expert witness in trials could also be something that lawyers can take a different approach to when considering the results of this study. In a trial involving a defendant who was a victim of childhood trauma, it may be beneficial for the defense attorneys to bring to the stand an expert in childhood trauma. The expert witnesses could potentially then add further context to why childhood trauma may have played a role in the crime that was committed. This could make for a more informed jury and judge when it comes to decision making events.

For future research, it would be beneficial to use an empathy measure that separates the two types of empathy previously mentioned (state vs trait level empathy or cognitive vs affective empathy). There is a great deal of research that has found reliable relationships between empathy and assessments of guilt, so the topic should not be ruled out. Being able to capture how each specific type of empathy plays a role in juror decision making may increase the likelihood of identifying significant results compared to the broader view of empathy as it was studied in this case.

In addition to narrowing down the empathy measures, the current study's definition of trauma could also benefit from being narrowed down. Previous research has indicated that there are five different forms of childhood trauma: childhood witnessing violence, childhood neglect, childhood emotional abuse, childhood physical abuse, and childhood sexual abuse (Sansone et al., 2012; Sansone et al., 2013). The results of these studies have shown that there are different outcomes depending on which form of trauma was experienced. Further narrowing down childhood trauma to specific types may be useful. There is also the type of trauma experienced by the defendant. In order for the juror's trauma to affect their decision making, it may need to be the same type of trauma as the defendant. That would increase the possibility of identifying with the defendant and therefore empathizing with them more.

It may also be beneficial to ask participants if they themselves have been diagnosed with any mental illness as well as their perceptions of mental illness (e.g., biases or stigmas). Mental health stigmas could potentially be a mediator between jury decision making and empathy. If a participant has a stigma toward mental health, they may be less likely to be empathetic toward a mentally ill defendant, and therefore give them a more harsh verdict and find them more culpable. Along the same lines of possible mediators, as mentioned previously, resiliency may be a key factor. Experience of trauma may correlate with empathy and guilt or culpability, but only if the trauma did not lead to a strong resiliency in the person.

Jury trials are meant to give citizens a fair trial, so it is important for researchers to identify variables (other than the facts of the case) that may be impacting decisions. With some evidence of a relationship between jurors' trauma and judgments of culpability, it could be of great importance in the court system to further investigate what the mediating variable is in this relationship. This avenue of research is particularly beneficial because most of the current studies

focus on the role of the defendant's experiences of trauma, rather than the juror's traumatic experiences. This research can inform the development of guidelines and protocols to ensure fair and unbiased trials. Ultimately, understanding the unique influence of early trauma on jurors is important for maintaining a fair legal system.

References

- Accomazzo, S., Israel, N., & Romney, S. (2015). Resources, exposure to trauma, and the behavioral health of youth receiving public system services. *Journal of Child and Family Studies*, 24(11), 3180-3191. <https://doi.org/10.1007/s10826-015-0121-y>
- American SPCC. (2018, March 21). *How childhood trauma can affect mental and physical health into adulthood*. Retrieved May 13, 2024, from https://americanspcc.org/how-childhood-trauma-can-affect-mental-and-physical-health-in-to-adulthood/?gad_source=1&gclid=CjwKCAjw9IayBhBJEiwAVuc3fpRD3Rxt4CmNdZDxJcIJMn8UTR0YuVgaiHMcP5I37fV7Rj6CKcGrBoCfOoQAvD_BwE.
- Assari, S. (2020). Family socioeconomic status and exposure to childhood trauma: Racial differences. *Children*, 7(6), 57. <https://doi.org/10.3390/children7060057>.
- Auslander, W., Sterzing, P., Threlfall, J., Gerke, D., & Edmond, T. (2016). Childhood abuse and aggression in adolescent girls involved in child welfare: The role of depression and posttraumatic stress. *Journal of Child & Adolescent Trauma*, 9(4), 359-368. <https://doi.org/10.1007/s40653-016-0090-3>
- Baer, J., & Maschi, T. (2003). Random acts of delinquency: Trauma and self destructiveness in juvenile offenders. *Child and Adolescent Social Work Journal*, 20(2), 85-98. <https://doi/10.1023/A:1022812630174>
- Baglivio, M. T., Wolff, K. T., Piquero, A. R., & Epps, N. (2015). The relationship between adverse childhood experiences (ACE) and juvenile offending trajectories in a juvenile offender sample. *Journal of Criminal Justice*, 43(3), 229-241. <https://doi.org/10.1016/j.jcrimjus.2015.04.012>

