ATKINS DECISIONS:
THE IMPACT OF CRIME AND MOCK JUROR CHARACTERISTICS

by

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ABSTRACT

Since the Supreme Court of the United States ruled that individuals with intellectual disability (ID) could not be sentenced to death (Atkins vs. Virginia, 2002), triers-of-fact have been required to make determinations as to whether a defendant or offender meets the required diagnostic criteria. The current study evaluated the impact of crime and juror characteristics on diagnostic determinations. Undergraduate students were assigned to a “low” or “high” heinousness condition, which varied by the crime vignette, and listened to an Atkins hearing. Participants then made a determination regarding the claimant’s disability status (i.e., ID or not ID) and completed several measures assessing personal attitudes and emotions thought to affect legal decision-making. As hypothesized, results revealed that perceptions of crime heinousness and juror characteristics can influence mock jurors’ Atkins decisions. Specifically, the more heinous participants perceived the crime to be, the less likely that they were to conclude the individual had ID.
DEDICATION

This dissertation is dedicated to my family. Their constant support, encouragement, and endless love are what allowed me to fulfill this dream. Without them, I am not sure where I would be, but I know I would not be the person that I am today.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>SCOTUS</td>
<td>Supreme Court of the United States</td>
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<td>Supreme Court</td>
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<td>Court</td>
<td>Supreme Court of the United States</td>
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<tr>
<td>HAC</td>
<td>Heinous, Atrocious, or Cruel</td>
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<td>CEST</td>
<td>Cognitive-Experiential Self-Theory</td>
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<tr>
<td>ID</td>
<td>Intellectual Disability</td>
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<tr>
<td>APA</td>
<td>American Psychiatric Association</td>
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<td>AAIDD</td>
<td>Association of Intellectual and Developmental Disabilities</td>
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<tr>
<td>AB</td>
<td>Adaptive Behavior</td>
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<tr>
<td>IQ</td>
<td>Intelligence Quotient</td>
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<tr>
<td>CLAS-MR</td>
<td>Community Living Attitude Scale – Mental Retardation</td>
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<td>EIV</td>
<td>Empathy Index toward the Victim</td>
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<td>EIC</td>
<td>Empathy Index toward the Claimant</td>
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<td>RLAQ-23</td>
<td>Revised Legal Attitudes Questionnaire-23</td>
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<td>PUN</td>
<td>Punitive Orientation Scale</td>
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<td>MOS-M</td>
<td>Moral Outrage Scale – Modified</td>
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<td>JUNAS</td>
<td>Juror Negative Affect Scale</td>
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$M$ Mean: The sum of a group of numbers divided by the number of observations

$SD$ Standard deviation: Value of variation from the mean

$n$ Sample size of a group

$N$ Population size

$r$ Pearson product-moment correlation coefficient

$p$ Probability associated with the occurrence under the null hypothesis of a value extreme as or more extreme than the other observed value

$CI$ Confidence Interval

$t$ T Statistic: Value determining whether sample means differ

$\chi^2$ Chi-square test of significance of model fit

$df$ Degree of freedom

$R^2$ Proportion of the variance for a dependent variable that is explained by an independent variable or variables in a regression model

$\Delta R^2$ Change in R: How much variance in the outcome variables can be attributed to the predictor variables

$B$ Unstandardized regression coefficient

$SE_B$ Standard error of the coefficient

$\beta$ Standardized regression coefficient

$F$ F statistic: Value calculated by the ratio of two sample variances
ACKNOWLEDGMENTS

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CHAPTER 1

INTRODUCTION

Capital Punishment in America

To ensure that capital punishment is applied in a manner consistent with the 8th Amendment, the process of identifying individuals worthy of the death penalty is “evaluated in light of evolving standards of decency” (“Death Penalty,” n.d.). This evaluation occurs in order to determine if the imposition of the death penalty constitutes cruel and unusual punishment and to ensure that it is not employed in an arbitrary and capricious manner. Though not the first time the issue was heard by the Justices of the Supreme Court of the United States (SCOTUS; Supreme Court; Court), the issue regarding the application of the punishment was highlighted in *Furman v. Georgia* (1972). In this case, the SCOTUS determined that three groups of individuals (i.e., those with a lower socioeconomic status, individuals who were African American, and members of outcast groups) had been disproportionately sentenced to death. The *Furman* ruling held that the imposition of the death penalty constituted cruel and unusual punishment due to the arbitrary way in which sentences had been imposed and was thus in violation of the 8th and 14th Amendments. As a result of their decision, a moratorium on the use of capital punishment was imposed and would be lifted once the application of the death penalty was consistent with the Constitution of the United States. As noted by Justice Douglas:

> In a Nation committed to equal protection of the laws, there is no permissible "caste" aspect of law enforcement. Yet we know that the discretion of judges and juries in imposing the death penalty enables the penalty to be selectively applied, feeding
prejudices against the accused if he is poor and despised, and lacking political clout, or if he is a member of a suspect or unpopular minority, and saving those who by social position may be in a more protected position (*Furman v. Georgia*, 1972, p. 408).

As there were no established standards regarding the application of capital punishment prior to *Furman v. Georgia* (1972), it was possible jurors’ biases played a role in their decision-making. Although the decision in *Furman* made it clear the death penalty could not be arbitrarily imposed, the Court’s ruling lacked legal instructions that were to be applied in all cases. In response, state legislatures developed statutes to reduce arbitrariness in sentencing. Four years later, in 1976, two approaches were presented to and evaluated by the Supreme Court in five cases: *Roberts v. Louisiana*, *Woodson v. North Carolina*, *Gregg v. Georgia*, *Jurek v. Texas*, and *Proffitt v. Florida*.

