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The Effect of Psychopathy Trait Descriptions on Mock Juror Decision-Making

by

Bailey A. Hall

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts with a concentration in Clinical Psychology Department of Psychology College of Arts and Sciences University of South Florida

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> Date of Approval: July 21, 2023

Keywords: Interpersonal-Affective, Mock Jurors, Criterion Effects, Mental Health Evidence, Capital punishment

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#### ACKNOWLEDGMENTS

I would like to thank my thesis committee Dr. Christine Ruva, Dr. Jon Rottenberg, and Dr. Edelyn Verona for their flexibility, enthusiasm, and insightful questions. I would like to thank my advisor, Dr. Edelyn Verona, for her guidance, patience, and example of a powerful P.I. working to improve the criminal justice system. I would like to thank my lab mates for creating a culture that I can best describe as the opposite of toxic masculinity (restorative feminine energy?) and my cohort for embarking on this arduous journey with me (which can be most concisely represented by the "This Is Fine" meme). Specifically, Kendall Smith inspired this line of research and Allison Cunning, Jessica Birg, and Alora McCarthy provided moral support through daunting statistical analyses and moments of intense frustration. I would like to thank my book club for providing empathy and sanity during our weekly check-ins. In particular, I would likely have not gotten to graduate school at all without Jenna Ollen's indispensable coding assistance on my senior thesis or Lydia Dolvin's guidance on my personal statement. I would like to thank my family for their endless support during my graduate studies and my parents for their clinical guidance and steadying perspective. I would like to thank Dallas Hall for being what I most looked forward to this year and L.T. Hall for helping me maintain work-life balance. Finally, I'd like to thank Nick Wells for everything-- namely for being my teammate through it all.

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#### ABSTRACT

Layperson misconceptions and stigma surrounding mental illness can have devastating consequences in criminal trials, especially capital (death penalty) cases. Psychopathy is a particularly stigmatizing disorder often used as an aggravating factor in capital cases. The present experimental study examined how case vignettes that included descriptions of psychopathic traits (i.e., criterion effects) differentially influenced juror decision-making. Specifically, undergraduate participants read case facts about a convicted defendant and were randomly assigned to read one of five expert witness testimony conditions describing the defendant using: interpersonal-affective psychopathy traits (e.g., superficially charming, manipulative), antisocial-lifestyle traits (e.g., reckless, aggressive), combined interpersonalaffective and antisocial-lifestyle traits, or control trait conditions: clinical (autistic) or nonclinical. Participants across all conditions (n=444) provided ratings of defendant perceived psychopathy, future dangerousness, and treatment amenability on a Likert scale and voted to sentence the defendant to either life in prison or death. We found that both trait description, particularly interpersonal-affective traits, and perceived psychopathy of the defendant were significantly related to mock juror ratings of treatment amenability and future dangerousness, but not to sentencing to death. Instead, sentencing was related to juror gender, treatment amenability, and future dangerousness. These mixed results suggest nuance in juror decision-making that should be further examined by investigating potential moderators. Understanding juror perceptions of mental health conditions is key to preventing bias in the courtroom.

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#### **CHAPTER ONE: INTRODUCTION**

Individuals suffering from mental health problems are disproportionately represented in the criminal justice system. The Bureau of Justice Statistics Report estimated that 64% of jail inmates, 56% of state prisoners, and 45% of federal prisoners self-report mental health problems (defined as self-reported symptoms or a diagnosis in the last year; James & Glaze, 2006). The percentage of incarcerated persons with serious mental illness (i.e., schizophrenia, bipolar disorder, or major depressive disorder) has been increasing for the last 40 years, such that there are now more individuals with mental illness incarcerated than institutionalized in psychiatric hospitals (Torrey et al., 2010; Vogel et al., 2014). During criminal trials, mental health problems can be used as a mitigating factor, to help the jury understand why the crime happened, or an aggravating factor, to convince the jury that the defendant is likely to reoffend. One mental health condition that has a prominent role in criminal cases, especially as an aggravating factor, is psychopathic personality disorder (psychopathy), a condition marked by lack of empathy, callousness, and disinhibition.

Evidence of psychopathy has been increasingly introduced in criminal cases in the last two decades, and prior research indicates that such evidence influences juror decisions (DeMatteo et al., 2014; Thi, 2016). Evidence of psychopathy is often introduced by the prosecution as an aggravating factor for jurors to consider, particularly as it relates to future dangerousness. This usage is in spite of the fact that the predictive utility of psychopathy is based on a subset of psychopathy traits known as the antisocial-lifestyle traits (Kennealy et al., 2010).

In the context of capital cases (where death penalty is a possible sentencing option), the layperson jurors' understanding of effects of a mental health condition on behavior can produce irretrievable consequences.

Capital cases can be used as a microcosm through which to examine the United States criminal justice system. Death penalty trials are more high-profile, costly, thorough, and extensive than the average criminal case. Thus, they magnify the issues present in the rest of the American legal system, including biases related to race, class, privilege, and mental health problems. A capital case is an ideal template for mock juror studies, because in addition to determining guilt, jurors in capital cases decide sentencing. After the United States Supreme Court ruled against the legality of the death penalty in Furman vs. Georgia (1972) due to the arbitrary way it was imposed (which disproportionately punished Black men), many states sought to restructure the death penalty to comply with *Furman* rather than abolishing it. States that use the death penalty today have a bifurcated trial in which jurors first decide if the defendant is guilty or innocent and then decide if the defendant shall receive life in prison without possibility of parole (LWOP) or the death penalty. Additionally, jurors are asked to weigh aggravating factors (often including future dangerousness) against mitigating factors (an open-ended category including anything that humanizes the defendant to the jury or mitigates the defendant's actions, including treatment amenability) to decide sentencing.

When evidence of psychopathic personality is presented in a capital case, it can influence jurors' decision-making processes not only in regard to guilt, but also to sentencing. In such cases, the defense responds either by minimizing the presence of the disorder or by presenting the condition as a mitigating factor. According to prior research, mock capital jurors (research participants assigned to a mock legal case) are more likely to impose the death penalty when the

prosecution labels the defendant as a "psychopath" than when not labeled as such (Berryessa & Wohlstetter, 2019). Mock jurors are also more likely to perceive future dangerousness when presented with the psychopathy label than in other conditions (e.g., no label), which likely influences their tendency to select a harsher sentence. Partly as a result of findings from this research, a group of psychologists and legal scholars have come together to urge the courts to make evidence of psychopathy inadmissible in capital cases. These experts argue that it is more prejudicial than "probative", the term used in legal cases to decide if a piece of evidence is able to be presented in court (DeMatteo et al., 2020; Federal Rules of Evidence, Rule 404B). Despite this petition, psychopathy is still introduced in criminal cases, including capital cases, and thus it is critical to study the effects of introducing evidence of psychopathy in criminal cases on juror decision-making.

The current study expands on prior research by examining how mock juror perceptions of trait descriptors of different features of psychopathy (rather than just the label) can affect sentencing, as well as ratings of future dangerousness, treatment amenability, and perceptions of level of psychopathic personality of a defendant in a hypothetical capital case. This has implications for criminal trials; if there is stigma attached to the traits associated with psychopathic personality, then even lawyers who evoke the traits without the label may be affecting sentencing outcomes. This information should be known so that the legal community can make informed decisions about what is allowable in criminal cases.

#### **Psychopathy and Juror Decision-Making**

Psychopathy is described as a constellation of traits that include grandiose sense of self, superficial charm, manipulative behavior, callousness, lack of remorse and empathy, impulsivity, irresponsibility, and antisocial behavior. Various conceptualizations of the disorder have

emerged over the years, primarily stemming from Hervey Cleckley's (1941) description of the condition in his book, *The Mask of Sanity*. In legal settings, the primary instrument used to assess psychopathy is the Psychopathy Checklist Revised (PCL-R; Hare, 2003). Developed to assess individuals housed in forensic settings, the instrument involves clinician ratings of personality traits based on a semi-structured interview and review of official records. Scores can range from 0-40, with the typical cutoff for psychopathy in the U.S. being 30. Although this condition is now primarily conceptualized as dimensional rather than categorical in the academic literature (Edens et al., 2006), the cutoff score of 30 is still used in forensic settings to designate persons as "psychopathic" if they exceed that score.

Despite the wide use of the psychopathic label, psychopathy is not a unitary or homogeneous construct. The PCL-R items have been found to divide into two main factors: the interpersonal-affective factor and the antisocial-lifestyle factor (Hare, 2003). The interpersonalaffective factor includes features that affect interactions with others and emotional responses to others' distress. These include glibness, superficial charm, grandiose sense of self, manipulative behavior and pathological lying, lack of remorse, shallow affect, lack of empathy, and failure to accept personal responsibility (Hare, 2003). The antisocial-lifestyle factor involves behavioral features linked to impulsive, irresponsible, and criminal behavior. The items include poor behavioral controls (i.e., reactive anger and aggression), childhood behavioral problems and delinquency, criminal versatility and violations of supervised releases, stimulation seeking, parasitic lifestyle, lack of realistic long-term goals, impulsivity, and irresponsibility (Hare, 2003). The antisocial-lifestyle factor is correlated with offending and recidivism, which is unsurprising given that a history of criminality is part of the criteria (Olver & Wong, 2015). A meta-analysis examining the predictive utility of psychopathy on violence found that the antisocial-lifestyle

traits do a better job of predicting violence than the interpersonal-affective traits (d=.40 compared to d=.11, respectively) and the traits do not interact to increase predictive power (Kennealy et al., 2010). This is relevant, given that expert witnesses are often called to testify about psychopathy as it relates to future dangerousness and because prior research shows that the influence of psychopathy on juror decision-making typically stems from the interpersonal-affective traits rather than the antisocial-lifestyle traits (Cox et al., 2013; Edens et al., 2013). The technical traits associated with psychopathy in a research or clinical setting may differ from a layperson's understanding of psychopaths" as bold, dangerous, and evil (Edens et al., 2013). This accords with popular media representations of psychopathy in characters like Hannibal Lecter, and the fascination with serial killers like Ted Bundy (Hesse, 2009). Since the psychopathic label is viewed as socially undesirable, evidence of psychopathy usually produces a negative perception of defendants by laypersons (Truong et al., 2021).

The two most recent meta-analyses examining the effects of perceived psychopathy on mock juror decision-making are from Berryessa and Wolhstetter (2019), who analyzed labeling effects in 22 prior studies, and Kelley and colleagues (2019), who examined both labeling and criterion effects in 10 prior studies. "Labeling" studies examine juror decision-making as a function of whether or not the defendant is labeled a psychopath. In most labeling studies, mock jurors are randomly assigned to conditions where they are exposed to the same case that uses different labels by an expert witness, such as "psychopathic", "psychotic disorder", or not assigned a label. "Criterion" studies, in contrast, examine differences in juror decision-making based on whether the defendant is described as possessing traits associated with psychopathy. In most criterion studies, jurors are randomly assigned to conditions with the same case but with

different trait descriptions of the defendant (often traits associated with psychopathy, schizophrenia, or positive characteristics) presented in different conditions.

In a meta-analysis of 21 studies, psychopathy labels showed significant effect sizes for sentencing decisions, future dangerousness, and treatment amenability when compared to control conditions (ds=.17, .58, and -.30 respectively), but not when compared to another psychiatric label (ds=.09, .14, and .02 respectively; Berryessa & Wolhstetter, 2019). Taken together, these findings suggest that negative perceptions surrounding perceived psychopathy in criminal cases may be due to the stigma of mental illness generally rather than psychopathy in particular. Alternatively, it may indicate that mock jurors cannot differentiate the labels associated with different mental health conditions (e.g., schizophrenia vs. psychopathy). Thus, when studying the effects of perceived psychopathy, it is important to have both a non-disorder comparison condition as well as another mental illness comparison condition.

Studies that focus more on criterion effects (personality trait descriptions and not a label) may also help in this regard. The meta-analytic results across studies measuring criterion effects of psychopathy reveal significant though heterogenous effect sizes for sentencing decisions and future dangerousness. In an analysis of 10 studies, the effect sizes for future dangerousness ranged from r=.02-.72, and the effect sizes for death verdicts ranged from r= -.05-.57 (Kelley et al., 2019). This heterogeneity of effect sizes could be due to different methods across studies (e.g., juvenile versus adult cases, capital punishment versus criminal sentencing). While a range of effect sizes can be an indication that effects are merely an artifact of publication bias, fail safe N analyses suggest that the significant mean weighted effect sizes are not due to the file drawer effect and instead represent a genuine trend in the data (Kelley et al., 2019).

The heterogeneity of effect sizes warrants further research and may be due to variations in the types of psychopathic traits presented to mock jurors. In particular, some criterion studies only include interpersonal-affective psychopathy traits by the expert witness (e.g., Edens et al., 2003; Guy & Edens, 2006; Mowle et al., 2016; Vidal & Skeem, 2007). Those studies argue either that these traits are more central to the disorder as originally conceptualized by Cleckley, or that they are perceived as more negative than antisocial-lifestyle traits (Edens et al., 2001). Other criterion studies use a range of psychopathic traits in their vignettes (e.g., Boccaccini et al., 2008; Chauhan et al., 2007; Jones & Cauffman, 2008). Given the mixed picture, the current study expands on previous criterion studies of psychopathy to systematically examine juror's perceived psychopathy and sentencing outcomes via experimental manipulation across different trait conditions: interpersonal-affective psychopathy traits only, antisocial-lifestyle traits only, combined psychopathy traits, and two control conditions: a clinical control condition (autistic traits) and a non-clinical control condition (control personality traits).