- Barnett, M. E., Brodsky, S. L., & Davis, C. M. (2004). When mitigation evidence makes a difference: Effects of psychological mitigating evidence on sentencing decisions in capital trials. *Behavioral Sciences & the Law*, 22(6), 751-770.
- Baron-Cohen, S., & Wheelwright, S. (2004). The Empathy Quotient: An Investigation of Adults with Asperger Syndrome or High Functioning Autism, and Normal Sex Differences. *Journal of Autism and Developmental Disorders*, 34(2), 163–175.
- Batson, C. D., Turk, C. L., Shaw, L. L., & Klein, T. R. (1995). Information function of empathic emotion: Learning that we value the other's welfare. *Journal of Personality and Social Psychology*, 68(2), 300-313. <https://doi.org/10.1037//0022-3514.68.2.300>
- Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T., Stokes, J., Handelsman, L., Medrano, M., Desmond, D., & Zule, W. (2003). Development and validation of a brief screening version of the childhood trauma questionnaire. *Child Abuse & Neglect*, 27(2), 169-190. [https://doi.org/10.1016/s0145-2134\(02\)00541-0](https://doi.org/10.1016/s0145-2134(02)00541-0)
- Blair, R. (2005). Responding to the emotions of others: Dissociating forms of empathy through the study of typical and psychiatric populations. *Consciousness and Cognition*, 14(4), 698-718. <https://doi.org/10.1016/j.concog.2005.06.004>
- Bornstein, B. H., & Greene, E. (2011). Jury decision making: Implications for and from psychology. *Current Directions in Psychological Science*, 20(1), 63-67. <https://doi.org/10.1177/0963721410397282>
- Bremner, J. D. (1999). The lasting effects of psychological trauma on memory and the hippocampus. *Law and Psychiatry*.
- Brink, D. O. (2018). The nature and significance of culpability. *Criminal Law and Philosophy*, 13, 347-373. <https://doi.org/10.1093/oso/9780198859468.003.0007>

- Brown, D. W., Anda, R. F., Tiemeier, H., Felitti, V. J., Edwards, V. J., Croft, J. B., & Giles, W. H. (2009). Adverse childhood experiences and the risk of premature mortality. *American Journal of Preventive Medicine*, 37, 389–396.
<https://doi.org/10.1016/j.amepre.2009.06.021>
- Brown, P., Bakolis, I., Appiah-Kusi, E., Hallett, N., Hotopf, M., & Blackwood, N. (2022). Prevalence of mental disorders in defendants at criminal court. *BJPsych Open*, 8(3).
<https://doi.org/10.1192/bjo.2022.63>
- Carlson, K. A., & Russo, J. E. (2001). Biased interpretation of evidence by Mock jurors. *Journal of Experimental Psychology: Applied*, 7(2), 91-103.
<https://doi.org/10.1037//1076-898x.7.2.91>
- Chrysikou, E. G., & Thompson, W. J. (2016). Assessing cognitive and affective empathy through the interpersonal reactivity index. *Assessment*, 23(6), 769-777.
<https://doi.org/10.1177/1073191115599055>
- Crawley, D., Ramos, C., & Leyva, J. (2017). Perceptions of criminal defendants scale: Development and validation. *Psi Chi Journal of Psychological Research*, 22(4), 307-319. <https://doi.org/10.24839/2325-7342.jn22.4.307>
- Cross, D., Fani, N., Powers, A., & Bradley, B. (2017). Neurobiological development in the context of childhood trauma. *Clinical Psychology: Science and Practice*. Advance online publication. <https://doi.org/10.1111/cpsp.12198>
- Curley, L. J., Munro, J., & Dror, I. E. (2022). Cognitive and human factors in legal layperson decision making: Sources of bias in juror decision making. *Medicine, Science and the Law*, 62(3), 206-215. <https://doi.org/10.1177/00258024221080655>

- Decety, J., & Moriguchi, Y. (2007). The empathic brain and its dysfunction in psychiatric populations: Implications for intervention across different clinical conditions. *BioPsychoSocial Medicine*, 1(1), 22. <https://doi.org/10.1186/1751-0759-1-22>
- Doerschuk, P., Bahrim, C., Daniel, J., Kruger, J., Mann, J., & Martin, C. (2016). Closing the gaps and filling the STEM pipeline: A multidisciplinary approach. *Journal of Science Education and Technology*, 25, 682-695. doi:10.1007/s10956-016-9622-8
- Dong, C., Xu, R., & Xu, L. (2020). Relationship of childhood trauma, psychological resilience, and family resilience among undergraduate nursing students: A cross-sectional study. *Perspectives in Psychiatric Care*, 57(2), 852-859. <https://doi.org/10.1111/ppc.12626>
- Doyle, C., & Cicchetti, D. (2017). From the cradle to the grave: The effect of adverse caregiving environments on attachment and relationships throughout the lifespan. *Clinical Psychology: Science and Practice*, 24(2), 203-217. <https://doi.org/10.1111/cpsp.12192>
- Dutton, D. G., & Painter, S. (1993). The battered woman syndrome: Effects of severity and intermittence of abuse. *Journal of Clinical Forensic Medicine*, 1(3), 158. [https://doi.org/10.1016/1353-1131\(94\)90091-4](https://doi.org/10.1016/1353-1131(94)90091-4).
- Eklund, J., Andersson-Stråberg, T., & Hansen, E. M. (2009). "I've also experienced loss and fear": Effects of prior similar experience on empathy. *Scandinavian Journal of Psychology*, 50(1), 65-69. <https://doi.org/10.1111/j.1467-9450.2008.00673.x>
- Espinoza, R. K., & Willis-Esqueda, C. (2015). The influence of mitigation evidence, ethnicity, and SES on death penalty decisions by European American and Latino venire persons. *Cultural Diversity & Ethnic Minority Psychology*, 21(2), 288-299. <https://doi.org/10.1037/a0037646>