The first approach, presented in *Roberts v. Louisiana* (1976) and *Woodson v. North Carolina* (1976), eliminated juror discretion by proposing the use of mandatory death sentences. That is, a death sentence would be required if a crime was classified as a capital offense regardless of the circumstances. The Supreme Court rejected the mandatory sentencing approach because of the possibility that it could unduly influence the jurors. As noted in *Roberts v. Louisiana* (1976), mandatory sentencing “plainly invites the jurors to disregard their oaths and choose a verdict for a lesser offense whenever they feel that the death penalty is inappropriate” (p. 326). Although the mandatory sentencing approach failed, the Court approved the second approach, labeled “guided discretion,” which was presented in *Gregg v. Georgia* (1976), *Jurek v. Texas* (1976), and *Proffitt v. Florida* (1976); together, these cases are referred to as the *Gregg* decision. This approach provided an avenue for jurors to exert power in the sentencing process.

> The concerns expressed in *Furman* that the death penalty not be imposed arbitrarily or capriciously can be met by a carefully drafted statute that ensures that the sentencing authority is given adequate information and guidance, concerns best met by a system that provides for a bifurcated proceeding at which the sentencing authority is apprised of the information relevant to the imposition of sentence and provided with standards to guide its use of that information (p. 155).

As a result of the *Gregg* decision, the death penalty was reinstated. As a means for guiding jurors’ decisions, these cases introduced the use of aggravating and mitigating factors. These factors were presented as clear and objective standards, which were to be used to direct jurors’ decisions and limit the arbitrary imposition of sentences. As per the *Gregg* decision, the Court ruled that a jury must first determine if at least one statutory aggravating factor is present to deem the crime eligible for the death penalty. Aggravating factors are intended to help identify murders that are “more reprehensible than other homicides” (Latzer, 2002, pp. 47-48) and thus “narrow the class of murderers subject to capital punishment” (*Gregg v. Georgia*, 1976, p. 196).

If the state proves the presence of at least one aggravating factor, then the death penalty becomes a sentencing option. As a result, the role of the defense team is to convince jurors that circumstances exist that mitigate their client’s culpability or provide reasons to impose a sentence other than death. The mitigating factors presented to the jury are those "circumstances of the crime or characteristics of the defendant that make the offense less reprehensible and therefore support a less severe punishment" (Latzer, 2002, pp. 47-48). Jurors in a capital trial play a unique role in the sentencing process, such that they not only decide the verdict but in
instances where the defendant is found guilty, they must weigh mitigating factors against
aggravating factors to conclude whether the crime justifies the death penalty (Wolf, 2010). In
*Gregg v. Georgia* (1976) the Court held that “The jury is not required to find any mitigating
circumstance in order to make a recommendation of mercy that is binding on the trial court, but
it must find a statutory aggravating circumstance before recommending a sentence of death” (p.
197).

Although states have the freedom to develop their own statutory aggravating factors,
there is a large degree of overlap among the states with the death penalty. Most aggravating
factors are based on objective conditions and are therefore easily proven; for example, an offense
committed during the commission of another felony, a victim under the age of twelve, and the
murder of a peace officer (see Death Penalty Information Center, 2019, for a full list of all states’
aggravating factors). However, one factor that has stood out as being unconstitutionally vague
and indiscriminately applied is “the murder was especially heinous, atrocious, or cruel." As a
result of the ambiguity in this aggravator, numerous cases (e.g., *Godfrey v. Georgia*, 1980;
*Maynard v. Cartwright*, 1988; *Tuilaepa v. California*, 1994) have been brought forward to argue
its constitutionality (Adger, 2010; Rosen, 1986).

**Heinous, Atrocious, or Cruel – An Arbitrary Aggravator**

Out of the 29 states with the death penalty, 21 identify some form of “heinous, atrocious,
or cruel (or HAC)” as a statutory aggravating factor. This aggravator is intended to help jurors
establish whether the nature of the homicide is of a severity that warrants the possible imposition
of the death penalty (e.g., the victim experienced more pain and suffering, in comparison to other
murders). The issue as to whether courts have sufficiently limited and governed the use of the
HAC aggravator has been called into question (e.g., *Bui v. State*, 1988; *Cartwright v. State*,

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1985; Godfrey v. Georgia, 1980; Keller v. State, 1979; Maynard v. Cartwright, 1988; Shell v. Mississippi, 1990; State v. Goodman, 1979). In fact, just four years after the Gregg decision, in Godfrey v. Georgia (1980), the SCOTUS heard oral arguments regarding Georgia’s version of the HAC aggravator (i.e., “outrageously or wantonly vile, horrible or inhuman;” Ga. Code Ann. 272534.1 (b)(7)). In reference to the problematic nature of this aggravating factor, Justice White stated:

There is nothing in these few words, standing alone, that implies any inherent restraint on the arbitrary and capricious infliction of the death sentence. A person of ordinary sensibility could fairly characterize almost every murder as "outrageously or wantonly vile, horrible and inhuman." Such a view may, in fact, have been one to which the members of the jury in this case subscribed. If so, their preconceptions were not dispelled by the trial judge's sentencing instructions. These gave the jury no guidance concerning the meaning of any of § (b)(7)'s terms. In fact, the jury's interpretation of § (b)(7) can only be the subject of sheer speculation (pp. 428-429).