#### **Previous Research on Criterion Effects**

Despite the important work already done in this area, particularly around labeling effects, it is important to further study criterion effects (Berryessa & Wohlstetter, 2019; Murrie et al., 2005). Studying which traits have the biggest impact on jury decision-making is critical for practical and ethical purposes. If evidence of psychopathic traits is not probative, meaning that it does not help clarify whether the defendant will be amenable to treatment or a future danger in an institutional setting, it is prejudicial and should not be admissible. Evidence is said to be prejudicial when it wastes time, is confusing, or induces decision-making on a purely emotional basis. If interpersonal-affective traits influence jurors to perceive less treatment amenability and more future dangerousness for the defendant, without adequate evidence that these traits

significantly impact treatment amenability or future dangerousness (see Kennealy et al., 2010 and Polaschek & Skeem, 2018), a judge may rule that expert witness testimony regarding the traits is more prejudicial than probative and should not be presented to jurors. Thus, studying the impact of various trait presentations on mock jurors can help clarify which traits have the largest influence on jurors, and whether or not those traits are the same ones that correlate with adverse outcomes in the literature.

Further, since jury laypersons are unlikely to be familiar with the personality traits that make up psychopathy, their perception of the label may be different than their perception of the personality traits themselves. For example, meta-analyses examining criterion effects on mock juror ratings of treatment amenability have found non-significant effect sizes (mean weighted effect size across condition type of r=.12; Kelley et al., 2019), whereas meta-analyses examining labeling effects have found a significant mean effect size (d=-.30; Berryessa & Wohlstetter). It may be the case that mock jurors associate the term "psychopath" with lack of treatment amenability. The way that trait presentations of psychopathy affect mock juror perceptions of treatment amenability is particularly interesting, given that researchers have yet to determine if psychopathy (or a specific subset of psychopathic traits, such as the interpersonal-affective traits) renders individuals less amenable to treatment than those without psychopathic traits (Polaschek & Skeem, 2018).

Another piece of evidence suggesting that jurors may not understand the traits that make up psychopathy is research indicating that laypeople often confuse psychopathy with psychosis. In one study where more than 400 individuals attending jury duty were asked questions about perceptions and beliefs related to psychopathy, many participants endorsed delusions and other

symptoms of psychosis as core traits of psychopathy (Smith et al., 2014). Given this confusion, as well as the impact these misperceptions could have in juror decision-making, it is important to understand the extent to which actual psychopathic trait descriptors differentially affect mock juror perceptions of mental illness, dangerousness, and sentencing.

A specific area to pursue further involves understanding the potentially different impacts of the two psychopathy factor descriptions on juror decision-making. That is, which psychopathic trait descriptions lead to the most negative judgments and decisions among mock jurors? As noted above, psychopathic traits, even in the absence of a label, may be prejudicial. Traits such as "lack of remorse" and "living off the wealth of others" may influence juror opinions about the defendant in a way that is more prejudicial than probative, if these traits are perceived as malicious or even evil, regardless of if the term "psychopath" is used explicitly. Only two previous studies have examined the impact of distinct psychopathic trait descriptors on juror decision-making, although these studies did not use a randomized control design. Edens and colleagues (2013) analyzed data from three prior studies in which mock jurors were provided with a vignette of a crime (with no specific evidence of psychopathic traits) and then asked to rate the extent to which the defendant shows each of the 20 psychopathic traits on Hare's PCL-R. Participants were also asked about sentencing decisions (death or LWOP) and ratings of future dangerousness. Edens and colleagues (2013) found that, of participants who gave higher than midpoint ratings of interpersonal-affective traits, 49% voted for death. This is compared to only 15% of participants who gave lower than midpoint ratings ( $\Delta AUC = .5$ , meaning interpersonalaffective ratings were 5% more likely to predict sentencing outcome than global ratings). Cox and colleagues (2013) extended these studies using real jurors. The authors had jurors read a brief case description of a real murder (with no testimony of psychopathic traits) and then rate

the defendant on all 20 items from Hare's PCL-R, as well as make sentencing decisions. AUC analysis revealed the best predictors of death verdicts were higher ratings by the jurors of perceived remorselessness in specific and total interpersonal-affective traits in general, as compared to ratings of all traits or ratings of only antisocial-lifestyle traits. Ratings of only antisocial-lifestyle traits. Ratings of only antisocial-lifestyle traits. Ratings of only antisocial-lifestyle traits were generally associated weakly and non-significantly with death verdicts. The irony of these findings, showing that the interpersonal-affective traits are the most impactful for jurors, is that the empirically demonstrated predictive utility from psychopathic traits comes more from the antisocial-lifestyle traits than the interpersonal-affective traits (Kennealy et al., 2010).

Whereas these studies are helpful because they show that given the same information, jurors that perceive higher levels of interpersonal-affective psychopathy support harsher sentencing, they do not show us how being presented with different data (in our study, interpersonal-affective traits only, antisocial-lifestyle traits only, or both sets of traits) affects juror decision-making. It may be the case that when jurors are given concrete evidence of both interpersonal-affective and antisocial-lifestyle traits, they are more punitive than jurors who only are presented with one set of traits. Indeed, prior research suggests that the antisocial-lifestyle traits can also influence juror decision-making. Boccaccini and colleagues described a defendant with psychopathy to jurors and found that when the defendant was described with a greater antisocial history (similar to antisocial-lifestyle traits), jurors were more likely to suggest punitive outcomes (Boccaccini et al., 2008). Descriptions of criminal history are included in trait descriptions of antisocial-lifestyle traits (i.e., in the current study, as part of both the antisocial-lifestyle traits condition) because it is consistent with their measurement in Hare's PCL-R, which is the most common conceptualization of psychopathy

used by forensic evaluators and expert witnesses and presented to the court (DeMatteo, Hodges, & Fairfax-Columbo, 2016). Including criminal history as part of these conditions adds ecological validity, given that courts generally view criminal history as highly relevant to capital sentencing and admissible evidence presented to a capital jury.

#### **Proximal Judgments**

Another limitation of past research is that most studies tend to only assess *distal* decisionmaking by mock jurors (i.e., should the defendant receive a death sentence or LWOP?) rather than more *proximal* judgements (e.g., level of perceived psychopathy of the defendant). Proximal judgments that would presumably come before sentencing decisions most likely play a role in sentencing, although they have not been measured directly in most research. The measurement of proximal judgements of perceived psychopathy is particularly important in criterion studies that have found null results; in such studies, mock jurors in the control condition and the psychopathy condition did not choose significantly different sentencing outcomes (see Boccaccini et al., 2008; Murrie et al., 2007; Saks et al., 2014). It is unclear in such cases if the null results signify that there was no influence of psychopathy criterion effects on sentencing decision, that participants did not perceive the defendant described in the case as particularly psychopathic, or that participants did expect psychopathy to influence aggravating and mitigating factors. Thus, assessing the extent to which the different conditions impact judgments of psychopathy level would help us understand the reasoning behind juror decision-making.

In addition to studying the proximal outcome of perceived psychopathy, it is useful to study other rationales that may influence the juror's ultimate sentencing decision. For instance, does the psychopathy description influence the jurors' perceptions of treatment amenability and future dangerousness? Not only may these concepts weigh into the juror's capital sentencing

decision, they are also relevant outcomes of juror decision-making in non-capital cases. For example, some research indicates that criterion measures of psychopathy lead to greater perceived dangerousness (effect size  $r_W = .31$ , Kelley et al., 2019) than in control conditions. We refer to decisions about perceived dangerousness and treatment amenability as *medial* decisions, because theoretically they occur after the proximal judgement of perceived psychopathy and before the distal judgement of a death sentence or LWOP.

Finally, in order to accurately determine the effect of perceived psychopathy on juror decision-making, an adequate control condition needs to be used. Many prior studies examining the relationship between psychopathic traits and juror decisions used positive personality traits as the controls (e.g., traits that contrast with psychopathic traits, such as empathetic and responsible; Boccacini et al., 2008; Edens et al., 2003; Murrie et al., 2005; Murrie et al. 2007; Vidal & Skeem, 2007). The problem with this method is that it is impossible to determine if the specific traits of psychopathy are responsible for negative juror judgements, or if instead, the fact that psychopathy encompasses many negative and stigmatized traits (which are then compared to positively regarded personality traits) ultimately influenced decisions. Similarly, it is impossible to know if the stigma of mental health problems in general is responsible for differing juror judgements between the psychopathy condition and the control condition, unless the control condition includes an alternate mental health condition. Thus, the ideal control conditions include a control trait description which includes various traits, including negative ones (nonclinical control), and a control mental health problem condition that is different from psychopathy (clinical control). Although past research has explored the differences in juror decision-making between expert testimonies of psychopathy vs. psychotic disorder (Edens et al., 2004; Saks et al., 2014), to our knowledge, there is no prior study comparing juror perceptions of

autistic trait presentations to psychopathic trait presentations. Both disorders are associated with low empathy, but research suggests that autistic traits may be less stigmatizing than psychopathic traits and can even be mitigating factors in juror decision-making (Berryessa et al., 2015; Caliman & Berryessa, 2024). The present study sought to examine this more systematically.

#### **Present Study**

Despite some mixed findings in the literature, a larger picture emerges from past metaanalyses that perceived psychopathy affects mock juror decision-making. This finding is consistent across both labeling and criterion studies, in both juvenile and adult cases, and among various types of crimes presented, although the effects of criterion studies on sentencing are quite heterogeneous. It is important to consider that court cases in general include various descriptions of defendants (e.g., manipulative, deceitful), even when no psychiatric label is used, and research has shown that traits are more salient to mock jurors than labels (e.g., Boccaccini et al., 2008). No prior research has attempted to systematically uncover what descriptions may have the most impact on juror decision-making.

The present study examined criterion effects associated with distinct features of psychopathic personality on mock juror decisions. The studies that have been conducted to test criterion effects (e.g., Edens et al., 2013; Cox et al., 2013) did not manipulate exposure to expert testimony describing interpersonal-affective traits, antisocial-lifestyle traits, both, or neither to examine the impact of these distinct descriptions on sentencing. The current study did this and further expanded on previous research by assessing psychopathy criterion effects on more proximal decision-making, including ratings of perceived psychopathy and psychosis, and medial decision-making, including ratings of treatment amenability and future dangerousness.

#### Aims and Hypotheses

The present study investigated the impact of psychopathic trait descriptions on mock juror perceptions and decision-making. Specifically, the same case information was presented to participants, with the 5 conditions only differing as to the trait descriptors ascribed to the defendant by an expert witness: 1) interpersonal-affective traits, 2) antisocial-lifestyle traits, 3) combined interpersonal-affective and antisocial-lifestyle traits, 4) clinical control autistic traits condition, or 5) non-clinical control traits condition. The two control conditions allow us to examine the stigma of mental health problems overall in juror decision-making, versus the stigma of psychopathy specifically in juror decision-making.

Statistical analyses examined the effects of these conditions on the proximal outcome of perceived psychopathy, medial outcomes of ratings of future dangerousness and treatment amenability, and on distal sentencing decisions (LWOP or death). Additionally, we investigated if proximal outcomes (e.g., perceived psychopathy and perceived psychosis) relate to medial and distal decisions. Finally, we examined the relationship between perceived psychopathy and perceived psychopathy and perceived psychopathy and

#### Aim 1

How do different trait descriptions influence proximal juror decision-making?

*Hypothesis 1.1*: Based on evidence that jurors presented with both psychopathic traits and antisocial behavior are the most punitive (e.g., Boccaccini et al., 2008), we predicted that participants exposed to the trait description involving both interpersonal-affective traits and antisocial-lifestyle traits will have the highest perceived psychopathy ratings. Based on evidence that the interpersonal-affective psychopathy traits are more stigmatizing than the antisociallifestyle traits (e.g., Edens et al., 2001), we predicted that participants exposed to the trait

description with interpersonal-affective traits will have the second highest perceived psychopathy ratings, followed by those exposed to only antisocial-lifestyle traits. Participants exposed to the clinical control condition will have the second lowest ratings of perceived psychopathy, followed by participants exposed to the non-clinical control condition.

#### Aim 2

How do different trait descriptions influence medial juror decision-making?

*Hypotheses* 2.1 - 2.2: Based on evidence that jurors presented with both psychopathic traits and evidence of high levels of antisocial behavior are the most punitive (e.g., Boccaccini et al., 2008), we predicted that participants exposed to the trait description with both interpersonal-affective traits and antisocial-lifestyle traits will have the highest ratings of future dangerousness and lowest ratings of treatment amenability, followed by those exposed to only interpersonal-affective traits, then those exposed to only antisocial-lifestyle traits. Participants exposed to the clinical control condition will have the second lowest ratings of future dangerousness and the second highest ratings of treatment amenability, followed by participants exposed to non-clinical control condition.