- Feigenson, N. (2009). Emotional influences on judgments of legal blame: How they happen, whether they should, and what to do about it. *Nebraska Symposium on Motivation*, 45-96. https://doi.org/10.1007/978-1-4419-0696-0_3
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14(4), 245–258. [https://doi.org/10.1016/S0749-3797\(98\)00017-8](https://doi.org/10.1016/S0749-3797(98)00017-8)
- Finkelhor, D., Shattuck, A., Turner, H., & Hamby, S. (2015). Adverse childhood experiences inventory--revised. *PsycTESTS Dataset*. <https://doi.org/10.1037/t50371-000>
- Ford, H. H., Schindler, C. B., & Medway, F. J. (2001). School professionals' attributions of blame for child sexual abuse. *Journal of School Psychology*, 39(1), 25-44. [https://doi.org/10.1016/s0022-4405\(00\)00058-3](https://doi.org/10.1016/s0022-4405(00)00058-3)
- Geiger, E. J., Pruessner, L., Barnow, S., & Joormann, J. (2024). Empathy is associated with interpersonal emotion regulation goals in everyday life. *Emotion*, 24(4), 1092-1108. <https://doi.org/10.31234/osf.io/a7p3t>
- Gohara, M. S. (2013). Grace notes: case for making mitigation the heart of noncapital sentencing. *American Journal of Criminal Law*, 41(1), 41-90.
- Gohara, M. S. (2018). In defense of the injured: how trauma-informed criminal defense can reform sentencing. *American Journal of Criminal Law*, 45(1), 1-54.
- Goodman, G. S., Quas, J. A., Goldfarb, D., Gonzalves, L., & Gonzalez, A. (2018). Trauma and long-term memory for childhood events: Impact matters. *Child Development Perspectives*, 13(1), 3-9. <https://doi.org/10.1111/cdep.12307>

- Green, J. G., McLaughlin, K. A., Berglund, P. A., Gruber, M. J., Sampson, N. A., Zaslavsky, A. M., & Kessler, R. C. (2010). Childhood adversities and adult psychiatric disorders in the national comorbidity survey replication I. *Archives of General Psychiatry*, 67(2), 113.
<https://doi.org/10.1001/archgenpsychiatry.2009.186>
- Greenberg, D. M., Baron-Cohen, S., Rosenberg, N., Fonagy, P., & Rentfrow, P. J. (2018). Elevated empathy in adults following childhood trauma. *PLOS ONE*, 13(10), e0203886.
<https://doi.org/10.1371/journal.pone.0203886>
- Haegerich, T. M., & Bottoms, B. L. (2000). Empathy and jurors' decisions in patricide trials involving child sexual assault allegations. *Law and Human Behavior*, 24(4), 421-448.
<https://doi.org/10.1023/a:1005592213294>
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.
- Higgins, P. L., Heath, W. P., & Grannemann, B. D. (2007). How type of excuse defense, Mock juror age, and defendant age affect Mock jurors' decisions. *The Journal of Social Psychology*, 147(4), 371-392. <https://doi.org/10.3200/socp.147.4.371-392>
- Hiromoto, L. (2020). Childhood trauma: A basis for the insanity defense and other mitigating theories in light of trauma-linked biocognitive deficiencies. *Illinois Law Review*, 3, 41-52.
<https://www.illinoislawreview.org/wp-content/uploads/2020/03/Hiromoto-final.pdf>
- Holloway, C. P., & Wiener, R. L. (2018). Abuse history and culpability judgments: Implications for battered spouse syndrome. *Psychology, Public Policy, and Law*, 24(3), 279-291.
<https://doi.org/10.1037/law0000167>