As a result of the decision in Godfrey v. Georgia (1980), many states have instead limited the application of HAC to crimes that meet specific criteria. For instance, in Oklahoma, there must be mental or physical abuse or torture before the victim’s death (Oklahoma Uniform Jury Instructions-CR 4-73, 2005; 18 U.S. Code § 3592; Utah 76-5-202). Other states have worked to guide juror discretion by providing specific guidelines regarding the meaning of “heinous, atrocious, and/or cruel.” For example, in Arizona (State v. Knapp, 1977), the court provided definitions of the three elements of HAC1: (1) heinous was defined as “hatefully or shockingly evil: grossly bad” (p. 543), (2) depraved was defined as "marked by debasement, corruption,

1 Of note, in Arizona the law is written with the term depraved rather than atrocious.
perversion or deterioration” (p. 543), and (3) cruel was defined as “disposed to inflict pain esp. in a wanton, insensate, or vindictive manner: sadistic” (p. 543). In Alabama, jurors are provided with the following instructions:

For a capital offense to be especially heinous or atrocious, any brutality that is involved in it must exceed that which is normally present in any capital offense. For a capital offense to be especially cruel, it must be a pitiless crime that is unnecessarily torturous to the victim, either physically or psychologically. All capital offenses are heinous, atrocious, and cruel to some extent. What is intended to be covered by this aggravating circumstance is only those cases in which the degree of heinousness, atrociousness, or cruelty exceeds that which will always exist when a capital offense is committed (Alabama Pattern Jury Instructions — Criminal, 3rd ed., p. 21).

While the goal of providing clarification of the HAC criteria was useful, the criteria, regardless of state, were not written in a manner that provided clear, objective, and narrowing guidelines due to the subjective nature of the criteria itself (Rosen, 1986; Winchester, 2016). For example, although the presence of mental or physical abuse is an indicator of a HAC aggravating factor, the jury must still subjectively conclude what constitutes mental and/or physical abuse. As a result, this aggravator remains sufficiently vague and the threat of it being applied indiscriminately persists.

Rosen (1986) illuminated the limitations of these clarifications by pointing to cases in which the HAC factor was satisfied for contradictory reasons. For example, one case deemed the crime heinous because the victim was killed without knowledge of their imminent death (Breedlove v. State, 1982), whereas another case deemed the crime heinous because the victim was aware of his impending death (Clark v. State, 1983). Rosen also noted this pattern of
inconsistency with other elements of the crime. For example, victim intoxication, victim helplessness, the amount of time the victim suffered, method of killing, and the defendant’s lack of remorse have all served as determinants of the presence of the HAC factor (Rosen, 1986).

In *Tuilaepa v. California* (1994), Justice Blackmun opined that the vague, inconsistent, and subjective nature of the HAC aggravator failed to assist jurors in differentiating crimes deserving of capital punishment from those that are not. He opined that nearly all crimes could be perceived as heinous, atrocious, or cruel due to the contradictory ways in which prosecutors present, and jurors categorize, the nature of the crime factors (e.g., premeditation of the crime, the relationship between perpetrator and victim, the age of the victim, or method of the murder). In short, Justice Blackmun argued what may be heinous to one, may not be for another. The system is such that the presentation of identical facts can result in entirely different outcomes when presented to different juries, ultimately putting individuals’ constitutional rights at risk (Rosen, 1986).

**Juror Decision-Making**

Given the crucial role that jurors play in America’s criminal justice system, there is a significant amount of research that has examined the factors and processes that influence both general and legal decision-making. As noted in the book “Inside the Juror: The Psychology of Juror Decision Making:”

A juror’s decision is the product of a complex set of factors including, at a minimum, the juror’s personal history, character, and social background; attitudes, ideologies, and values; limits and proclivities of his or her cognitive processes; the nature of the evidence presented at trial; and legal rules that are supposed to govern the ways in which the
Evidence is interpreted, weighted, and applied to the decision (Hastie, 1993, Chapter 2, p. 65).

Because jurors consider evidence through the lens of their own values and experiences (Bornstein & Greene, 2011), they are susceptible to drawing different conclusions despite having been presented with the same pieces of information. To better understand juror decision-making, an understanding of the issues related to decision-making more broadly is necessary.

**Cognitive-Experiential Self-Theory**

Cognitive-Experiential Self-Theory (CEST) is one framework that has been used to understand decision-making in a variety of contexts (Epstein, 1973; Epstein, 1994; Epstein & Pacini, 1999). CEST is based on the notion that humans process information and form judgments via two modes: the rational and the experiential. Epstein (1994) defined the rational mode as “a deliberative, effortful, abstract system” (p. 715) that requires the individual to exert effort to encode and evaluate data. People make the conscious decision to employ this system, and it requires reasoned evidence to justify decisions. Given that this process is logical and analytical, it is not generally impacted by an individual's emotions. In contrast, the experiential system is driven by one’s emotions. Epstein (1994) defined this mode as “a crude system that automatically, rapidly, effortlessly, and efficiently processes information” (p. 715).

Of the two, the experiential system is more commonly used and is considered the default mode for cognitive processing in day to day decisions. Individuals using this system tend to be action-oriented, unreflective, and categorical in their thinking. Subsequently, they tend to base their judgments on personal experiences, emotions, and intuitions (Lieberman, 2002). Although there are two distinct and independent systems, Epstein (1973) theorized that the rational and experiential systems operate concurrently with variations in individuals’ use of each system and
the control that they have over it. Some individuals may naturally use one system over the other, which can contribute to one system being more dominant than the other. Although both systems contribute to one’s judgments and subsequent social behavior, Denes-Raj and Epstein (1994) posited that behavior is ultimately decided by a combination of individual differences and situational demands (e.g., level of emotional engagement).

The rational and experiential systems have been noted to be comparable in terms of quality, but there are advantages and disadvantages of each (Norris and Epstein, 2011). For example, Norris and Epstein (2011) put forth the idea that individuals who tend to use the experiential system are better able to connect with others, demonstrate empathy, and use their imagination to come up with original ideas. Individuals also process information faster through the experiential system. Although the speed can be adaptive at times, it contributes to some of this system’s disadvantages. In particular, given that the experiential system does not rely on an analytic and thorough assessment of the data, the information is processed more through the use of heuristics, which are “simple rules used to reduce the cognitive load of decision-making and prevent information overload” (van den Broek & Walker, 2019, p. 96). Consequently, the use of these mental shortcuts can result in an increased rate of errors in judgments (Epstein & Pacini, 1999; Kahneman & Tversky, 1982).