#### Aim 3

How do different trait descriptions influence distal sentencing outcomes?

*Hypothesis 3.1*: Based on evidence that jurors presented with both psychopathic traits and antisocial behavior are the most punitive (e.g., Boccaccini et al., 2008), we predicted that participants exposed to the trait description with both interpersonal-affective traits and antisociallifestyle traits will be most likely to sentence a defendant to death, followed by those exposed to only interpersonal-affective traits, then those exposed to only antisocial-lifestyle traits.

Participants exposed to the clinical control condition will be second least likely to sentence the defendant to death, followed by participants exposed to the non-clinical control condition.

#### Aim 4

How do proximal judgements relate to medial and distal outcomes?

*Hypothesis 4.1-4.3*: Based on evidence that perceived psychopathy is related to jurors endorsing more punitive outcomes (e.g., Cox et al., 2013, Edens et al., 2013), we predicted that participants who rate the defendant higher on levels of perceived psychopathy, regardless of treatment condition, will be more likely to endorse future dangerousness, less likely to endorse treatment amenability, and more likely to sentence the defendant to death than those who rate lower levels of perceived psychopathy.

#### Aim 5

To what extent do mock jurors perceive psychosis when presented with descriptions of psychopathy?

*Hypothesis 5.1:* Based on evidence that laypersons confuse psychosis and psychopathy (e.g., Smith et al., 2014), we predicted that despite no description of psychotic features in the different conditions of the study, participants will endorse greater perceived psychosis in the psychopathy vs. control conditions.

#### **CHAPTER TWO: METHOD**

#### **Open Science Practices**

This study, including the procedures, data cleaning process, and analytic plan, was preregistered on <u>Open Science Framework (OSF)</u>. After consenting to the study but before answering any questions, participants were asked if they consented to their de-identified data being uploaded to OSF. This process was approved by the study's Institutional Review Board prior to publishing the survey. Of our final sample, 419 (94.4%) consented to their de-identified data being uploaded to OSF.

#### **Participants**

The participants were 444 undergraduate students at a large, Southeastern university participating in research for credit in their introductory psychology course through the SONA systems platform. Participants were 54% female, 64% white, and 20% Hispanic. Almost half (45%) of participants were 18 years old, whereas 50% were 19-22 years old, and 5% were 23-41 years old. The sample was fairly representative of USF undergraduate students as a whole, although the sample contained more respondents of Asian descent (14% compared to 9%) and fewer female respondents (54% compared to 60%). See Tables 1 and 2 for further sample demographic information.

## Table 1

Sample Characteristics

Demographic Information	Sample Used in Analyses (N = 444)
Age in years $(M(SD))$	19.26(2.22)
Missing $(n(\%))$	0
Gender $(n(\%))$	
Man	195(43.9)
Woman	239(53.8)
Non-Binary	4(0.9)
Other	5(1.1)
Missing	1(0.2)
Race $(n(\%))$	
White	285(64.2)
African American/Black	32(7.2)
Asian	64(14.4)
Pacific Islander or Hawaiian	1(0.2)
Mixed Race	34(7.7)
Other	27(6.1)
Missing	1(0.2)
Ethnicity $(n(\%))$	
Hispanic/Latino	90(20.3)
Non-Hispanic/Latino	353(79.5)
Missing	1(0.2)
Political Orientation $(n(\%))$	
Conservative	82(18.5)
Moderate	163(36.7)
Liberal	140(31.5)
Apolitical	56(12.6)
Missing	3(0.7)
Political Affiliation $(n(\%))$	
Republican	93(20.9)
Independent	112(25.2)
Democrat	118(26.6)
None	118(26.6)
Missing	3(0.7)

#### Table 2

Characteristic	Current	USF student
	sample	population
African American	7.2%	9.1%
Asian	14.4%	8.6%
Hispanic	20.3%	22.9%
Non-Hispanic White	50.2%	50.4%
Pacific Islander or Hawaiian	0.2%	0.1%
Male	43.9%	40.3%
Female	53.8%	59.6%

Sample Demographics vs USF Demographics

#### **Power Analysis**

A power analysis was conducted *a priori* utilizing G\*Power, a tool for computing statistical power analyses (Faul et al., 2007) to determine the required sample size, based on the expected effect size, which can be estimated based on prior literature. In this case, a metaanalysis found effect sizes ( $r_w$ ) between .22 and .46 for criterion measures of psychopathy on risk of future dangerousness and death verdicts (mean weighted correlation; Kelley et al., 2019). They found small or no effect sizes for treatment amenability ( $r_w$ =.09; Kelley et al., 2019). Failsafe N analyses indicated that these results were not merely due to the file-drawer effect (Kelley et al., 2019). Based on this, we attempted to detect an effect size of at least Cohen's *d*=.408 (equal to Pearson's r = .2) for sentencing. The Type 1 error rate was set at .05 and the number of conditions was 5. The recommended sample size based on the power analysis with these parameters was 347. Our sample size of 444 participants allowed us to meet the required sample size to detect our anticipated effect.

#### Procedures

#### **Consent and Demographics**

Participants completed the study using Qualtrics, an online survey software. The first page of the survey was an informed consent page detailing the estimated time of the study (45 minutes), the study procedures (reading a brief vignette detailing a murder and answering some questions), and the minimal risks. Next, participants were asked if they consented to their deidentified data being shared with the research community via the Open Science Framework.

The first questionnaire participants completed after the consent pages was a demographics questionnaire. Participants were asked about their age, race/ethnicity, gender, political affiliation/orientation, and juror qualification questions, including if they are a U.S. Citizen and if they had ever been convicted of a felony (see Appendix A).

#### **Trait Conditions**

Next, participants were given a vignette to read of the capital murder case and were asked to review it. The case was less than a page long, single-spaced, and details a murder involving a carjacking, an aggravating factor which qualified it to be tried as capital case. The male murder suspect confessed, and jurors unanimously found him guilty. This case is a real capital case (U.S. v Barnette, 2009), and the description was adapted from the one Cox et al. (2013) used in a similar study (see Appendix B).

Below the case description, the participants read a brief report by an expert witness, a clinical psychologist who spent many hours interviewing the defendant and described the defendant's personality. Participants were randomly assigned to one of five trait descriptions using Qualtrics' randomizer, with "evenly present elements" specified (see Appendix C). In the interpersonal-affective condition, the defendant was described as being superficially charming,

manipulative, emotionally shallow, and callous. He was additionally described as being a smooth talker and pathological liar. Finally, he was described as failing to accept responsibility, lacking remorse and empathy, and possessing a grandiose sense of self-worth.

In the antisocial-lifestyle condition, the defendant was described as being impulsive, irresponsible, and thrill seeking. Additionally, he was described as being aggressive and hot headed since childhood and living off the wealth of others. Finally, he was described as having a history of juvenile delinquency and having a criminal history, which includes many different types of offenses, and violations of probation for a previous charge. In the combined psychopathy traits condition, the defendant was described with all the above traits, and this trait description is slightly longer than the others.

In addition to the experimental conditions above, two control conditions were included. The first control condition was a clinical control condition where the defendant was described as showing behaviors associated with autism spectrum disorder, including being socially awkward, detail-oriented, and introverted. He was also described as being very sensitive to sounds and smells, being especially good at remembering numbers, and liking to stick to a routine. Finally, he was described as being bad at reading other people's tones and facial expressions and understanding others' emotions. The second control condition is the non-clinical control condition, where the defendant was described with personality traits not associated with any psychological disorder. In this condition, the defendant was described as being outgoing, pessimistic, independent-minded, blunt, and rude. He was also described as being perceptive, curious, unreliable, an original thinker and a procrastinator. Finally, he was described as having low self-esteem, having a history of starting creative projects and not finishing them, and having a history of not asking for help when he needs it.

The trait descriptions were standardized for length and reading difficulty. Each expert witness testimony had a Flesch-Kincaid Grade Level of between 10.2 and 10.4, meaning that they should be fully understood by anyone with an 11<sup>th</sup> grade reading level or above (Solnyshkina et al., 2017). This reading level was deemed appropriate for the sample, who were college students. Additionally, the language used to describe the traits are similar to descriptions used in prior studies (see Edens et al., 2013). Each trait description, besides the combined psychopathy condition, had between 94 and 97 words in the expert testimony; the combined psychopathy expert testimony was 155 words.

After reading the trait description by the expert testimony, participants were asked multiple choice questions about the content of the case vignette to make sure they were paying attention (see Appendix D). These three questions were included as validity checks. Participants were not allowed to go backwards in the survey to edit answers to questions and did not have access to the case description while answering the validity check questions. Participants had to answer at least 2 out of 3 validity questions correctly in order for their data to be included further analyses.

#### **Mock Juror Ratings and Sentencing Decision**

After the validity check, the participants were asked several questions based on what they read. For the proximal decision-making outcome, mock jurors were first asked to rate the defendant on the following descriptors on a 1-5 Likert scale (not at all to extremely): psychopathic personality, depression, psychosis, neurosis, mental health problems, anxiety, and autism (see Appendix E). The main focus of these questions was to understand the relationship between participant ratings of psychopathy and sentencing outcomes. Other traits associated with mental health problems were included to lower the chances that the participants would guess the

purpose of the study. Perceived psychosis was probed as a secondary aim to examine if participants understand the difference between psychosis and psychopathy.

For medial decision-making outcomes (see Appendix F), jurors were then asked to rate the defendant's future dangerousness (e.g., "what is the likelihood that the defendant would present a future danger to society?") and his treatment amenability (e.g., "what is the likelihood that the defendant would respond to psychological treatment and get better?") from 1-5 on Likert scales (not all likely to extremely likely).

Finally, they were asked to vote to either sentence him to LWOP or to death. They were provided instructions in sentencing that are similar but less complex than the actual instructions for capital jurors (see Appendix G). The purpose of the sentencing question was to assess the effects of case psychopathic trait descriptions on sentencing rather than increasing ecological validity, especially since real juror instructions can be confusing and complex and therefore can confound the variables of interest in this study (Lynch & Haney, 2000).

#### **Fake-Good Responding and Debriefing Questions**

Participants were then administered a 9-item Fake-Good scale in order to assess positive impression management (Pinsoneault, 1996, see Appendix H). In prior research, this scale showed good convergent validity (r=.59) with the Minnesota Multiphasic Personality Inventory Adolescent Version Lie Scale (MMPI-A L; Butcher et al., 1992) and good discriminant validity between honest and fake-good (p<.001; for a full description of psychometric properties, see Pinsoneault, 1996).

At the end of the study, participants were asked several debriefing questions, including a question to assess "death qualification" (meaning if participants can meaningfully consider imposing the death penalty as a juror). Those who are not death qualified would be struck from

the jury pool in a real capital trial. Additionally, participants were asked questions to understand their decision-making, including when they made their sentencing decision, how heavily the expert witness testimony factored into their decision, how much criminal history influenced their decision (if applicable), and whether they found the instructions confusing (see Appendix H for all debriefing questions). After survey completion, participants were given a list of mental health resources and the contact information for the Primary Investigator (see Appendix I). The study in its entirety took 30 minutes to an hour to complete.

#### **Data Analytic Strategy**

Participants who failed the validity check questions described above, obtained a raw score of 6 or higher on the fake good questions, or failed to answer at least 80% of the questions were excluded from the data (Meade & Craig, 2012). In total, 514 respondents participated in the survey study; however, 70 respondents were excluded from the analyses due to the a priori exclusion criteria (n=40 missing 80% or more of their data, n=30 failed 2 out of 3 validity questions or scored a 6 or higher on the fake-good scale). Multiple imputation was specified a priori for missing data when it did not exceed 20% of that participant's questionnaire under the assumption that data is missing at random (Schafer, 1999); however, no data was missing at random for the primary analyses once the data pruning process was complete. Descriptive statistics and correlations were run for all variables.

Analyses were conducted in SPSS version 27. Preliminary analyses investigated any demographic differences between the conditions that were not balanced by random assignment. We used chi square analyses to assess for any between-condition differences on nominal demographic variables, such as race/ethnicity, gender, and political orientation. ANOVAs were used to explore differences in continuously measured demographic variables, including age, as

well as the fake-good validity scale. We specified a priori that if there were significant betweencondition differences, we would incorporate the variables with such differences as covariates in main analyses. The conditions did not differ on any of these demographic or fake-good variables.

For Aims 1 and 2 (how do different trait descriptions influence proximal and medial juror decision-making?), three ANOVAs were used to examine group effects (5 trait description conditions) on perceived psychopathy, treatment amenability, and future dangerousness. When main effects were found, we examined differences between groups using Tukey's Honestly Significant Difference post hoc test (Abdi & Williams, 2010). In order to account for multiple testing, the Holm-Bonferroni correction was employed when conducting post hoc tests (Abdi, 2010). For Aim 3 (how do different trait descriptions influence distal sentencing outcomes?), a chi square test was conducted. For Aim 4 (how do proximal judgements relate to medial and distal outcomes?), Pearson bivariate correlations were conducted to examine relationships between perceived psychopathy, treatment amenability, and future dangerousness. A logistic regression was used to examine the relationship between perceived psychopathy (predictor variable) and sentencing (dependent variable). Finally, for Aim 5 (to what extent do mock jurors perceive psychosis when presented with trait descriptions of psychopathy?), ANOVA was used to examine condition effects on perceived psychosis.