- Hooker, C. I., Verosky, S. C., Germine, L. T., Knight, R. T., & D'Esposito, M. (2010). Neural activity during social signal perception correlates with self-reported empathy. *Brain Research, 1308*, 100-113. <https://doi.org/10.1016/j.brainres.2009.10.006>
- Jackson, V., Sullivan, D. H., Mawren, D., Freiberg, A., Kulkarni, J., & Darjee, R. (2021). Trauma-informed sentencing of serious violent offenders: An exploration of judicial dispositions with a gendered perspective. *Psychiatry, Psychology and Law, 28*(5), 748-773. <https://doi.org/10.1080/13218719.2020.1855267>
- Jurors Qualifications and Exemptions, 38 OK Stat § 28. (2024). <https://law.justia.com/codes/oklahoma/title-38/section-38-28/>.
- Justia. (2023, October 15). *Aggravating and mitigating factors in criminal sentencing law*. Retrieved April 15, 2025, from <https://www.justia.com/criminal/aggravating-mitigating-factors/>.
- Kunyk, D., & Olson, J. K. (2001). Clarification of conceptualizations of empathy. *Journal of Advanced Nursing, 35*(3), 317-325. <https://doi.org/10.1046/j.1365-2648.2001.01848.x>
- Lim, D., & DeSteno, D. (2016). Suffering and compassion: The links among adverse life experiences, empathy, compassion, and prosocial behavior. *Emotion, 16*(2), 175-182. <https://doi.org/10.1037/emo0000144>
- Maschi, T., Baer, J., Morrissey, M. B., & Moreno, C. (2013). The aftermath of childhood trauma on late life mental and physical health: A review of the literature. *Traumatology: An International Journal, 19*(1), 49-64. <https://doi.org/10.1177/1534765612437377>
- Misiak, B., Stańczykiewicz, B., Pawlak, A., Szewczuk-Bogusławska, M., Samochowiec, J., Samochowiec, A., Tyburski, E., & Juster, R. (2022). Adverse childhood experiences and low socioeconomic status with respect to allostatic load in adulthood: A systematic

- review. *Psychoneuroendocrinology*, 136, 105602.
<https://doi.org/10.1016/j.psyneuen.2021.105602>
- Najdowski, C. J., & Weintraub, J. N. (2019). Juror gender and confession evidence: An exploratory study of effects on empathy and trial outcomes for juvenile defendants. *Journal of Experimental Criminology*, 16(4), 595-606.
<https://doi.org/10.1007/s11292-019-09396-9>
- Narvey, C., Yang, J., Wolff, K. T., Baglivio, M., & Piquero, A. R. (2020). The interrelationship between empathy and adverse childhood experiences and their impact on juvenile recidivism. *Youth Violence and Juvenile Justice*, 19(1), 45-67.
<https://doi.org/10.1177/1541204020939647>
- Nezlek, J. B., Schütz, A., Lopes, P., & Smith, C. V. (2007). Naturally occurring variability in state empathy. *Empathy in Mental Illness*, 187-200.
<https://doi.org/10.1017/cbo9780511543753.012>
- Núñez, N., Schweitzer, K., Chai, C. A., & Myers, B. (2015). Negative emotions felt during trial: The effect of fear, anger, and sadness on juror decision making. *Applied Cognitive Psychology*, 29(2), 200-209. <https://doi.org/10.1002/acp.3094>
- Parlar, M., Frewen, P., Nazarov, A., Oremus, C., MacQueen, G., Lanius, R., & McKinnon, M. C. (2014). Alterations in empathic responding among women with posttraumatic stress disorder associated with childhood trauma. *Brain and Behavior*, 4(3), 381-389.
<https://doi.org/10.1002/brb3.215>
- Phalen, H. J., Bettis, T. C., Bean, S. R., & Salerno, J. M. (2025). Jurymen seldom rule against a person that they like: The relationship between emotions towards a defendant, the

- understanding of case facts, and juror judgments in civil trials. *Behavioral Sciences*, 15(7), 965. <https://doi.org/10.3390/bs15070965>
- Reardon, S. F., Valentino, R. A., Kalogrides, D., Shores, K. A., & Greenberg, E. H. (2013). *Patterns and trends in racial academic achievement gaps among states, 1999-2011*. Retrieved from <https://cepa.stanford.edu/content/patterns-and-trends-racial-academic-achievement-gaps-among-states-1999-2011>
- Robinson, P. H. (1980). A brief history of distinctions in criminal culpability. *Hastings Law Journal*, 815-853. https://scholarship.law.upenn.edu/faculty_scholarship/631.
- Roy, A., Carli, V., & Sarchiapone, M. (2011). Resilience mitigates the suicide risk associated with childhood trauma. *Journal of Affective Disorders*, 133(3), 591-594. <https://doi.org/10.1016/j.jad.2011.05.006>
- Rusting, C. L. (1999). Interactive effects of personality and mood on emotion-congruent memory and judgment. *Journal of Personality and Social Psychology*, 77(5), 1073-1086. <https://doi.org/10.1037//0022-3514.77.5.1073>
- SAMHSA - Substance Abuse and Mental Health Services Administration. (2023, March 17). *Recognizing and Treating Child Traumatic Stress*. Retrieved June 5, 2024, from <https://www.samhsa.gov/child-trauma/understanding-child-trauma>.
- Sansone, R. A., Leung, J. S., & Wiederman, M. W. (2012). Five forms of childhood trauma. *The Primary Care Companion For CNS Disorders*. <https://doi.org/10.4088/pcc.12m01353>
- Sansone, R. A., Leung, J. S., & Wiederman, M. W. (2012). Five forms of childhood trauma: Relationships with employment in adulthood. *Child Abuse & Neglect*, 36(9), 676-679. <https://doi.org/10.1016/j.chiabu.2012.07.007>