An example of a mistake in cognitive processing is one in which individuals assume that a cause-and-effect relationship exists even when events occur by chance (Epstein & Pacini, 1999). Similarly, researchers have shown that when engaged in experiential processing, individuals are more likely to categorically judge someone as either a good or bad person based on arbitrary and limited information (Epstein & Pacini, 1999). Based on their review of available research findings, Lieberman (2002) concluded that the use of the experiential mode typically
resulted in quick and biased judgments. As a result, the researchers recommended that individuals employ the rational system to form conclusions and guide behavior, given its proclivity for fewer logical errors and more accurate decisions.

CEST postulates that both personal and situational factors can influence how individuals process information. One such personal factor is temperament; a characteristic found to influence individuals’ daily experiences and interactions, and their perceptions of both (Haase et al., 2014; Hedwig & Epstein, 1998; Pintzinger, Pfabigan, Pfau, Kryspin-Exner, & Lamm, 2017). For example, Hedwig and Epstein (1998) posited that individuals with temperaments that are related to emotional reactivity and self-regulation difficulties are more likely to process information through the experiential system. In turn, they are more apt to develop schemas with a greater focus on emotions and pay less attention to detail and reason.

While personal factors have been found to be important in an individual’s system selection, a variety of situational factors have also been deemed influential. One such situation factor that has been shown to play a critical role in information processing and decision-making is emotional engagement. Epstein, Denes-Raj, and Pacini (1995) suggested that when individuals find themselves emotionally involved in the presented material, they are likely to use the experiential system to form their judgments. However, when information is less emotionally engaging, individuals are more likely to use the rational system (Epstein et al., 1995).

**CEST and legal decision-making.** Due to the many ways in which individuals’ decisions can be affected by their information processing, it is important to consider the impact such factors may have on jurors tasked with making legal decisions. Although jurors are expected to remain partial and interpret all evidence equally, they are not immune to the effects
that different modes of information processing can have on their decisions. Winter and Greene (2007) alluded to these issues regarding the difference between ideal jurors and jurors in reality:

The ideal juror is one who can dispassionately listen to the trial evidence and is savvy enough to render a verdict based on rational and prejudice-free thought processes. The real juror, on the other hand, is not the blank slate that the judicial system prefers and presumes to exist. Rather, various cognitive factors affect jurors’ abilities to process complex and lengthy trial information and make judgments based on that evidence in light of the legal parameters available to them (p. 741).

The impact such cognitive factors might have on jurors is particularly salient given the nature of the information presented during legal proceedings. Often, the evidence presented during trials, especially capital murder trials, can trigger significant emotional reactions. Given that emotionally engaging information is more likely to be processed through the experiential system, jurors may be more inclined to use this system when tasked with legal decisions. In doing so, they may base their judgments on their emotions and experiences as opposed to a thorough analysis of the evidence. As a result, there is an increased likelihood of errors in logic and biased judgments (Epstein & Pacini, 1999; Epstein et al., 1995; Lieberman, 2002).

Considering the importance of accurate decisions in legal contexts, numerous studies have investigated the role of CEST in juror decision-making. Krauss, Lieberman, and Olson (2004) investigated how evidence and mock jurors’ information processing modes affected their decisions in a death penalty case. Prior to listening to an expert witness’s testimony about a defendant’s future dangerousness, the researchers primed participants’ processing mode by having them complete tasks thought to engage the different systems (i.e., the completion of mathematical problems vs. an artistic task expressing current emotions). The results of this study
supported the hypothesis that the type of information processing system utilized can impact mock jurors’ interpretation of evidence and their subsequent perspectives. Experientially primed participants who listened to clinical testimony rated the defendant as more dangerous in comparison to rationally primed participants; however, these effects were not seen until after the exposure to the expert witness’s cross-examination.

To make sense of why the effects of clinical testimony on experientially primed participants were only seen after cross-examination, Krauss and colleagues (2004) posed possible explanations based on what is known about individuals’ information processing through this mode. First, it is possible that participants who processed information through the rational system adjusted their opinions after integrating the contradictory evidence presented during the cross-examination. The researchers pointed to the notion that those who engage in the rational mode of processing focus more on statistically oriented information and logically evaluate all available evidence. Additionally, the researchers considered that judgments made through the experiential system are often based on “gut-level hunches” (Krauss et al., 2004, p. 816), and subsequently, rely more on intuition and appealing information and less on analytical evidence. The researchers hypothesized that individuals in the experiential mode found the information presented first to be more appealing, formed their gut-level reactions, and were resistant to information to the contrary expressed during the cross-examination. This hypothesis is in line with Carlson and Russo’s (2001) findings, which demonstrated that people tend to seek out and remember preferential information when making decisions. In their study, jurors were more likely to attend to and later recall information that supports their preference for a particular verdict, whereas they were more likely to criticize and not consider information that did not support their preference.
In another study, researchers investigated the role of information processing and different types of expert testimony on participants’ perceptions of an individual being considered for commitment as a Sexually Violent Predator (SVP) (Lieberman, Krauss, Kyger, & Lehoux, 2007). All participants (i.e., undergraduate students) were exposed to a vignette that depicted an expert witness’s testimony on the defendant’s future dangerousness. Their testimony was based on either clinical opinion (i.e., the clinician’s intuition), actuarial evidence (i.e., empirical research and measures), or guided professional judgment (i.e., both clinical opinion and actuarial evidence). Researchers found significant differences between participants’ perceptions of the defendant’s future dangerousness to be dependent on the mode of processing and type of testimony. When primed to process information through the rational mode, participants who heard an expert’s testimony on actuarial evidence perceived the defendant to be more likely to commit violent acts in the future. Conversely, clinical testimony was more persuasive to participants who were primed to process information through the experiential mode. The researchers concluded that these findings could be explained by CEST; that is, individuals who processed information through the experiential system were more likely to base their decisions on their intuitions and ignore analytical information (i.e., an expert’s testimony about actuarial evidence).