#### **Post Hoc Analyses**

A priori, we specified that covariates would only be included in our statistical analyses if they were determined to be significantly different across the trait description conditions. However, given the theoretical relevance of gender (Guy & Edens, 2003, Saxena et al., 2023) and political orientation (Mowle et al., 2016, Sivasubramaniam et al., 2020) in mock juror decision-making, particularly as it pertains to psychopathy, we conducted several post-hoc

analyses incorporating these sociodemographic covariates into our statistical analyses. For Aims 1 and 2 (how do different trait descriptions influence proximal and medial juror decision-making?), three ANCOVAs (including gender and political orientation as covariates) were used to examine condition effects (5 trait description conditions) on perceived psychopathy, treatment amenability, and future dangerousness.

For Aim 3 (how do different trait descriptions influence distal sentencing outcomes?), a hierarchical binary logistic regression was conducted that included gender and political orientation in block one, trait description condition in block two, treatment amenability and future dangerousness in block three, and sentencing decisions as the outcome variable. Given that trait descriptions were not significantly related to sentencing (see below), we also conducted hierarchical binary logistic regression with the same variables but only using participants who were death qualified (meaning that they indicated that they could meaningfully consider imposing either the death penalty or LWOP based on the facts of the case) and those who indicated that they did not make their sentencing decision until after hearing the facts of the case and the expert witness testimony.

For Aim 4, we wanted to examine the unique and cumulative roles of each proximal and medial decision on sentencing. Thus, a hierarchical binary logistic regression was conducted (block 1: gender and political orientation, block 2: trait description condition, block 3: proximal psychopathy ratings, block 4: medial treatment amenability and future dangerousness ratings) on sentencing outcome. Finally, for Aim 5 (to what extent do mock jurors perceive psychosis when presented with trait descriptions of psychopathy?), ANCOVA was used to examine condition effects on perceived psychosis, with gender and political affiliation as covariates.

#### **CHAPTER THREE: RESULTS**

#### **Manipulation Check**

To confirm that participants correctly interpreted descriptions of defendant personality based on the expert witness manipulation, we compared the 5 conditions on participant ratings of perceived psychopathy and other psychopathology conditions on the proximal decision-making items. The fact that perceived psychopathy scores were higher in the psychopathy trait descriptions (for descriptive statistics, see Table 3) suggests that the expert witness testimony did have an effect on participant perceptions of the defendant. Mean psychopathy ratings in the interpersonal-affective condition and the combined trait condition were above 4 (rated on a 1 to 5 Likert scale with 1 as "not at all" and 5 as "extremely"), as compared to the control conditions of 2.97 and 3.10, indicating that the participants perceived higher psychopathy when they read expert witness descriptions). The rating for antisocial-lifestyle trait condition was 3.3, which was higher than the control conditions but lower than the other psychopathy conditions, suggesting that participants who read this trait description were less likely to perceive psychopathy than when they read the interpersonal-affective traits or a combined trait descriptions.

In terms of the control conditions, participants who saw the autistic trait presentation rated perceived autism significantly higher than all other conditions; however, as shown in Table 3, the mean rating was only 2.7 out of 5 with the anchors of 1 (not at all) and 5 (extremely). This suggests that the autism trait description did lead participants to rate the defendant as

significantly more autistic than participants in other conditions, but not necessarily to think of the

defendant as autistic.

### Table 3

Dorooiyo	Non	Clinical	Anticopial	Internarco	Combined	Avorago	10
d Trait	NUII-	(Autism)	Allusocial	merperso	Developed	Average	п
d Iran	Chinical	(Autisiii)	-Lifestyle	nal-	Psychopat		
Rating	Control	Control	1 raits	Affective	file Traits		
M(SD)	(n=91)	(n=88)	(n=84)	Traits	(n=93)		
				(n=99)			
Psychop	3.10(1.23)	2.97(1.19)	3.29(1.29)	4.19(0.88)	4.31(0.87)	3.58(1.24)	441
athy							
Autism	1.38(0.75)	2.71(1.36)	1.34(0.67)	1.26(0.60)	1.35(0.79)	1.60(1.03)	432
Psychos	3.13(1.20)	2.97(1.29)	3.42(1.34)	3.60(1.34)	3.85(1.15)	3.40(1.30)	441
-							
is							
Depressi	3.03(1.25)	2.68(1.28)	2.52(1.23)	2.19(1.24)	1.85(1.17)	2.45(1.30)	437
- • P • • • •			()	,			
on							
on							
Neurotic	3 10(1 27)	3.02(1.12)	3 31(1 25)	2.90(1.41)	3 30(1 33)	3 13(1 20)	441
INCUIOLIC	5.10(1.27)	5.02(1.12)	5.51(1.25)	2.90(1.41)	5.50(1.55)	5.15(1.29)	441
icm							
15111							
A	2 40(1 12)	2.22(1.00)	0.51(1.20)	1.7((1.10)	1.75(1.05)	2 24(1 20)	420
Anxiety	2.49(1.13)	3.23(1.09)	2.51(1.32)	1.76(1.19)	1.75(1.05)	2.34(1.28)	438
	2.27(1.20)	2 2 5 (1 1 1)	2.51(1.20)	2 47 (1 20)	2.05(1.20)	2.51(1.20)	1.1.2
Mental	3.37(1.28)	3.36(1.11)	3.51(1.29)	3.47(1.30)	3.85(1.29)	3.51(1.26)	443
Illness							
Treatme	2.73(1.05)	2.88(1.12)	2.31(1.01)	1.91(0.97)	1.88(0.79)	2.34(1.07)	444
nt							
Amenab							
ility							
Future	3.53(0.94)	3.33(1.13)	4.10(0.90)	4.08(0.89)	4.42(0.71)	3.89(1.00)	444
Dangero	. ,		. ,		. ,	. ,	
usness							
Sentenci	67(26.4%)	71(19.3%)	68(20%)	63(28%)	62(33.3%)	331(25.5	444
ng*				<b>x</b> - · · · <b>/</b>		%)	
-0						. ~ /	

Descriptive Statistics for Proximal and Medial Trait Ratings and Sentencing Decision by Condition

\* Sentencing includes the number of participants who voted for death (vs. life without parole), with the percentage in parentheses.
### Aim 1

The first aim of the study was to investigate whether trait description condition influenced proximal ratings of psychopathy (perceived psychopathy level of the defendant). As shown in Figure 1, a one-way ANOVA revealed a significant effect of trait description on perceived psychopathy, F(4,436)=29.51, p<.001,  $\eta^2$ =.213, with a large effect size (see Table 4 for post-hoc contrasts). Participants in the combined psychopathy condition (M=4.31, SD=.87) and the interpersonal-affective psychopathy condition (M=4.19, SD=.88) gave the highest ratings of perceived psychopathy, and these effects were not significantly different from each other. These trait conditions were significantly different from the ratings of the antisocial-lifestyle psychopathy condition (M=3.29, SD=1.29), the non-clinical control condition (M=3.10, SD=1.23), and the clinical control condition (autism; M=2.97, SD=1.19), which received the lowest ratings of perceived psychopathy. When gender and political orientation were incorporated as covariates in an ANCOVA during post-hoc analyses, neither were significant predictors of perceived psychopathy (gender: F(1,431)=1.01, p=.32; political orientation: F(1,431)=1.73, p=.19), whereas trait description remained significant, F(4,431)=29.07, p<.001,  $\eta^2 = .212$ ).

Thus, trait descriptions appear to influence mock juror's perceptions of psychopathy, even though the expert witnesses testimony never used the word "psychopath" or "psychopathy." Interestingly, those participants exposed to interpersonal-affective traits (either in the combined psychopathy condition or the interpersonal-affective condition) had significantly higher perceptions of psychopathy than those who were only exposed to the antisocial-lifestyle condition, indicating that the interpersonal-affective traits are the traits that lead jurors to perceive psychopathy.



The Effect of Trait Description on Perceived Psychopathy

## Figure 1

Perceived Psychopathy as a Function of Trait Description

## Table 4

Perceived Psychopathy: Post-Hoc Contrasts and Effect Sizes with Holm-Bonferroni Correction

Condition 1	Condition 2	MD	SE	р	H.B.	Cohen's d
				-	Correctio	on
Combined	Autism	1.35	.164	<.001	0.010	1.29
IA	Autism	1.23	.167	<.001	0.009	1.17
Combined	Control	1.21	.163	<.001	0.008	1.14
IA	Control	1.09	.166	<.001	0.007	1.02
Combined	AL	1.03	.166	<.001	0.006	0.93
IA	AL	.907	.168	<.001	0.005	0.82
AL	Autism	.320	.169	.058	0.232	0.26
AL	Control	.184	.168	.272	0.816	0.15
Control	Autism	.136	.166	.415	0.830	0.11
Combined	IA	.119	.164	.470	0.830	0.14

*Note.* H.B.=Holm-Bonferroni, IA=interpersonal-affective psychopathy, AL=antisocial-lifestyle psychopathy, combined=combined psychopathy traits condition; bolded numbers are significant.

#### Aim 2

The second aim of the study was to investigate the effects of trait description on medial decisions about defendant treatment amenability and future dangerousness, both of which were rated on a 5-point scale from 1 (not at all likely) to 5 (extremely likely). First, a one-way ANOVA revealed a significant effect of trait description on perceived defendant treatment amenability F(4,443)=18.93, p<.001,  $\eta^2=.147$ , with a medium effect size. Figure 2 shows that those in the clinical control condition (autism; M=2.88, SD=1.12) and the non-clinical control condition (M=2.73, SD=1.05) had the highest treatment amenability ratings, which were significantly higher (autism condition, p=.006; non-clinical control condition, p=.024) than those in the antisocial-lifestyle psychopathy condition (M=2.31, SD=1.01). See Table 5 for post-hoc tests. The second lowest treatment amenability ratings were made by those in the combined psychopathy condition (M=1.88, SD=.79) and the interpersonal-affective psychopathy condition (M=1.91, SD=.97), which did not differ from each other but differed from ratings in the two control conditions and the antisocial-lifestyle condition. When gender and political orientation were incorporated as covariates into the ANCOVA during post-hoc analyses, neither were significant predictors of treatment amenability (gender: F(1,434)=.044, p=.83; political orientation: F(1,434)=1.15, p=.28), whereas trait description remained significant, F(4,434)=18.132, p<.001,  $\eta^2=.143$ .



## Figure 2

The Effect of Trait Description on Ratings of Treatment Amenability

## Table 5

Treatment Amenability: Post-Hoc Contrasts and Effect Sizes with Holm-Bonferroni Correction

Condition 1	Condition 2	MD	SE	р	H.B.	Cohen's d
				-	Correction	
Autism	Combined	.968	.149	<.001	0.010	1.032
Autism	IA	.937	.152	<.001	0.009	0.926
Control	Combined	.847	.147	<.001	0.008	0.915
Control	IA	.816	.150	<.001	0.007	0.811
Autism	AL	.534	.153	<.001	0.006	0.534
AL	Combined	.434	.150	.004	0.020	0.474
Control	AL	.413	.150	.006	0.024	0.408
AL	IA	.403	.153	.009	0.027	0.404
Autism	Control	.121	.150	.419	0.838	0.138
IA	Combined	.031	.149	.835	0.838	0.034

*Note.* H.B.=Holm-Bonferroni, IA=interpersonal-affective psychopathy, AL=antisocial-lifestyle psychopathy, combined=combined psychopathy, bolded numbers are significant.

Second, there was a large and significant effect of trait description on ratings of defendant future dangerousness, F(4,443)=21.32, p<.001,  $\eta 2=.163$ . As shown in Figure 3, participants in the combined psychopathy condition (M=4.42, SD=.71), the antisocial-lifestyle condition (M=4.10, SD=.90) and the interpersonal-affective condition (M=4.08, SD=.89) all gave the highest ratings of future dangerousness, which did not differ from each other. These three conditions differed significantly from ratings of future dangerousness in the non-clinical control condition (M=3.53, SD=.94) and the clinical (autism) control condition (M=3.33, SD=1.13). For post-hoc contrasts, see Table 6. When gender and political orientation were included as covariates into the ANCOVA during post-hoc analyses, neither were significant predictors of future dangerousness (gender: F(1,434)=.799, p=.37; political orientation: F(1,434)=1.35, p=.24) and trait description remained significant, F(4,434)=20.935, p<.001,  $\eta 2=.162$ .

Together, these findings suggest that presentations of psychopathy trait descriptions, especially when they include interpersonal-affective descriptions, are associated with lower perceptions of treatment amenability and dangerousness, although antisocial-lifestyle traits are also important for the latter.