- Salekin, R. T., Ogloff, J. R., McFarland, C., & Rogers, R. (1995). Influencing jurors' perceptions of guilt: Expression of emotionality during testimony. *Behavioral Sciences & the Law*, 13(2), 293-305. <https://doi.org/10.1002/bsl.2370130208>
- Schulz, A., Becker, M., Van der Auwera, S., Barnow, S., Appel, K., Mahler, J., Schmidt, C. O., John, U., Freyberger, H. J., & Grabe, H. J. (2014). The impact of childhood trauma on depression: Does resilience matter? population-based results from the study of health in Pomerania. *Journal of Psychosomatic Research*, 77(2), 97-103. <https://doi.org/10.1016/j.jpsychores.2014.06.008>
- Sjöberg, M. P. (2015). The relationship between empathy and stringency of punishment in Mock jurors. *Journal of European Psychology Students*, 6(1), 37-44. <https://doi.org/10.5334/jeps.cr>
- Tabak, S. J., & Klettke, B. (2014). Mock jury attitudes towards credibility, age, and guilt in a fictional child sexual assault scenario. *Australian Journal of Psychology*, 66(1), 47-55. <https://doi.org/10.1111/ajpy.12035>
- Tetterton, V. S., & Brodsky, S. L. (2007). More is sometimes better: Increased mitigating evidence and sentencing leniency. *Journal of Forensic Psychology Practice*, 7(3), 79-85. https://doi.org/10.1300/j158v07n03_05
- Tsoudis, O. (2002). The influence of empathy in mock jury criminal cases: Adding to the affect control model. *Western Criminology Review*, 4(1), 55-67.
- Wakabayashi, A., Baron-Cohen, S., Wheelwright, S., Goldenfeld, N., Delaney, J., Fine, D., Smith, R., & Weil, L. (2006). Development of short forms of the empathy quotient (EQ-short) and the systemizing quotient (SQ-short). *Personality and Individual Differences*, 41(5), 929-940. <https://doi.org/10.1016/j.paid.2006.03.017>

- Wayland, K. (2008). The importance of recognizing trauma throughout capital mitigation investigations and presentations. *Hofstra Law Review*, 36(923), 923-
https://heinonline.org/HOL/Page?collection=journals&handle=hein.journals/hoflr36&id=934&men_tab=srchresults.
- Wiersma, J. E., Hovens, J. G., Van Oppen, P., Giltay, E. J., Van Schaik, D. J., Beekman, A. T., & Penninx, B. W. (2009). The importance of childhood trauma and childhood life events for chronicity of depression in adults. *The Journal of Clinical Psychiatry*, 70(7), 983-989.
<https://doi.org/10.4088/jcp.08m04521>
- Williams, A. (2020). Early childhood trauma impact on adolescent brain development, decision making abilities, and delinquent behaviors: Policy implications for juveniles tried in adult court systems. *Juvenile and Family Court Journal*, 71(1), 5-17.
<https://doi.org/10.1111/jfcj.12157>
- Wood, J. L., James, M., & Ciardha, C. Ó. (2014). 'I know how they must feel': Empathy and judging defendants. *The European Journal of Psychology Applied to Legal Context*, 6(1), 37-43. <https://doi.org/10.5093/ejpalc2014a5>
- U.S. Census Bureau. (n.d.). *Bachelor's degree or higher, percent of persons age 25 years+, 2020-2024*. <https://www.census.gov/quickfacts/geo/chart/OK/EDU685224>
- U.S Department of Justice. (2023, May 12). *Trial*. <https://www.justice.gov/usao/justice-101/trial>.
- Verhofstadt, L., Devoldre, I., Buysse, A., Stevens, M., Hinnekens, C., Ickes, W., & Davis, M. (2016). The role of cognitive and affective empathy in spouses' support interactions: An observational study. *PLOS ONE*, 11(2), e0149944.