Lieberman and Krauss (2009) continued their research related to cognitive processing in SVP cases by investigating the effects of information processing, type of testimony, and mock jurors’ familiarity with diagnostic labels on decision-making. After being primed to process information either rationally or experientially, participants were exposed to a vignette in which a mental health expert labeled the defendant as either a “psychopath” (familiar label) or as having a “paraphilia” (unfamiliar label). The expert’s diagnostic opinion was drawn from either clinical
opinion or actuarial data. Although the use of a familiar diagnostic label resulted in findings similar to previous studies (i.e., experientially primed participants were more influenced by clinical testimony, whereas rationally primed participants were more influenced by actuarial testimony), the opposite was seen for individuals provided with the unfamiliar “paraphilia” diagnostic label. That is, experientially primed participants were more influenced by actuarial testimony, whereas rationally primed participants were more influenced by clinical testimony.

In light of the aforementioned results, Lieberman and Krauss (2009) drew conclusions regarding how testimony in which diagnostic labels are used may result in differences in what influences jurors’ decisions. They concluded that although the type of testimony (i.e., clinical opinion or actuarial data) and mode of information processing (i.e., rational or experiential) are important in juror decision-making, when interpreting mental health testimony, the diagnostic label that experts use in their testimony is also a significant factor. Although mock jurors are generally able to disregard clinical opinion and focus on actuarial data, the use of an unfamiliar diagnostic label may result in a decreased likelihood in their ability to do so.

In a similar vein and in line with CEST, researchers have demonstrated that mock jurors’ mode of processing can be impacted by attorneys’ statements. For example, McCabe and Krauss (2011) found that when mock jurors were encouraged to reflect on their own emotional reactions while simultaneously carefully considering the evidence, they were more likely to be persuaded by clinical testimony (i.e., based on clinical opinion) than actuarial evidence (i.e., based on statistically-oriented data), compared to those who were encouraged to exert more cognitive effort. As a result, it appears that attorneys’ remarks primed participants to use the less effortful, experiential mode of processing. In addition to the effect of the attorney’s statements, the researchers found that attributes of the decision-maker also influenced whether the individual
was able to set aside their emotions. For example, mock jurors with children were less likely to set aside their emotional reactions, despite being encouraged to consider the evidence carefully, when deciding whether to civilly commit a sexually violent predator.

Overall, research findings support the use of the CEST as a framework for understanding how emotionally salient information can alter cognitive processing and thereby, decision-making. Moreover, the mode (i.e., rational or experiential) in which individuals process information, influenced by both personal and situational factors, has the potential to affect judgments. While the rational mode depends on logic and deliberate analysis of information, the experiential mode relies on individuals’ emotions and intuitions, leading to the use of heuristics and resultant biased judgments. Given the importance of the role emotions play in drawing conclusions, several studies have examined the impact that the emotions frequently experienced by jurors invariably have on informing their perception and behaviors.

**Emotions and legal decision-making.** Researchers have demonstrated that jurors’ decision-making is affected by the ways in which they process information, especially when that information is emotional in nature (Feigenson, 2016; Gunnell & Ceci, 2010; Nunez, Estrada-Reynolds, Schweitzer, & Myers, 2016; Wevodau, Cramer, Kehn, & Clark III, 2014; Wiener, Bornstein, & Voss, 2006). These findings align with a primary function of human emotion, which is to help individuals consider competing objectives and values in order to organize data and make decisions (Damasio, 1994; Niedenthal & Brauer, 2012; Shariff & Tracy, 2011). Researchers have noted that emotions inform individuals’ decisions by impacting which details they attend to, the time spent on these details, and how the details are interpreted (Feigenson, 2000; George & Dane, 2016; Lerner, Yi, Valdesolo, & Kassam, 2015). As a result, researchers have proposed that individuals’ emotional responses to presented information likely provide a
frame of reference for processing all subsequent information (Lerner et al., 2015; Wrightsman, Nietzel, & Fortune, 1994). This is particularly true in the setting of increased cognitive demands. Consequently, people are more likely to rely on their emotional reactions, or the “affect heuristic” (Slovic, Finucane, Peters, & MacGregor, 2002), in order to reduce the burden of increasing cognitive strain (Ask & Landstrom, 2010).

Psychologists are not the only ones that have recognized the influence of individuals' cognitive and affective functioning on their decisions. Attorneys also utilize their knowledge of these differences in jurors’ processing modes and emotional reactivity to their advantage (Lieberman, 2002; Mauet, 1992). According to Mauet (1992), attorneys attempt to select jurors who have moral values and personal attributes thought to be beneficial to their argument. If their side of the argument would be better interpreted through a thorough and logical analysis of the evidence, and they plan to emphasize statistical evidence in their case, then attorneys may seek out jurors who are more inclined toward the rational mode of processing. On the other hand, if attorneys plan to present emotionally salient evidence aimed to evoke a vivid and strong emotional response, they may seek out jurors who are more inclined toward the experiential mode of processing. As noted by Lieberman (2002), attorneys capitalize on jurors’ tendencies throughout the trial in an effort to strengthen their case. They do so by either emphasizing factual case details or highlighting emotionally salient components of the case as it suits their needs.