# Figure 3

The Effect of Trait Description on Ratings of Future Dangerousness

# Table 6

Future Dangerousness: Post-Hoc Contrasts and Effect Sizes with Holm-Bonferroni Correction

Condition 1	Condition 2	Mean Diff.	SE	р	H.B.	Cohen's d
				-	Correction	
Combined	Autism	1.09	.137	<.001	0.010	1.155
Combined	Control	.892	.136	<.001	0.009	1.068
AL	Autism	.766	.141	<.001	0.008	0.754
IA	Autism	.750	.139	<.001	0.007	0.737
AL	Control	.568	.139	<.001	0.006	0.619
IA	Control	.552	.138	<.001	0.005	0.601
Combined	IA	.340	.137	.013	0.052	0.422
Combined	AL	.324	.139	.020	0.060	0.395
Control	Autism	.198	.138	.151	0.302	0.192
AL	IA	.016	.141	.911	0.911	0.022

*Note.* H.B.=Holm-Bonferroni, IA=interpersonal-affective psychopathy, AL=antisocial-lifestyle psychopathy, combined=combined psychopathy, bolded numbers are significant.

#### Aim 3

The third aim of the study was to analyze the effects of trait description on sentencing. There was no significant effect of trait description on sentencing decision,  $\chi^2$  (4, 444)=7.05, p=.13), even though assumptions for chi-square were met, including that there was an expected value of 5 or greater in each cell. As part of post-hoc analyses, a binary logistic regression was run on sentencing decision, in which theoretical covariates (gender and political orientation) were included in step 1 and trait description condition was included in step 2. As shown in Table 7, gender was a significant predictor of sentencing decision (p=.002) and remained so once trait description was added into the equation (p=.003; for full model results, see Table 7). However, trait description remained non-significant after controlling for gender and political orientation. This suggests that individual characteristics of the juror, such as gender, may be more salient in sentencing decision-making than characteristics of the defendant (i.e., psychopathic traits).

Given that our results differed somewhat from past literature which indicates that psychopathy labels affect sentencing decisions (Berryessa & Wohlstetter, 2019, Saxena et al., 2022), we conducted post-hoc chi-square including only participants who were death qualified (those that could meaningfully consider imposing a death sentence in a capital trial). Even in death qualified jurors (n=330, non-clinical control n=63, clinical control n=73, antisociallifestyle traits n=59, interpersonal-affective traits n=68, combined psychopathy traits n=67), there was no significant effect of trait description on sentencing decision  $\chi_2$  (4, 330) =7.22, p=.13). As an additional safeguard, we used data from our debriefing questions to eliminate those mock jurors who indicated that they had decided on their sentencing decision before hearing the expert witness testimony, leaving an n=336. Even after eliminating jurors who indicated that they had made their decision before hearing the expert testimony, there was no significant effect of trait description on sentencing decision  $\chi^2$  (4, 336) =7.22, p=.07.

### Table 7

Post-Hoc Test: Binary Logistic Regression Examining Trait Description Effects on Sentencing Decision, with Covariates

		В	S.E.	Wald	df	Sig.	Exp (B)	
C.	<u> </u>							
Step	Gender							
1a		-0.64	0.22	8.25	1.00	0.00	0.53	
	Political Orientation	-0.10	0.12	0.65	1.00	0.42	0.91	Pseudo R <sup>2</sup> =.032
	Constant	0.13	0.42	0.09	1.00	0.77	1.13	-2LL=490.02
Step 2	Gender	-0.66	0.23	8.60	1.00	0.00	0.52	
	Political Orientation	-0.09	0.12	0.59	1.00	0.44	0.91	
	Trait Description	0.14	0.08	3.17	1.00	0.08	1.15	Pseudo R <sup>2</sup> =.043
	Constant	-0.15	0.45	0.11	1.00	0.74	0.86	-2LL=486.82

*Note:* The measure of pseudo- $R^2$  is Nagelkerke  $R^2$ . Exp(B) is an odds ratio indicating the predicted change in odds for every unit change in the predictor variable.

## Aim 4

The fourth aim of the study was to investigate how proximal judgements (perceived psychopathy) relate to medial ratings of treatment amenability and future dangerousness, and the distal sentencing decision. See Table 8 for the intercorrelations between study variables. First, Pearson bivariate correlations indicated a significant relationship between perceived psychopathy and both treatment amenability (r=-.316, p<.001) and future dangerousness (r=.397, p<.001). This suggests that those who perceive higher levels of psychopathy in the defendant are significantly more likely to give higher ratings of future dangerousness and lower ratings of

treatment amenability. Second, the planned binary logistic regression was run to examine the relationship between the proximal judgement (perceived psychopathy) and distal sentencing. Contrary to expectation, there was not a significant relationship between perceived psychopathy and sentencing outcome (perceived psychopathy: B = 0.126,  $SE_B = 0.091$ , Wald = 1.931, p = .165). This suggests that while the proximal judgment of perceived psychopathy is significantly related to medial judgements (treatment amenability and future dangerousness), it is not predictive of sentencing outcome.

Finally, we conducted a post-hoc hierarchical binary logistic regression on sentencing outcomes, with trait description and demographic covariates entered in the first step, proximal perceived psychopathy in the second step, and medial treatment amenability and future dangerousness ratings in the third step. As shown in Table 9, trait description and perceived psychopathy ratings were not related to sentencing decisions, but treatment amenability and future dangerousness were related to sentencing (B=-.53 and .31 respectively). We also conducted the post-hoc binary logistic regressions including only death qualified jurors (those that suggested they could meaningfully consider imposing the death penalty based on the facts of the case, n=330) and those who indicated that they did not make a sentencing decision until after hearing the expert witness testimony (n=336). However, trait description and perceived psychopathy were not significant in either case (see Tables 10 and 11 for full model results).

## Zero-Order Correlations between Main Study Variables

*Note:* Nominal variables (Race, Gender, Ethnicity) were dichotomized. Sample sizes for correlations varied due to missing and not applicable data (*n* ranged between 430 and 444). \*p<.05.

	1	2	3	4	5	6	7	8	9	10	11
1. Race	_										
2. Gender	05	_									
3. Ethnicity	.51**	.00	_								
4. Political											
Orientation	.13**	.13**	.04	_							
5. Political											
Affiliation	.34**	.02	.14**	.50**	_						
6. Trait											
Description	06	.03	03	01	05	_					
7. Perceived											
Psychopathy	01	04	02	07	05	.42**	-				
8. Perceived											
Psychosis	08	06	01	10*	03	.23**	.58**	-			
9. Perceived											
Autism	02	01	03	.00	.04	20**	04	.03	-		
10. Treatment	1 4 1/1 1/1	0.1	0.4	0.6	0.0	0.5 - 14 - 14			0.7.1.11		
Amenability	.14**	.01	.04	.06	.09	35**	32**	22**	.27**	-	
11. Future	0.2	0.0	0.1	07	0.5				1.0.4	1 O vite vite	
Dangerousness	.03	.03	.01	07	05	.36**	.40**	.33**	10*	48**	_
12. Sentencing	01	15**	06	06	03	.08	.07	.08	05	25**	.20**
**p<.01.											

		В	S.E.	Wald	df	Sig.	Exp	
							(B)	
Step	Gender							Pseudo $R^2 = 0.40$
1a		-0.63	0.23	7.90	1.00	0.01	0.53	K =.040
	Political Orientation	-0.09	0.12	0.59	1.00	0.44	0.91	-2LL=483.68
	Trait Description	0.14	0.08	3.15	1.00	0.08	1.15	
	Constant	-0.19	0.45	0.18	1.00	0.67	0.83	
Step	Gender							Pseudo R <sup>2</sup> =
1b		-0.63	0.23	7.70	1.00	0.01	0.54	.042
	Political Orientation	-0.09	0.12	0.53	1.00	0.47	0.92	-2LL=483.28
	Trait Description	0.12	0.09	1.82	1.00	0.18	1.12	
	Perceived Psychopathy	0.06	0.10	0.41	1.00	0.53	1.07	
	Constant	-0.40	0.56	0.51	1.00	0.48	0.67	
Step	Gender							Pseudo R <sup>2</sup> =
1 C		-0.69	0.24	8.44	1.00	0.00	0.50	.153
	Politica1 Orientation	-0.04	0.13	0.11	1.00	0.74	0.96	-2LL=448.08
	Trait Description	-0.02	0.09	0.07	1.00	0.79	0.98	
	Perceived Psychopathy	-0.11	0.11	1.03	1.00	0.31	0.90	
	Treatment Amenability	-0.54	0.14	14.50	1.00	<.001	0.59	
	Future Dangerousness	0.40	0.16	6.54	1.00	0.01	1.49	
	Constant	0.08	0.90	0.01	1.00	0.93	1.08	

Post-Hoc Test: Binary Logistic Regression Examining Proximal and Medial Decision-Making and Sentencing Decisions, with Covariates

*Note:* The measure of pseudo- $R^2$  is Nagelkerke  $R^2$ . Exp(B) is an odds ratio indicating the predicted change in odds for every unit change in the predictor variable.

		В	S.E.	Wald	df	Sig.	Exp	
							(B)	
Step	Gender							Pseudo $P^2 = 0.38$
1a		-0.53	0.25	4.47	1.00	0.04	0.59	K –.038
	Political Orientation	-0.13	0.13	1.04	1.00	0.31	0.88	-2LL=389.10
	Trait Description	0.15	0.09	2.91	1.00	0.09	1.16	
	Constant	-0.04	0.48	0.01	1.00	0.93	0.96	
Step	Gender							Pseudo R <sup>2</sup> =
1b		-0.52	0.25	4.38	1.00	0.04	0.59	.043
	Political Orientation	-0.13	0.13	0.97	1.00	0.32	0.88	-2LL=387.98
	Trait Description	0.11	0.10	1.26	1.00	0.26	1.11	
	Perceived Psychopathy	0.12	0.11	1.11	1.00	0.29	1.12	
	Constant	-0.39	0.59	0.44	1.00	0.51	0.68	
Step	Gender							Pseudo R <sup>2</sup> =
1 C		-0.58	0.27	4.73	1.00	0.03	0.56	.182
	Politica1 Orientation	-0.13	0.14	0.84	1.00	0.36	0.88	-2LL=353.21
	Trait Description	-0.01	0.10	0.01	1.00	0.93	0.99	
	Perceived Psychopathy	-0.07	0.12	0.35	1.00	0.55	0.93	
	Treatment Amenability	-0.60	0.16	13.83	1.00	<.001	0.55	
	Future Dangerousness	0.42	0.17	6.26	1.00	0.01	1.53	
	Constant	0.16	0.99	0.03	1.00	0.87	1.18	

Post-Hoc Test: Hierarchical Binary Logistic Regression of Decision-Making Variables on Sentencing (Death Qualified Sample)

*Note:* The measure of pseudo- $R^2$  is Nagelkerke  $R^2$ . Exp(B) is an odds ratio indicating the predicted change in odds for every unit change in the predictor variable.

Post-Hoc Test: Hierarchical Binary Logistic Regression of Decision-Making Variables on Sentencing (Sentencing Decision Timing Sample)

		В	S.E.	Wald	df	Sig.	Exp (B)	
Step 1a	Gender	0.17	0.09	3.31	1.00	0.07	1.18	Pseudo $P^2 = 0.36$
	Political Orientation	-0.58	0.26	4.98	1.00	0.03	0.56	-2LL=369.96
	Trait Description	0.09	0.14	0.39	1.00	0.53	1.09	
	Constant	-0.76	0.53	2.05	1.00	0.15	0.47	
Step 1b	Gender							Pseudo R <sup>2</sup> =
		0.14	0.10	2.10	1.00	0.15	1.15	.038
	Political Orientation	-0.57	0.26	4.78	1.00	0.03	0.57	-2LL=369.6
	Trait Description	0.09	0.14	0.45	1.00	0.50	1.10	
	Perceived Psychopathy	0.07	0.12	0.36	1.00	0.55	1.07	
	Constant	-1.00	0.66	2.26	1.00	0.13	0.37	
Step 1 C	Gender							Pseudo R <sup>2</sup> =
		0.00	0.11	0.00	1.00	0.98	1.00	.128
	Political Orientation	-0.68	0.27	6.26	1.00	0.01	0.51	-2LL=347.92
	Trait Description	0.10	0.15	0.44	1.00	0.51	1.10	
	Perceived Psychopathy	-0.09	0.13	0.55	1.00	0.46	0.91	
	Treatment Amenability	-0.38	0.15	6.02	1.00	0.01	0.69	
	Future Dangerousness	0.48	0.17	7.71	1.00	0.01	1.61	
	Constant	-1.03	1.05	0.97	1.00	0.32	0.36	

#### Aim 5

The fifth and final aim of the study was to investigate to what extent mock jurors perceive psychosis when presented with trait descriptions featuring traits associated with psychopathy. A one-way ANOVA indicated a significant medium effect of trait description on psychosis ratings: F(4,440)=7.01, p<.001,  $\eta = 0.06$ . As shown in Figure 4, participants in the combined trait condition (M=3.85, SD=1.15), the interpersonal-affective trait condition (M=3.59, SD=1.34), and antisocial-lifestyle trait condition (M=3.42, SD=1.34) all gave the highest ratings of perceived psychosis, which did not differ from each other. The combined trait condition differed significantly from both control conditions (non-clinical control: M=3.13, SD=1.20, autistic clinical control: M=2.97, SD=1.29, p<.01), whereas the interpersonal-affective condition differed significantly only from the non-clinical control condition (autism; p<.01; for post-hoc contrasts, see Table 12). The antisocial-lifestyle condition did not differ significantly from either control condition. The effect size comparing the non-clinical control condition to the combined psychopathy condition was medium in size (Cohen's d=.613). Additionally, perceived psychopathy and perceived psychosis were highly correlated in the zero-order correlation matrix (r=.58, p<.001). These findings suggest that the trait description affected perceived psychosis in participants, mostly when the descriptions were the most extreme from each other (i.e., combined psychopathy vs. non-clinical control).