Appendix A

Demographic Questionnaire

1. How did you hear about this study?
 - a. I received an email through the University of Central Oklahoma
 - b. I received an invitation/link from a friend/colleague *or* through social media
2. Are you working on/have finished a college degree?
 - a. If so, please name your major or degree
3. What gender do you identify with?
 - a. Man
 - b. Woman
 - c. Non-binary/third gender
 - d. Prefer not to say
4. Please enter your age in years.
 - a. ____ (type in)
5. Which race or ethnicity best describes you? Select all that apply.
 - a. White or Caucasian
 - b. Black or African American
 - c. American Indian/Native American or Alaska Native
 - d. Asian
 - e. Native Hawaiian or Other Pacific Islander
 - f. Other (type in below)
 - g. Prefer not to say

6. Are you eligible to serve on a jury in the state of Oklahoma? In order to be eligible, you must meet all of the following criteria: be a resident or registered voter in Oklahoma and be at least 18 years of age. Additionally, if you have been convicted of a felony, you must have completed all parts of your sentence. Further, you are **ineligible** if you serve in any form of law enforcement or legislation, or are a licensed attorney.
 - a. Yes, I am eligible to serve in a jury in Oklahoma based on the above criteria.
 - b. No, I am NOT eligible to serve in a jury in Oklahoma based on the above criteria.
7. Have you ever served on a jury before?
 - a. Yes
 - b. No

Appendix B

Case Summary

Mitchell Harper is a 27-year-old man who is currently on trial for killing his father, Raymond Harper. One evening, Mitchell and his father got into a heated argument at their home. Mitchell says that his father, who had been drinking, became aggressive and grabbed a fireplace poker during the argument. Believing his father was about to attack him, Mitchell says he picked up a fireplace poker and stabbed his father. His father died from the injury.

In opening statements, the defense highlighted Mitchell's history of childhood trauma. From the time Mitchell was eight, his father was known to physically punish him for minor mistakes, such as dropping food or talking back. His teachers had filed multiple reports of suspected abuse. Mitchell's therapist testified that he has been diagnosed with PTSD related to childhood physical and emotional abuse, and that his reactions in high-stress situations are often based on past trauma rather than the immediate facts.

The prosecution argued that, although Mitchell had a difficult childhood, his actions on the night of the incident went too far. They suggested that he had other options, like leaving the house or calling for help, and questioned whether his life was truly in danger. They pointed out that there were some inconsistencies in Mitchell's story, and said that the force he used was more than what was necessary.

You are now being asked to evaluate this case and decide what level of guilt and culpability, if any, Mitchell should bear.

Appendix C

Empathy Quotient (EQ-Short; Wakabayashi et al., 2006)

Notes: All items are scored on a 4-point scale of definitely disagree to definition agree. The test is constructed such that only the first two or last two responses (strongly disagree or strongly agree) score points, depending on whether the statement is positively worded or negatively worded. Positively worded items (indicating higher empathy) are coded as 1 point for Slightly agree and 2 points for Strongly agree. Negatively worded items are scored as 1 point for Slightly disagree and 2 points for Strongly disagree. The EQ-Short is based on a longer form Empathy Quotient by Baron-Cohen and Wheelwright (2004). The researchers previously mentioned define the scoring as the following:

- Positive scoring items (indicate more empathy). Strongly Agree (2) and Slightly Agree (1) score points on the following items: **1, 2, 6, 8, 9, 10, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22**
- Negative scoring items (indicate less empathy). Slightly Disagree (1) and Strongly Disagree (2) score points on the following items: **3, 4, 5, 7, 11, 17**

Questionnaire Items:

1. I can easily tell if someone else wants to enter a conversation. (strongly disagree, slightly disagree, slightly agree, strongly agree).
2. I really enjoy caring for people (strongly disagree, slightly disagree, slightly agree, strongly agree).
3. *I find it hard to know what to do in a social situation* (strongly disagree, slightly disagree, slightly agree, strongly agree).

4. *I often find it difficult to judge if something is rude or polite.* (strongly disagree, slightly disagree, slightly agree, strongly agree).
5. *In a conversation, I tend to focus on my own thoughts rather than on what my listener might be thinking.* (strongly disagree, slightly disagree, slightly agree, strongly agree).
6. I can pick up quickly if someone says one thing but means another. (strongly disagree, slightly disagree, slightly agree, strongly agree).
7. *It is hard for me to see why some things upset people so much.* (strongly disagree, slightly disagree, slightly agree, strongly agree).
8. I find it easy to put myself in somebody else's shoes. (strongly disagree, slightly disagree, slightly agree, strongly agree).
9. I am good at predicting how someone will feel.(strongly disagree, slightly disagree, slightly agree, strongly agree).
10. I am quick to spot when someone in a group is feeling awkward or uncomfortable.
(strongly disagree, slightly disagree, slightly agree, strongly agree).
11. *I can't always see why someone should have felt offended by a remark.* (strongly disagree, slightly disagree, slightly agree, strongly agree).
12. I don't tend to find social situations confusing. (strongly disagree, slightly disagree, slightly agree, strongly agree).
13. Other people tell me I am good at understanding how they are feeling and what they are thinking. (strongly disagree, slightly disagree, slightly agree, strongly agree).
14. I can easily tell if someone else is interested or bored with what I am saying. (strongly disagree, slightly disagree, slightly agree, strongly agree).