A variety of studies have been conducted that broadly examine the role of emotion in legal decision-making. For instance, researchers have found that evidence is more easily remembered, judged to be more credible, and is more persuasive when it provokes strong imagery and elicits emotional reactions from the jurors (Bell & Loftus, 1985; Bright & Goodman-Delahunt, 2006; Nabi, 2002; Nisbett & Ross, 1980; Tiedens & Linton, 2001). In
another study, Kassin and Garfield (1991) demonstrated that, after viewing evidence on a videotape intended to evoke strong emotional responses, participants were more likely to employ a lower standard of proof and to convict the defendant. Researchers have also shown that emotionally salient information significantly influences jurors’ perceptions of the evidence even when instructed to ignore that information both before and during the trial. In the context of pretrial publicity, Kramer, Kerr, and Carroll (1990) found that participants had difficulty setting aside emotionally evocative information learned prior to their involvement in the trial, resulting in biased opinions of the defendant. In the context of the trial itself, Edwards and Bryan (1997) found participants paid more attention to emotionally arousing evidence when it was deemed inadmissible as opposed to permitted to stand. Furthermore, the inadmissible emotional evidence was found to have a greater impact on verdict decisions compared to both inadmissible non-emotional evidence and permitted emotional evidence.

**Moral outrage: anger and disgust.** Negative emotionality in jurors has the potential to create adverse outcomes for defendants, as it has been linked to emotionally-based information processing and decision-making. Two common negative emotions experienced by jurors are anger and disgust. Anger has been defined as “a negative, phenomenological (or internal) feeling state associated with specific cognitive and perceptual distortions and deficiencies, subjective labeling, physiological changes, and action tendencies to engage in socially constructed and reinforced organized behavioral scripts” (Kassinove and Sukhodolsk, 1999, p. 7). Whereas anger can arise in a variety of situations, researchers have found that disgust is most often elicited by moral transgressions (Chapman & Anderson, 2013). As a result, disgust is conceptualized as both a moral emotion (Rozin, Lowery, Imada, & Haidt, 1999), as well as a “gut feeling” (Schnall, Haidt, Clore, & Jordan, 2008, p. 1097), which serves to “(a) organize
moral norms, (b) to express disapproval of violations and, possibly, and possibly, (c) to distance oneself from targets of social condemnation” (Lieberman & Patrick, 2018, p. 113).

On their own, both anger and disgust can affect individuals’ information processing and subsequent behaviors; however, researchers suspect the concurrent experience of these emotions could result in an even larger effect by causing each emotion to exacerbate the other (Salerno & Peter-Hagene, 2013). Some researchers have posited the two emotions are related to one another in that anger is believed to be a primary component of disgust, whereas other researchers have hypothesized that the combined effect of anger and disgust results in the experience of moral outrage (Jensen & Petersen, 2011; Mullen & Skitka, 2006; Okimoto & Brescoll, 2010; O’Mara, Jackson, Batson, & Gaertner, 2011; Salerno & Peter-Hagene, 2013). Salerno and Peter-Hagene (2013) define moral outrage as “a constellation of cognitive, affective, and behavioral responses” (p. 2069) that is triggered by individuals' reactions to moral transgressions.

In their study, Salerno and Peter-Hagene (2013) investigated whether moral outrage arises from one’s experience of both anger and disgust and how these emotions interact to influence decision-making. The results of their study revealed anger was only predictive of moral outrage when it was associated with disgust and vice versa. Their results demonstrated that, although anger is often deemed central to the concept, moral outrage is distinguishable from anger alone. Furthermore, moral outrage is better predicted when both anger and disgust are considered as opposed to considering the independent effects. With regard to the impact of moral outrage, researchers have found it can influence legal decisions (Salerno et al., 2010), voting (Okimoto & Brescoll, 2010), and political intolerance (Skitka, Bauman, & Mullen, 2004). Moral outrage has also been shown to contribute to individuals’ determinations of responsibility and punishment (Lerner, Goldberg, & Tetlock, 1998). The impact of moral outrage on individuals’
decisions is not surprising given the extensive literature indicating that both anger and disgust can independently influence individuals’ information processing and subsequent decisions.

*Anger.* With regard to anger, researchers have demonstrated that anger uniquely affects individuals’ appraisal of situations and can bias their interpretation of subsequent events (Lerner & Tiedens, 2006). In fact, individuals are less likely to engage in a diligent analysis of the available data when angered and instead are prone to process information quickly and superficially. The result of such processing is an overreliance on heuristic cues (i.e., mental shortcuts) (Bodenhausen, Sheppard, & Kramer, 1994; Lerner & Keltner, 2001). The finding is consistent with Schwarz and Clore’s (1996) affect-as-information theory, which posits that one’s emotions, with respect to both valence and level of arousal, serves as a central information source driving subsequent cognitive processes (e.g., judgment, decision making). As a result of such surface-level processing and premature judgments, individuals often demonstrate rapid and error-prone follow-up behavior (Bodenhausen et al., 1994; Lerner & Keltner, 2001).

Anger is most commonly conceptualized as the direct result of an external stimulus (Sherman & Hoffman, 2007), often creating an impulse for individuals to attack or blame the source of their anger (Lazarus, 1991). This is important to consider in a legal context, as the source of jurors’ anger is often the defendant. Individuals have been shown to place more blame on defendants when they were primed to feel angry before being exposed to details of the crime (Lerner et al., 1998). These findings suggest that jurors may be vulnerable to inadvertently place blame and take their anger out on defendants through their judgments and, consequently, their determinations of punishment (Pillsbury, 1989). In fact, mock jurors who viewed gruesome photographs endorsed more intense feelings of anger toward the defendant, likely resulting in blame attributions, and therefore convicted the defendant at a higher rate (Bright & Goodman-
Delahunty, 2006). Georges, Wiener, & Keller (2013) found similar results with mock jurors’ whose anger increased throughout the capital punishment trial. As their anger increased, participants’ opinions about the strength of the defense’s mitigating evidence decreased (i.e., they rated it as weaker) and the likelihood of imposing a death sentence increased.