In a post-hoc ANCOVA including gender and political orientation as covariates, neither covariate was related to perceived psychosis (gender: F(1,431)=.285, p=.29, political orientation: F(1,431)=3.24, p=.07) while trait description remained significant (F(4,431)=7.00, p<.001,  $\eta 2=.06$ ).



The Effect of Trait Description on Perceived Psychosis

## Figure 4

The Effect of Trait Description on Ratings of Perceived Psychosis

### Table 12

Perceived Psychosis: Post-Hoc Contrasts and Effect Sizes with Holm-Bonferroni Correction

Condition 1	Condition 2	MD	SE	р	H.B.	Cohen's d
					Correction	
Combined	Autism	.884	.188	<.001	0.010	0.720
Combined	Control	.715	.187	<.001	0.009	0.613
IA	Autism	.625	.191	.001	0.008	0.479
IA	Control	.456	.190	.017	0.119	0.370
AL	Autism	.451	.193	.020	0.120	0.342
Combined	AL	.433	.190	.023	0.120	0.344
AL	Control	.282	.192	.143	0.572	0.228
Combined	IA	.259	.188	.169	0.572	0.200
IA	AL	.174	.193	.366	0.732	0.134
Control	Autism	.169	.190	.374	0.732	0.128

*Note*. H.B.=Holm-Bonferroni, IA=interpersonal-affective psychopathy, AL=antisocial-lifestyle psychopathy, combined=combined psychopathy, bolded numbers are significant.

#### **CHAPTER FOUR: DISCUSSION**

Evidence of psychopathy is increasingly introduced in high stakes criminal proceedings, such as capital murder trials (DeMatteo et al., 2014). Given that reviews of studies conducted with both mock jurors and real-world court cases suggest that evidence of psychopathy has negative effects on the defendant (Berryessa & Wolhstetter, 2019; Edens & Cox, 2012; Kelley et al., 2019; Lloyd et al., 2010), it is important to understand how mock jurors perceive different types of psychopathy traits and whether these perceptions influence sentencing decisions. While past research has examined the relationship between psychopathic labeling effects on mock juror sentencing decisions, the relationship between criterion effects (descriptions of psychopathic traits) and mock juror decision-making is less represented in the literature.

The present study is the first to experimentally manipulate mock juror exposure to criterion effects of psychopathy separated into interpersonal-affective traits and antisocial-lifestyle traits. We also added in two control conditions: a clinical control (autism) condition to differentiate the psychopathy stigma from psychopathology stigma more broadly, and a non-clinical control condition (featuring some socially undesirable traits) to differentiate the stigma of psychopathy traits from the stigma of socially undesirable traits more broadly. Finally, we examined three different aspects of mock juror decision-making to help understand how different perceptions may relate to ultimate decisions about sentencing: proximal decision-making (perceptions of

treatment amenability and future dangerousness), and distal decision-making (sentencing decision).

Our findings indicated that mock jurors adequately differentiated the psychopathy trait conditions from control conditions, and importantly, gave the highest ratings of perceived psychopathy in the two conditions that highlight interpersonal-affective traits: combined psychopathy condition and the interpersonal-affective condition. This same pattern was observed for ratings of treatment amenability, where mock jurors in the combined and interpersonalaffective psychopathy conditions gave the lowest ratings of treatment amenability, indicating that they perceive the interpersonal-affective traits as most linked to deleterious outcomes. Ratings of future dangerousness, however, deviated from this pattern of the uniqueness of the interpersonalaffective traits, in that the highest ratings came from the combined, interpersonal-affective, and antisocial-lifestyle conditions, which did not differ significantly from each other (but differed from the two control conditions). The three psychopathy trait conditions were also rated highest on psychosis, which, together with ratings of dangerousness, indicates that the antisocial-lifestyle traits are still considered important when judging defendant's difficulties in adjusting in society. Surprisingly, there was no effect of either perceived psychopathy or trait condition on sentencing. However, gender, treatment amenability, and future dangerousness all had significant effects on sentencing outcomes, suggesting that psychopathic trait judgements and different stages of decision-making have nuanced relationships with sentencing in a mock capital case.

These findings add to the body of literature on criterion effects, suggesting that psychopathic traits, even when presented without labels, influence juror decision-making and thus should be introduced into evidence in criminal cases only with great forethought and caution if at all. However, findings were not as straight-forward as expected in our study, as criterion

effects were not related to death verdicts. Given that this finding differs from much of the prior literature, it invites further study regarding potential moderators of the relationship between criterion effects and sentencing.

### **Proximal Perceptions of Psychopathy and Mental Illness**

Our first aim was to examine juror's proximal perceptions of psychopathy, as well as mental illness and psychosis, based on the experimental manipulation of psychopathic trait presentation. We found that even though the term "psychopath" is never used, mock jurors pick up on the presence of psychopathy, especially when the interpersonal-affective psychopathy traits are described. However, when only antisocial-lifestyle traits were described, mock jurors rated perceived psychopathy much lower, and functionally equivalent to the two control conditions. The current findings, thus, clarify previous work by confirming through experimentation that participants, who are presumably naïve to the nuances of psychopathic traits, tend to perceive the interpersonal-affective traits as most reflective of the psychopathic personality. They do not necessarily connect chronic criminal history and violence (antisocial-lifestyle) to psychopathy, though. This suggests that whether the defendant is perceiving interpersonal-affective traits based on a case description or whether they are explicitly presented with such traits by an expert witness, the traits are salient to multiple aspects of jury decision-making.

In addition to perceiving psychopathy when exposed to psychopathic traits, jurors also perceived higher levels of psychosis. There was a medium effect of specific trait description on perceived psychosis ( $\eta$ 2=.06), and perceived psychopathy and perceived psychosis were highly correlated (r=.58, p<.001). It is noteworthy that trait description was significantly predictive of perceived psychosis, given that none of the five trait descriptions included any psychotic traits.

This is consistent with our predictions, which were based on Smith and colleagues' findings that many individuals attending jury duty considered psychotic symptoms to be prototypical of psychopathy (Smith et al., 2014). These findings together suggest that laypersons may indeed confuse psychopathy and psychosis and that this misconception should be addressed in expert witness testimonies.

Despite conflating psychopathy and psychosis, ratings of "mental illness" remained fairly stable across all five conditions (M=3.51/5, SD=1.26). This suggests that the mock jurors were differentiating mental illness from psychopathy and psychosis. The fact that participants in each trait condition rated the defendant as "somewhat" mentally ill suggests that their perceptions of mental illness were not significantly influenced by the presence or lack of psychopathic traits across conditions. It is possible that the initial case description of a defendant murdering two people, regardless of the expert witness testimony on defendant personality traits, led to the perception of a "somewhat" mentally ill defendant. This result is consistent with the common societal perception that the majority of murderers are mentally ill (Angermeyer & Schulze, 2001; Girard & Aguilar, 2019). Additionally, the fact that our participants perceived significantly more psychosis in the psychopathy conditions, but not more mental illness suggests that the participants associate psychosis more with psychopathy than they do with mental illness, which is a fallacy.

In addition to evaluating proximal perceptions of psychopathy, psychosis, and mental illness, we asked participants how autistic the defendant was. While we hoped to compare the stigmatizing effects of autism (or lack thereof) to the stigmatizing effects of psychopathy, it is unclear if the jurors were receptive to our autistic trait manipulation. The mean rating of perceived autism in the autistic trait condition was 2.71/5, which was higher than the average of

perceived autism in the other conditions (1.33/5), but still below the midpoint of 3. Similarly, those in the autism condition did not give significantly higher ratings of mental illness than those in the non-clinical control condition (autism:3.36/5, control:3.37/5). Together, these results suggest that mock jurors did not perceive the autism control condition as being that different from the non-clinical control condition, limiting our ability to determine whether autism is less stigmatizing than psychopathy. Studies on labeling effects, however, may yield a different finding. Juror reactions to autism or other forms of psychopathology may be more extreme when the condition is actually named. Researchers in a prior study found that mock jurors changed their decision-making about a defendant's moral responsibility and legal consequences once they were informed that the defendant had high functioning autism spectrum disorder and were educated about the condition (Berryessa et al., 2015). In sum, participants in our study were much less likely to perceive autism from the autistic traits than they were to perceive psychopathy from the psychopathic traits.

#### Medial Perceptions of Treatment Amenability and Future Dangerousness

The next mock juror decision we examined was treatment amenability. When rating treatment amenability of the defendant, the mock jurors in the clinical (autism) and non-clinical control conditions rated the defendant significantly more likely to be amenable to treatment than the three psychopathy conditions. Theoretically, it is unsurprising that mock jurors would link psychopathic traits to a lower chance of treatment amenability. Smith and colleagues (2014) surveyed individuals in a jury pool and found that they had negative views that persons considered to be "psychopaths" could be rehabilitated through treatment. Thus, our results are consistent with Smith's findings, as well as our hypotheses.

Interestingly, the presence of interpersonal-affective traits (in the interpersonal-affective and combined conditions) influence jurors to perceive less treatment amenability than even the antisocial-lifestyle traits alone, which is consistent with our findings for perceived psychopathy described above. This would suggest that in our study, ratings of perceived psychopathy align with ratings of treatment amenability; and indeed, the present study found a significant effect of both trait description condition and perceived psychopathy on treatment amenability ( $\eta^2$ =.147 and r=-.316 respectively). These results, however, are not completely consistent with some prior research. A recent meta-analysis (Kelley et al., 2019) found no significant mean weighted effect of perceived psychopathy on treatment amenability.

One possible explanation for the differing results between our study and the past metaanalysis is age of the defendant. Prior studies examining criterion effects on treatment amenability have primarily been in cases where the mock defendant is a juvenile (Boccaccini et al, 2008; Chauhan et al., 2007; Edens et al., 2003; Jones & Cauffman, 2008; Murrie et al., 2005; Vidal & Skeem, 2007). This would indicate that younger defendants may be seen as more amenable to treatment, regardless of psychopathic traits. More aligned with our findings, research examining relationships between trait descriptions and juror perceptions in adult defendants indicates that interpersonal-affective traits, particularly remorselessness, are indeed more salient than antisocial-lifestyle traits to mock juror decision-making, including in perceptions of treatment amenability (Cox et al., 2013; Edens et al., 2013).

In that regard, the traits that influence mock jurors' ratings of treatment amenability appear to differ from the traits that influence their ratings of future dangerousness. For treatment amenability, interpersonal-affective traits were associated with lower ratings than antisociallifestyle traits, whereas antisocial-lifestyle traits and interpersonal-affective traits were associated

with similar ratings of dangerousness. It is noteworthy that mock jurors exposed to interpersonalaffective traits alone did not rate the defendant as significantly less of a future danger, since those traits do not explicitly describe previous violent or dangerous behavior in the way that the antisocial-lifestyle traits do. This equal standing of the interpersonal-affective and antisociallifestyle traits regarding perceptions of dangerousness would ignore research showing that the predictive utility of psychopathic traits in risk assessments stems primarily from the antisociallifestyle traits (Kennealy et al., 2010). These results, again, highlight that the interpersonalaffective traits are viewed as most consequential, in a negative way, among mock jurors.

Not only did trait descriptions affect ratings of dangerousness, but perceived psychopathy ratings were related to perceptions of dangerousness ( $\eta$ 2=.163 and r=.397 respectively). This is consistent with the meta-analysis by Kelley and colleagues (2019), which found similar effects, with perceived psychopathy showing a moderate effect on ratings of future dangerousness (r=.31). Thus, whether the interpretation of psychopathy is coming from the experimental manipulation of the trait description or from the perception of the mock juror, the presence of psychopathy in any form is influencing mock juror perceptions of both future dangerousness and treatment amenability, which are presumably both important aspects of sentencing decision-making.

### **Distal Decision-Making: Sentencing**

We were ultimately interested in whether the jurors would sentence the defendant to death or to life in prison. In contrast to our hypothesis that psychopathy trait descriptions would influence jurors to choose the most punitive sentencing outcome (death), trait description condition was not significantly correlated with sentencing decision. Not only was our chi-square not significant, but the average death verdict percentages between the control groups and the

psychopathy groups were not meaningfully different (22.8% and 26.9% death verdicts, respectively). Similarly, there was not a significant relationship between perceived psychopathy and sentencing decision. We know that perceived psychopathy and trait condition were related, meaning that our manipulation was successful. Therefore, it makes sense that if trait condition was not significantly related to sentencing, then neither was perceived psychopathy. Even when only data from participants who indicated that they waited until they had heard all evidence (including expert witness testimony) and from death qualified jurors was examined, neither perceived psychopathy nor trait description had a significant relationship with sentencing.