15. Friends usually talk to me about their problems as they say that I am very understanding.
(strongly disagree, slightly disagree, slightly agree, strongly agree).
16. I can sense if I am intruding, even if the other person doesn't tell me. (strongly disagree, slightly disagree, slightly agree, strongly agree).
17. *Other people often say that I am insensitive, though I don't always see why.* (strongly disagree, slightly disagree, slightly agree, strongly agree).
18. I can tune into how someone else feels rapidly and intuitively. (strongly disagree, slightly disagree, slightly agree, strongly agree).
19. I can easily work out what another person might want to talk about. (strongly disagree, slightly disagree, slightly agree, strongly agree).
20. I can tell if someone is masking their true emotion. (strongly disagree, slightly disagree, slightly agree, strongly agree).
21. I am good at predicting what someone will do. (strongly disagree, slightly disagree, slightly agree, strongly agree).
22. I tend to get emotionally involved with a friend's problems. (strongly disagree, slightly disagree, slightly agree, strongly agree).

Appendix D

Revised Adverse Childhood Experiences (ACEs) Questionnaire (Finkelhor et al., 2015)

Instructions: Below is a list of 14 categories of Adverse Childhood Experiences (ACEs). From the list below, please place a checkmark next to each ACE category that you experienced prior to your 18th birthday.

1. Did a parent or other adult in the household **often or very often** swear at you, insult you, put you down, or humiliate you?
 - a. **OR** act in a way that made you afraid that you might be physically hurt?
2. Did a parent or other adult in the household **often or very often** push, grab, slap, or throw something at you?
 - a. **OR ever** hit you so hard that you had marks or were very injured?
3. Did an adult or person at least five years older than you **ever** touch or fondle you or have you touch their body in a sexual way?
 - a. **OR** attempt or actually have oral, anal, or vaginal intercourse with you?
4. Did you **often or very often** feel that no one in your family loved you or thought you were important or special?
 - a. **OR** your family didn't look out for each other, feel close to each other, or support each other?
5. Did you **often or very often** feel that you didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?
 - a. **OR** your parents were too drunk or high to take care of you or take you to the doctor if you needed?
6. Was a biological parent **ever** lost to you through divorce, abandonment, or other reason?

7. Was your mother or stepmother **often or very often** pushed, grabbed, slapped, or had something thrown at her?
 - a. **OR sometimes, often, or very often** kicked, bitten, hit with a fist, or hit with something hard?
 - b. **OR ever** repeatedly hit over at least a few minutes or threatened with a gun or knife?
8. Did you live with anyone who was a problem drinker or alcoholic, or who used street drugs?
9. Was a household member depressed or mentally ill, or did a household member attempt suicide?
10. Did a household member go to prison?
11. Did other kids, including brothers or sisters, **often or very often** hit you, threaten you, pick on you or insult you?
12. Did you **often or very often** feel lonely, rejected or that nobody liked you?
13. Did you live for 2 or more years in a neighborhood that was dangerous, or where you saw people being assaulted?
14. Was there a period of 2 or more years when your family was very poor or on public assistance?

Appendix E

Jury Instructions

The defendant, Mitchell Harper, is charged in the information with:

Count 1: Murder in the Second Degree, by stabbing Raymond Harper on or about June 23, 2023 in Oklahoma County, Oklahoma.

To these charges the defendant has entered a plea of not guilty

The defendant is presumed innocent of the crimes charged and the presumption continues unless, after consideration of all the evidence, you are convinced of his guilt beyond a reasonable doubt.

The State has the burden of presenting the evidence that established the guilt beyond a reasonable doubt.

The defendant must be found not guilty unless the State produces evidence which convinces you beyond a reasonable doubt of each element of the crime.

Evidence is the testimony received from the witnesses under oath, stipulations made by the attorneys, and the exhibits admitted into evidence during the trial.

The information in this case is the formal method of accusing the defendant of a crime. The information is not evidence of guilt, and the law is that you should now allow yourself to be influenced against the defendant by reason of the filing of the information.

The Court has made rulings in the conduct of the trial and the admission of evidence. In doing so I have not expressed nor intimated in any way the weight or credit to be given any evidence or

testimony admitted during the trial. Nor have I indicated in any way the conclusions to be reached by you in this case.