**Disgust.** Researchers have shown that moral disgust can impact how individuals interpret and judge moral violations and transgressions (Haidt and Hersch, 2001). Given its role in guiding moral judgments, it is a particularly relevant emotion to consider in its relation to legal decision-making. In a legal context, researchers have found that details presented in a murder trial likely provoke jurors’ feelings of disgust, and such feelings, can result in an increased likelihood of guilty verdicts (Jones & Fitness, 2008). These feelings have also been found to affect jurors’ sentencing decisions resulting in harsher or more severe judgments of defendants’ moral transgressions (Johnson et al., 2016; Schnall et al., 2008). Although individuals may experience a reduction in some negative emotions in light of the defense’s presentation of mitigating evidence, feelings of disgust have been found to be relatively stable, even after the presentation of such evidence (Russel & Giner-Sorolla, 2011). Researchers have also shown that individuals who are more prone to feelings of disgust tend to hold more negative attitudes toward stigmatized groups (Inbar, Pizarro, Knobe, & Bloom, 2009). The researchers concluded this finding provided support for previous research that suggests implicit attitudes are affectively based (Gawronski & Bodenhausen, 2006).

**Certainty.** Both anger and disgust are negative emotions that are typically associated with unpleasant experiences. Despite this, both emotions have been found to be associated with certainty appraisals (i.e., these emotions contribute to someone feeling as though they understand their surroundings and current situation; Smith & Ellsworth, 1985), which have been found to
contribute to feelings of confidence (Humrichouse & Watson, 2010; Tiedens & Linton, 2001). Researchers have demonstrated how certainty appraisals and feelings of confidence associated with either anger or disgust can negatively impact information processing (Bodenhausen et al., 1994; Lerner & Keltner, 2001; Tiedens & Linton, 2001). For example, one study found that when feelings of anger and disgust are associated with the certainty appraisal and enhanced confidence, individuals were more likely to perceive their thoughts as valid and reliable and were less likely to process new information (Brinol et al., 2018). Mock jurors’ confidence levels have even outweighed the effects of individuals’ information-processing on their decision-making (Krauss, McCabe, & Lieberman, 2012). Overall, the results of previous researchers suggest that anger and disgust, and the resultant experience of moral outrage, can impact individuals’ information processing and subsequent judgments.

**Empathy, sympathy, and compassion.** Although a great deal of negative emotionality can result from legal proceedings, jurors may also experience more positive affective responses that have the potential to influence their judgments. In fact, in their study investigating judgments on the credibility of rape victims, Ask and Landstrom (2010) found mock jurors’ views were impacted more by their feelings of compassion toward the victim than their negative emotions such as anger and disgust. Empathy, sympathy, and compassion are considered common emotions experienced by jurors in legal proceedings (Feigenson, 1997). Although there are subtle differences between these three constructs, researchers have often evaluated their impact interchangeably given the significant overlap in the meaning and experience of each, which can be seen in their definitions.

These three constructs all include cognitive and affective components. Batson, Fultz, and Schoenrade (1987) defined empathy as “the process of intuiting one’s way into an object or
event to see it from the inside” (p. 20). Over time, researchers have recognized that one can have both cognitive and affective empathy. Cognitive empathy is defined as “a comprehension of other people’s experience,” whereas affective empathy is “the ability to vicariously experience the emotional experience of others” (Reniers, Corcoran, Drake, Shryane, & Völlm, 2011, p. 85). Sympathy, on the other hand, has been defined as “an emotional response stemming from the apprehension or comprehension of another’s emotional state or condition that consists of feelings of sorrow or concern for the other” (Oswald, Bieneck, & Hupfeld-Heinemann, 2009, p. 167). Compassion has been defined in the literature multiple ways, but Strauss and colleagues (2016) summarized its five main elements as “recognizing the suffering of others; understanding the common humanity of this suffering; feeling emotionally connected with the person who is suffering; tolerating difficult feelings that may arise; and acting or being motivated to act to help the person” (p. 26).

Although the experience of such emotions is generally considered a positive affective experience, in legal proceedings, it has been shown to have possible negative effects in terms of its biased influence on jurors’ decisions. For example, researchers have noted jurors’ feelings of sympathy can both amplify or reduce any feelings of anger or fear (Oswald et al., 2009). In general, people are more sympathetic and empathic toward individuals they perceive as being similar to themselves, as well as those whose suffering was not deserved (Batson, Turk, Shaw, & Klein, 1995; Graham, Weiner, & Zucker, 1997). Furthermore, individuals are likely to experience increased feelings of sympathy toward people they like, which in mock legal proceedings resulted in jurors’ increased leniency toward well-liked defendants (Davis, Bray, & Holt, 1977).
Bornstein (1998) posited sympathetic individuals strive to reduce others’ suffering, which in a legal context, could influence their decisions about the defendant’s responsibility (in criminal cases) or liability (in civil cases). Interestingly, researchers have found the impact these feelings have can vary depending on whom an individual’s empathy is directed toward. That is, empathy for the victim may increase a juror’s anger toward the defendant, while empathy for the defendant could reduce it. For example, when jurors empathize with the victim, they may demonstrate more confidence in their guilty verdict and recommend a harsher sentence (Deitz, 1980; Deitz & Byrnes, 1981). On the other hand, the experience of empathy for a defendant can contribute to views of decreased culpability (Archer, Foushee, Davis, & Aderman, 1979).

Cohen & Greenberg (1982) suggested a connection between empathy and the fundamental attribution error in that individuals are more likely to blame others when they attribute their behavior to personal traits rather than situational factors. Conversely, individuals are less likely to commit this error when they empathically consider someone else's circumstance and perspective, which results in a decreased likelihood of blame (Skorinko, Laurent, Bountress, Nyein, & Kuckuck, 2014). The experience of empathy and its relation to other cognitive processes has also been considered. For example, researchers have posited feeling empathic is a cognitively demanding experience given the effort involved in taking the perspective of others. As such, when individuals are taxed with other cognitive demands (e.g., attending to legal proceedings), they may be less likely to experience empathy (Davis, Conklin, Smith, & Luce, 1996).