This finding that psychopathy trait description condition did not affect sentencing decision differs from past findings, although the majority of past studies analyzed the effects of psychopathy labels rather than trait descriptions (Berryessa et al., 2019). A smaller meta-analysis examining criterion effects of psychopathy found that perceived interpersonal-affective traits were significantly related to sentencing, although they found that the effect size was fairly small and there was plenty of heterogeneity in effect sizes not explained by condition type (r=.22,  $I^2$ =58.7; Kelley et al., 2019). Thus, our null results are discrepant with the consensus from past literature, especially since our effect size was very small (Cramer's V = .048), but ours is not the only individual study to find that perceived psychopathy or trait condition was not significantly related to death verdicts.

One element that differentiated our study from past studies is that our non-clinical control condition utilized a mixture of personality traits, including socially undesirable traits. In prior studies, control traits have often been socially desirable traits meant to oppose psychopathy traits, such as remorseful, responsible, and empathetic. It is possible that including socially undesirable traits in our control condition (such as pessimistic, rude, and procrastinating) made

participants more likely to sentence the defendant to death than they would have been if the control had all socially desirable personality traits and that, for this reason, death verdicts were not significantly different in the control condition and the psychopathy conditions. Given the fact that trait description was not associated with sentencing decision, future research should continue to investigate if the relationship between psychopathic traits and harsher sentencing is due to psychopathic traits in particular or socially undesirable traits more broadly.

Another difference between this study and past studies is the percentage of participants who voted for death, which was only 25% of our total sample. Although we used a larger sample for primary analyses, even the death qualified subset of our sample (n=330, 74% of our total sample) had a much lower death sentencing rate (30.3%) than past research and polling suggests (Gallup, 2020; Hughes, 2020; Pew Research Center, 2021). A study using the same vignette as ours a decade ago with participants selected from a jury pool found that 60% of participants overall voted for death and found a significant relationship between psychopathy and sentencing (Cox et al., 2013). Given that our sample is younger and more racially diverse, we would expect a lower percentage of death verdicts, but a 35% difference is extreme. Another recent study with a similar sample to ours (college students in the American South) examining mock juror decision-making when presented with evidence of psychopathy found that 40.3% of their sample voted for death (Truong et al., 2021). They also found a relationship between psychopathy and sentencing. Given that the samples were similar, it is interesting that our study had 15% lower death verdicts than this recent study. It is possible that the low percentage of death penalty votes, unique to our sample, partially explains why the relationship between perceived psychopathy and sentencing was not significant. Future studies should examine the potential moderating role of proportion of death verdicts on the relationship between psychopathy and sentencing.

Additionally, it would be interesting to assess if defendant psychopathy affects sentencing if the sentence was not dichotomous. Perhaps participants in our study did not view defendant psychopathy as salient enough to "make or break" the death sentence, but it would be a factor considered in a more nuanced sentencing decision. Instead, sentencing could be measured as percent chance defendant should be sentenced to death or number of years defendant should serve.

Another potential moderator of the relationship between defendant psychopathy and sentencing is gender. Our sample included a slightly higher number of women than men (54% vs. 44%). When we added gender and political orientation as covariates for our sentencing analysis, we found that gender was a significant predictor of sentencing (p<.001, Exp(B)=.53). This is consistent with past research that women tend to be more empathetic and less punishment-oriented than men (Devine, 2012) and that they are less likely to vote for death (Jones, 2021; Saxena et al., 2023). Beyond the relationship between gender and empathy (Christov-Moore et al., 2014), past research finds a relationship between empathy and capital sentencing more broadly (Foglia et al., 2019; Unnever et al., 2005). Future work can help unpack relationships between empathy, defendant psychopathic traits, and juror decision-making directly. While we did find a relationship between gender and sentencing, we did not find one between political orientation and sentencing, despite participants endorsing a broad range of political orientations. These findings contrast with prior literature (Cochran, 2006); thus, our sentencing results should be interpreted with caution.

While we did not find a direct link between perceived psychopathy and sentencing, we did find an indirect connection. The proximal judgement of perceived psychopathy was significantly associated with the medial judgements of treatment amenability and future

dangerousness, and those medial judgements were significantly associated with the distal outcome of sentencing. It was the proximal judgement of perceived psychopathy and the distal judgement of sentencing that did not correlate with each other. This suggests that while vignette condition and perceived psychopathy are not significant factors in sentencing decisions, treatment amenability and future dangerousness are. We conceptualized sentencing as a "distal" decision, meaning that it would be one that jurors made after hearing all evidence, forming perceptions of the defendant (such as psychopathic, autistic, mentally ill, etc.) and considering both treatment amenability and future dangerousness. However, when the participants were specifically asked when they made their sentencing decision, only 28.6% (n=127) indicated that they made the sentencing decision *after* deciding future dangerousness and treatment amenability. This would indicate that participants may have used their sentencing decision to justify their decisions about treatment amenability and future dangerousness ray have used their sentencing decision to result they may be inappropriate to attribute temporal precedence to the relationship between treatment amenability, future dangerousness, and sentencing.

Overall, we found that neither psychopathic trait description nor perceived psychopathy was significantly related to sentencing. This is surprising given past findings. To further understand this result, future research should explore moderating effects of socially undesirable control traits, base rate support for the death penalty in the sample, gender, and empathy on the relationship between psychopathic traits and sentencing.

### Limitations

While this study was designed with specific methodology to clarify the relationship between criterion effects of psychopathy and mock juror decision-making, there are still many limitations that are important to acknowledge. For one, the ecological validity is limited by both

the sample (college undergraduates rather than a potential jury pool) and the methodology (a 60minute survey with a written one-page case description rather than a trial lasting multiple weeks with presentations by various attorneys and expert witnesses). Another big difference from an actual trial is that real jurors have to decide sentencing in conjunction with their fellow jurors rather than on their own; these group dynamics likely play a large role in the sentencing outcome. However, if a single paragraph including trait descriptions of a defendant from an expert witness is able to significantly influence juror perceptions of the defendant's treatment amenability and dangerousness, there are grand implications for a real trial in which the expert witness gives live testimony with greater detail. Future research should further the ecological validity of this body of evidence by using samples taken from actual jury pools and by including live testimony rather than a written vignette.

Another limitation to ecological validity is that our analyses were not limited to those that would qualify for jury. We analyzed results from 444 participants, and only 330 of them were "death qualified," meaning that they could meaningfully consider imposing both the death penalty and life without possibility of parole on the defendant based on the facts of the case and expert witness testimony. This sample was slightly below our target sample size determined through our power analysis (n=337). Additionally, when our sample was restricted further to those that were U.S. Citizens and had not been convicted of a felony, we were left with only 283 participants who would theoretically qualify for a jury (63% of total participants used for analyses). Nonetheless, supplemental analyses revealed that death qualification and jury eligibility did not have a significant effect on analyses such as sentencing.

A strength of our study includes the assessment of mock juror perceptions of psychopathology across the conditions, which served as an important manipulation check and

provided key insights into how lay persons may perceive different traits associated with psychopathy and autism. These methods increased internal validity and helped us clarify confusion in past literature (e.g., did the jurors perceive higher levels of psychopathy or mental illness in the psychopathy trait description vignettes?). However, we did not find compelling evidence that our autistic manipulation was successful, so we had to be careful when interpreting participant decisions for that trait description. The autistic traits we used were representative of high functioning autism, and laypeople may have interpreted the traits as representing eccentricity rather than a specific psychopathology. Thus, future studies examining criterion effects could manipulate the traits listed in the autism condition to see if participants associate specific traits with autism. Additionally, future researchers could conduct a labeling study using autism as a clinical control. Such research will aid in investigating if the stigma from psychopathy is due to the condition itself or psychopathology more broadly.

In addition to studying five trait description conditions, we studied decisions across a hypothesized timeline including proximal, medial, and distal outcomes. Given past research, we expected mock jurors to first decide perceived psychopathy, then weigh treatment amenability and future dangerousness, and finally deciding sentencing. Thus, we were surprised that the majority of our participants indicated that they departed from the hypothesized order (71% indicated that they made their sentencing decision *prior* to the rating treatment amenability and future dangerousness). This finding is similar to a study on actual jurors where the authors interviewed 916 capital jurors and found that almost half of them (48.3%) reached a sentencing decision before hearing all evidence and before a judge gave them sentencing instructions (Bowers et al., 1998). Future research should further explore temporal precedence in juror decision-making in both experiments and real-life jury trials. In mock-jury research, researchers

could manipulate the timing of instructions so that jurors are asked to decide treatment amenability and future dangerousness before they know they will be sentencing the defendant. Alternatively, to investigate the temporal precedence of real jurors' decision-making, researchers could interview them to see when in the trial they made each decision, including ratings of future dangerousness and treatment amenability.

### **Conclusion and Implications**

In summary, this research suggests that criterion effects of psychopathic traits influence perceived psychopathy as well as treatment amenability and future dangerousness. This means that when psychopathic traits are presented to jurors, even in the absence of labels, they can bias jurors. Indeed, we found that mock jurors consider interpersonal-affective traits without extensive criminal history (no antisocial-lifestyle traits) to be equally as influential when rating future dangerousness as the antisocial-lifestyle traits involving extensive criminal and violent histories. This finding has important implications for the problems with using these descriptors in criminal cases, given that this perception does not align with research. In fact, the predictive element of psychopathic traits for estimations of future dangerousness stems from antisociallifestyle traits (more specifically the criminal history) and this relationship is often the justification for allowing evidence of psychopathy to be admitted in death penalty cases. As such, legal scholars assert that predictions of future dangerousness are not reliable or accurate enough to be appropriate in cases with such heightened legal consequences as death penalty cases (La Fontaine, 2002). Our findings confirm that juror perceptions of future dangerousness were extremely influential to their sentencing decision, and additionally, that perceptions of psychopathy were extremely influential to future dangerousness ratings (Dorland & Krauss, 2005).

In addition to concerns about mental health testimony of psychopathy as it relates to future dangerousness, experts in forensic psychology worry about the prejudicial effects of psychopathy testimony on jurors more broadly (DeMatteo et al., 2020). Judges may find evidence unduly prejudicial if the evidence is expected to lead to emotional decision-making (Federal Rule of Evidence 403, Advisory Committee's Note). We found that trait presentations of interpersonal-affective psychopathy alone (without ever mentioning the term psychopathy) affect juror decision-making more than even trait presentations including previous history of antisocial and violent behaviors in rating future dangerousness and treatment amenability. This result indicates that the psychopathy testimony can be prejudicial and overwhelms more rational decision-making. As such, mental health testimony of psychopathic traits needs to be admitted with great caution, if at all. This is especially important in capital cases where a life is on the line. In addition, participants appeared to confuse psychopathy with psychosis, as evidenced by significantly correlated ratings of perceived psychopathy and perceived psychosis. This indicates that the psychopathic traits evoked inaccurate associations with loss of touch with reality. This finding suggests that jurors are making inappropriate associations between varying mental health conditions even when presented with traits and not labels. These terms should be clearly differentiated by an expert witness so as not to muddle juror decision-making processes when considering mental health evidence.

Overall, our study adds to the body of research suggesting that defendant psychopathy influences juror decision-making even when the psychopathic traits are never labeled. Even when psychopathic traits were compared to autistic traits and socially undesirable control traits, they significantly influenced perceptions of treatment amenability and future dangerousness, two judgements key to sentencing. At the same time, we did not find that psychopathic trait

descriptions or ratings of perceived psychopathy were related to sentencing in our study. Given that these findings contradict much of the past literature, more research investigating potential moderators of the relationship should be conducted before drawing broad policy conclusions related to psychopathic criterion effects and capital sentencing.

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**APPENDICES** 

#### **Appendix A: Demographics Questionnaire**

*Please select the answer(s) that are most true for you.* 

How old are you? 18 -----99

What is your gender identity? A)Man B)Woman C)Non-Binary D)Other (Describe)

What is your race? A)Caucasian (White) B)African American (Black) C)Asian D)Pacific Islander or Hawaiian E)Native American F)Mixed Race G)Other (Describe)

What is your ethnicity? A)Hispanic/Latino B)Non-Hispanic/Latino

Which best describes your political orientation? A)Conservative B)Moderate C)Liberal D)Apolitical

Which best describes your political affiliation? A)Republican B)Independent C)Democrat D)None

Are you a U.S. Citizen? A)Yes B)No C)Prefer not to say

Have you ever been convicted of a felony? A)Yes B)No C)Prefer not to say

## **Appendix B: Case Description**

United States of America v. A. M. Barnette (2009)

Mr. Barnette (defendant) and Ms. Robin Williams began dating in 2004. The two moved in together in Roanoke, Virginia, in March 2005. A little over a year later, their relationship soured, and Williams broke up with Barnette in April 2006. Barnette then left the apartment they shared in Roanoke and returned to Charlotte, North Carolina where he lived in his mother's house. The breakup was not friendly, however, and Barnette continued to attempt to resume his relationship with Ms. Williams.