It is your responsibility to determine the credibility of each witness and the weight to be given testimony of each witness. In determining such weight or credibility, you may properly consider: the interest, if any, which the witness may have in the result of the trial; the relation of the witness to the parties; the bias or prejudice of the witness, if any have been apparent; the candor, fairness, intelligence, and demeanor of the witness; the ability of the witness to remember and relate to past occurrences, the means of observation, and the opportunity of knowing the matters about which the witness has testified. From all the facts and circumstances appearing in evidence and coming to your observation during the trial, aided by the knowledge which you each possess in common with other persons, you will reach your conclusions.

You should not let sympathy, sentiment or prejudice enter into your deliberations, but should discharge your duties as jurors impartially, conscientiously, and faithfully under your oaths and return such verdict as the evidence warrants when measured by these instructions.

The defendant is charged with Count One: Murder in the Second Degree by stabbing Raymond Harper on June 23, 2023 in Oklahoma County, Oklahoma.

No person may be convicted of Murder in the Second Degree unless his conduct caused the death of the person allegedly killed. A death is caused by the conduct if the conduct is a substantial factor in bringing about the death and the conduct is dangerous and threatens or destroys life.

No person may be convicted of murder in the second degree unless the State has proved beyond a reasonable doubt each element of the crime. These elements are:

First, the death of a human;

Second, caused by conduct which was imminently dangerous to another

Third, the conduct was that of the defendant

Fourth, the conduct evinced a depraved mind in extreme disregard of human life;

Fifth, the conduct is not done with the intention of taking the life of any particular individual.

You are further instructed that a person evinces a "depraved mind" when he engages in imminently dangerous conduct with contemptuous and reckless disregard of, and in total indifference to, the life and safety of another.

You are further instructed that "imminently dangerous conduct" means conduct that creates what a reasonable person would realize as an immediate and extremely high degree of risk of death to another person.

The external circumstances surrounding the commission of the homicidal act may be considered in finding whether or not deliberate intent existed in the mind of the defendant to take a human life. External circumstances include words, conduct, demeanor, motive, and all other circumstances connected with a homicidal act.

If you beyond a reasonable doubt that the defendant committed the crime of Murder in the Second Degree, you shall return a verdict of guilty. If you have a reasonable doubt of the defendant's guilt to the charge of Murder in the Second Degree, or if you find the State has failed to prove each element of Murder in the Second Degree beyond reasonable doubt, you shall return a verdict of not guilty.

Appendix F

Guilt Verdict and Rating

VERDICT

COUNT ONE (1): MURDER IN THE SECOND DEGREE

I, EMPANELED AND WORN IN THE ABOVE-ENTITLED CAUSE, DO, UPON MY OATHS, FIND AS FOLLOWS:

☐ GUILTY OF MURDER IN THE SECOND DEGREE

☐ NOT GUILTY

On a scale of 1-10, please rate how guilty you think the defendant is of Murder in the Second Degree with 1 being not guilty at all and 10 being extremely guilty.

Appendix G

Culpability (Ford et al., 2001) and Sentencing Recommendations

To what extent do you think the defendant is to blame for the death of his father?

1 = not at all to blame

7 = completely to blame

If you found the defendant guilty of murder in the second degree, please provide a sentencing recommendation for them. In the state of Oklahoma, the minimum sentence for second degree murder is 10 years, and the maximum is life without parole.

(Note: According to Oklahoma law, a person convicted shall be required to serve not less than eighty-five percent (85%) of the sentence imposed before becoming eligible for consideration for parole and shall not be eligible for any credits that will reduce the length of imprisonment to less than eighty-five percent (85%) of the sentence imposed. If a person is sentenced to life imprisonment, the calculation of eligibility for parole is based upon a term of forty-five (45) years, so that a person would be eligible for consideration for parole after thirty-eight (38) years and three (3) months. However, if a person is not granted parole, he or she will be imprisoned for the remainder of his or her natural life while serving a sentence of life imprisonment [OUJI-CR 10-13B]).

1. 10 years
2. 15 years
3. 20 years
4. 25 years

5. 30 years
6. 40 years
7. 50 years
8. 60 years
9. Life with parole
10. Life without parole

Appendix H

Reading Check

1. What was the manner of death?
 - a. Gunshot
 - b. Stabbing**
 - c. Strangulation
 - d. Drowning
2. What was the relationship between the defendant
 - a. Father/son**
 - b. Mother/son
 - c. Friends
 - d. Brothers
3. Did the defendant have a history of abuse?
 - a. Yes**
 - b. No
4. What mental health condition was the defendant diagnosed with?
 - a. Bipolar Disorder
 - b. Anxiety Disorder
 - c. Major Depressive Disorder
 - d. Post-traumatic Stress Disorder**