In May of 2006, Barnette purchased a 12-gauge shotgun in Charlotte using his brother's Virginia driver's license. On June 21, 2006, Barnette took the gun and proceeded to commit a "car-jacking" at a local gas station, where his victim, Donald Allen, was killed during the incident. Barnette took Mr. Allen's wallet and car and then drove to Ms. Williams' mother's house in Roanoke, Virginia. During a confrontation, Barnette shot Ms. Williams twice, which resulted in her death. He then fled the scene.

Barnette turned himself in to the police on June 25, 2006, at his mother's house. After his arrest and Miranda warnings, Barnette took the police to the scene of Mr. Allen's murder and showed them where to find the body. Barnette later confessed to the two murders and the carjacking. After Barnette's arrest, the government served its notice of its intent to pursue the death penalty in the federal system.

The guilt/innocence phase of Barnette's trial began on January 21, 2008. No witnesses at trial disputed any of the facts of the crimes. Following a short period of deliberation, Barnette was convicted on two counts of murder by the jury.

Following the conclusion of the guilt phase, a sentencing hearing was then conducted. At this hearing, jurors are asked to decide if the defendant should be sentenced to life in prison without possibility of parole or to death. Below is testimony from the sentencing hearing regarding the personality of the defendant.

### **Appendix C: Trait Description**

#### Interpersonal-Affective Traits

A clinical psychologist, Dr. Wells, spent over 40 hours with the defendant. She interviewed him extensively and conducted a battery of psychological tests. The psychologist testified as an expert witness regarding Barnette's personality. She described him as a man who was superficially charming, manipulative, and emotionally shallow. She said he was a smooth talker and a pathological liar. She said overall, he showed failure to accept responsibility for his actions and that he lacked remorse. She also said that he was callous, he lacked empathy for others, and had a grandiose sense of self-worth.

93 words FK 10.3

#### Antisocial-Lifestyle Traits

A clinical psychologist, Dr. Wells, spent over 40 hours with the defendant. She interviewed him extensively and conducted a battery of psychological tests. The psychologist testified as an expert witness regarding Barnette's personality. She described him as a man who was impulsive, irresponsible, and a thrill seeker. She said he was hot headed and aggressive, and his behavior problems started in childhood. She said he lived off of the wealth of others. He also had a history of juvenile delinquency. His criminal history included many different types of offenses, including violations of probation for a previous charge. 97 words FK 10.3

#### Combined Psychopathy Traits

A clinical psychologist, Dr. Wells, spent over 40 hours with the defendant. She interviewed him extensively and conducted a battery of psychological tests. The psychologist testified as an expert witness regarding Barnette's personality. She described him as a man who was superficially charming, manipulative, and emotionally shallow. She said he was a smooth talker and a pathological liar. She said overall, he showed failure to accept responsibility for his actions and that he lacked remorse. She also said that he was callous, he lacked empathy for others, and had a grandiose sense of self-worth. She said the defendant was impulsive, irresponsible, and a thrill seeker. She said he was hot headed and aggressive, and his behavior problems started in childhood. She said he lived off of the wealth of others. He also had a history of juvenile delinquency. His criminal history included many different types of offenses, including violations of probation for a previous charge.

155 words FK 10.2

#### Clinical Control Condition: Autism Description

A clinical psychologist, Dr. Wells, spent over 40 hours with the defendant. She interviewed him extensively and conducted a battery of psychological tests. The psychologist testified as an expert witness regarding Barnette's personality. She described him as being socially awkward, detail-oriented, and introverted. She said he was very sensitive to sounds and smells, he always liked to stick to a routine, and he is especially good at remembering numbers, such as dates and phone numbers. She also said he was bad at reading other people's tones and facial expressions and bad at understanding others' emotions.

94 words FK 10.4

#### Non-Clinical Control Condition: Personality Traits

A clinical psychologist, Dr. Wells, spent over 40 hours with the defendant. She interviewed him extensively and conducted a battery of psychological tests. The psychologist testified as an expert witness regarding Barnette's personality. She described him as a man who was outgoing, pessimistic, independent-minded, blunt, and rude. She said he procrastinates, he tends to be unreliable, and he has low self-esteem. She also said he is perceptive, curious, and an original thinker who has a history of starting creative projects and not finishing them and not asking others for help when he needs it.

95 words FK 10.3

## **Appendix D: Validity Check**

Which is NOT a fact mentioned in the case description?A)The defendant committed a car-jackingB)The defendant murdered someone at a gas stationC)The defendant raped someone at a gas stationD)The defendant murdered his ex-girlfriend

For which crimes did the jury find the defendant guilty? A)Two counts of murder B)Two counts of murder and one count of rape C)One count of murder D)One count of murder and one count of rape

How was the defendant caught? A)He turned himself in to police B)He was arrested at a gas station C)He was arrested at a traffic stop D)He was caught by a clinical psychologist

## **Appendix E: Proximal Ratings**

Instructions: Now we are going to ask you a series of questions about the defendant. Please consider the information from the case and the expert witness testimony carefully before answering each question.

Perceived Psychopath	ny			
How psychopathic di	d you perceive t	he defendant to b	be?	
1	2	3	4	5
Not at all psychopath	ic			Extremely psychopathic
Perceived Psychosis				
How psychotic did ye	ou perceive the o	defendant to be?		
1	2	3	4	5
Not at all psychotic				Extremely psychotic
Perceived Depression				
How depressed did y	ou perceive the	defendant to be?		
1 2	3	4		5
Not at all depressed	Extremely depre	essed		
Perceived Neuroticisr	n			
How neurotic did you	a perceive the de	efendant to be?		
1 2	3	4		5
Not at all neurotic Ex	stremely neuroti	c		

Perceived Anxiety				
How anxious did y	ou perceive the de	fendant to be?		
1 2	3	4	5	
Not at all anxious I	Extremely anxious			
Perceived Autism				
How autistic did y	ou perceive the def	fendant to be?		
1 2	3	4	5	
Not at all autistic E	Extremely autistic			
Perceived Mental I	Health Problems			
How mentally ill d	id you perceive the	e defendant to be	?	
1 2	3	4	5	
Not at all mentally	illExtremely ment	ally ill		
Appendix F: Med	ial Ratings			
Treatment Amenak	vility			
What is the likeliho	od that the defend	ant would respon	nd to psychological	treatment and get
better?		ant would respon	la to psychological	treatment and get
1	2	3	4	5
Not at all likely		-		Extremely Likely
Future Dangerousn	less			
What is the likeliho	od that the defend	lant poses a subst	antial and continui	ng threat of future
dangerousness or is	s likely to commit	continued acts of	criminal violence?	-
1	2	3	4	5
Not at all likely				Extremely Likely

## **Appendix G: Sentence**

Now we want to ask you to put yourselves in the shoes of a federal jury person who is tasked with deciding on the defendant's sentence.

The law does not presume what is the appropriate sentence. The defendant does not have the burden of proving that life is the appropriate sentence. The State does not have the burden of proving that death is the appropriate sentence. It is for you, as a juror, to decide what you individually believe is the appropriate sentence.

To determine whether the defendant should be sentenced to death or to life in prison without the possibility of parole, you will need to evaluate any "aggravating" or "mitigating" circumstances that may be present.

"Aggravating circumstances" are those facts about the defendant or the way the crime was carried out which make his act especially egregious and justify sentencing him to death.

"Mitigating circumstances" are any factors that are a basis for a life sentence instead of a death sentence, so long as they relate to any sympathetic or other aspect of the defendant's character, propensity, history, or circumstances of the offense. These mitigating circumstances are not an excuse or justification for the offense, but are factors that in fairness or mercy may reduce the defendant's moral blameworthiness.

Mitigating circumstances may be offered by the defendant or State or be apparent from the case facts. You are not required to find that there is a connection between a mitigating circumstance and the crime committed in order for the mitigation evidence to be taken into account.

Each juror must decide individually whether any mitigating circumstance exists.

You individually determine whether the mitigating factors are "sufficiently substantial to call for leniency." This means that mitigation must be of such quality or value that it is adequate, in the opinion of you as an individual juror, to be persuaded to vote for a sentence of life in prison.

Even if you believe that the aggravating and mitigating circumstances are of the same quality or value, so that one does not outweigh the other, you are not required to vote for a sentence of death and may instead vote for a sentence of life in prison. You must decide, in light of all of the aggravating and mitigating facts, whether the defendant should be sentenced to death or to life imprisonment.

X Sentence to Life in Prison without the Possibility of Parole X Sentence to Death

### **Appendix H: Post-Study Debriefing Questions**

1)If you were on a jury for a case in which the defendant had been convicted of murder, could you meaningfully consider imposing the death penalty?

a) I would vote to impose a death sentence in all cases, regardless of the facts of the case.

b) I could meaningfully consider voting to impose a death sentence depending on circumstances and based on the facts of the case.

c) I could never vote to impose a death sentence regardless of circumstances and regardless of the facts of the case.

d)Comment Box \_\_\_\_\_

2)How much had you thought about the death penalty prior to completing this survey?

a)Not at all	
b)Very little	
c)Somewhat	
d)A lot	
e)Comment Box _	

3)How much did the defendant's prior criminal history (meaning any crimes he committed prior to the carjacking and 2 murders discussed in the vignette) influence your sentencing decision?

- a) I am unaware of the defendant's prior criminal history.
- b) The defendant's prior criminal history played no role in my sentencing decision.

c) The defendant's prior criminal history played a small role in my sentencing decision.

- d) The defendant's prior criminal history played a moderate role in my sentencing decision.
- e) The criminal history prior was the biggest factor in my sentencing decision.
- f) Comment Box \_\_\_\_\_

4)How much did the expert witness testimony influence your sentencing decision?

- a) I am unaware of the expert witness testimony.
- b) The expert witness testimony played no role in my sentencing decision.
- c) The expert witness testimony played a small role in my sentencing decision.
- d) The expert witness testimony played a moderate role in my sentencing decision.
- e) The expert witness testimony was the biggest factor in my sentencing decision.
- f) Comment Box \_\_\_\_\_

5)At what point during the survey did you make your final sentencing decision (life or death for the defendant)?

- a) Before I read the case description.
- b) After I read the facts of the case but before I read the expert witness testimony.
- c) After I read the case facts and testimonies, but before I answered personality questions about the defendant.
- d) After I read the case facts and testimonies, but before I answered personality questions about the defendant.
- e) Not until I was directly asked what my sentencing decision was.
- f) Comment Box \_\_\_\_\_

6)How confident were you in your final sentencing decision (life or death for the defendant)?

- a) Not at all confident
- b) Somewhat confident
- c) Extremely Confident
- d) Comment Box \_\_\_\_\_

7)How well did you understand the instructions for this survey?

- a) I was very confused.
- b) I was slightly confused.
- c) I understood all instructions.
- d) Comment Box \_\_\_\_\_

8)Had you heard about this study before taking it?

- a) No
- b) Yes (What did you hear? \_\_\_\_\_)

## **Appendix I: Final Screen**

Thank you for your time completing this survey! Please do not discuss the content of the survey with any other possible SONA participants as the study is ongoing. If you have questions or concerns, you can follow up with the Principal Investigator by email: baileyh2@usf.edu.

If you are struggling with mental illness, you can locate treatment using a national hotline. SAMHSA's National Helpline, 1-800-662-HELP (4357) (also known as the Treatment Referral Routing Service), or TTY: 1-800-487-4889 is a confidential, free, 24-hour-a-day, 365-day-ayear, information service, in English and Spanish, for individuals and family members facing mental and/or substance use disorders. This service provides referrals to local treatment facilities, support groups, and community-based organizations. The National Suicide Prevention Lifeline is a United States-based suicide prevention network of over 160 crisis centers that provides 24/7 service via a toll-free hotline with the number 1 273-8255. It is available to anyone in suicidal crisis or emotional distress. You can also make an appointment at the USF Counseling Center: https://www.usf.edu/student-affairs/counseling-center/what-we-do/make-appointment.aspx

# **Appendix J: IRB Exemption Letter**



## EXEMPT DETERMINATION

August 10, 2022

Bailey Hall 15420 Livingston Ave Apt 3205 Lutz, FL 33559

Dear Ms. Bailey Hall:

On 8/10/2022, the IRB reviewed and approved the following protocol:

Application Type:	Initial Study
IRB ID:	STUDY004591
Review Type:	Exempt 3
Title:	Mock Juror Decision-Making
Funding:	None
Protocol:	<ul> <li>HRP-503a- Mock Juror Decision Making IRB</li> </ul>
	Protocol_8_9_2022.docx
	No Consents

The IRB determined that this protocol meets the criteria for exemption from IRB review.

In conducting this protocol, you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Please note, as per USF policy, once the exempt determination is made, the application is closed in BullsIRB. This does not limit your ability to conduct the research. Any proposed or anticipated change to the study design that was previously declared exempt from IRB oversight must be submitted to the IRB as a new study prior to initiation of the change. However, administrative changes, including changes in research personnel, do not warrant a modification or new application.

Ongoing IRB review and approval by this organization is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about

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whether these activities impact the exempt determination, please submit a new request to the IRB for a determination.

Sincerely,

Myah Luna IRB Research Compliance Administrator Institutional Review Boards / Research Integrity & Compliance FWA No. 00001669 University of South Florida / 3702 Spectrum Blvd., Suite 165 / Tampa, FL 33612 / 813-974-5638

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