From the standpoint of the law, jurors should be uninfluenced by their personal experiences and perspectives in order to render an unbiased determination based on the evidence. That being said, attorneys and judges regularly consider the potential impact of empathy and
sympathy on jurors’ decisions. In some cases, lawyers likely contemplate whether such feelings would have a positive or negative effect on their side of the case. For example, the legal community assumes jurors will feel more sympathetic toward a victim when lawyers evoke a greater amount of feeling or empathy (Sannito & McGovern, 1993). From that perspective, a prosecuting attorney would likely favor empathic jurors, while a defense attorney would prefer jurors who could set such feelings aside to not bias their opinion of the defendant. As a result, attorneys consider these issues prior to the start of the trial. That way, during voire dire (i.e., the process of selecting jurors), attorneys vet potential jurors to eliminate those who may be biased in their interpretation of the case.

During the trial itself, although the aforementioned research has indicated why these instructions might be difficult to follow, jury instructions often explicitly discourage jurors from basing any determinations on their feelings. For example, Virginia’s model jury instructions for civil hearings instructs jurors to “not base the verdict in any way upon sympathy, bias, guesswork, or speculation” (Instruction No. 2.220, 2009). Judges are also admonished from allowing empathy to interfere with their duties. Although some believe judges are better able to reach moral decisions if they allow for empathy to play a role, most think it would unjustly bias their opinions and is grounds for disqualification (Crowe, 2010). Despite the court’s effort to remove emotion from jurors’ verdicts and sentencing decisions, it is clear from the evidence outlined above just how challenging and unrealistic a task this is.

**Legal Authoritarianism**

Although emotional processing plays a critical role in how jurors interpret evidence and make decisions, their dispositional traits and attitudes are also worth noting, as they have been shown to have an impact on legal decision-making. One such attitude that has been well
researched is legal authoritarianism. Broadly speaking, authoritarianism is defined as “a general acceptance of [authority’s] statements and actions” (Altemeyer, 1988, p. 3). Legal authoritarianism more specifically focuses on an individual’s acceptance of the beliefs, values, norms, and rules of the legal system (Narby, Cutler, & Moran, 1993). In comparison to others, individuals with strong legal authoritarian beliefs feel that individuals’ legal rights are not as important as the rights of the government (Butler & Moran, 2007).

Given the possible implications legal authoritarian beliefs and attitudes could have on an individual’s ability to fairly and responsibly serve on a jury, researchers have investigated the impact of such beliefs on legal decisions. Based on researchers’ findings, jurors’ legal authoritarian beliefs have been shown to influence their decisions in a variety of ways. For instance, with regard to culpability, individuals with stronger legal authoritarian beliefs are more likely to convict defendants in both capital and non-capital cases (Butler, 2007; Cutler, Moran, & Narby, 1992; Martin & Cohn, 2004; Narby et al., 1993). In fact, in the largest meta-analysis on juror characteristics and case outcomes to date, Devine and Caughlin (2014), demonstrated that jurors’ legal authoritarianism and trust in the legal system were most strongly related to verdicts of guilt in comparison to other juror characteristics (i.e., education level, prior experience as a juror, need for cognition, and gender). Furthermore, they revealed this pattern was even more likely when the case involved a capital murder charge.

Researchers have demonstrated a similar trend with regard to the effect of legal authoritarianism on jurors’ sentencing decisions. In general, individuals who endorse more legal authoritarian beliefs tend to apply harsher punishments (Jones, Jones, & Penrod, 2015; Lieberman & Sales, 2007; Narby et al., 1993). For example, they have been shown to have a stronger preference for the death penalty (Devine & Caughlin, 2014) and are more likely to
impose the death penalty than those who do not hold such beliefs in cases involving juvenile (Butler; 2007) and adult defendants (Butler & Moran, 2007). The impact such beliefs have on jurors’ likelihood of imposing the death penalty is particularly problematic given death-qualified individuals (i.e., those eligible to serve on capital juries) endorse more legal authoritarian beliefs than their counterparts (Butler, 2007). Considering this, other research findings raise further concern about their ability to serve on a capital jury. In particular, individuals higher in legal authoritarianism tend to endorse a larger number of aggravating factors and fewer number of mitigating factors (Butler & Moran, 2007), and they are more likely to discount the constitutional protections of the accused (Narby et al., 1993).

Research findings related to the effect of legal authoritarianism on jurors’ guilt and sentencing decisions demonstrates that individuals who hold legal authoritarian beliefs exhibit more punitive attitudes, suggesting they are more “oriented toward inflicting or awarding punishment” (Brodsky, 2009, p. 40). Sargent (2004) found that individuals who endorse more punitive attitudes have a lower need for thought and cognition, indicating a reliance on an emotionally-based decision-making process. Indeed, anger has been identified as a critical element of punitiveness (Lerner et al., 1998), and there is evidence to suggest that moral outrage is predictive of punitiveness (Fiske and Tetlock, 1997). Given these findings, it is clear that jurors’ legal authoritarian beliefs and attitudes can influence the way in which they process information and the subsequent decisions they render.

**Intellectual Disability and the Legal System**

Researchers have demonstrated a variety of extralegal factors that influence jurors’ decision-making regarding culpability and punishment. However, less is known regarding how such factors influence their judgments in other legal matters. For example, very little is known
about how such factors impact jurors tasked with deciding whether an individual qualifies for a
diagnosis of Intellectual Disability (ID); a fundamental and critical decision that some jurors
have to make given the Supreme Court’s ruling in Atkins v. Virginia (2002).


The SCOTUS has continued to implement changes to the capital punishment system to
ensure the rights provided by the Constitution are protected. One of the most crucial rulings the
Supreme Court has made regarding individuals with ID and the implementation of capital
punishment was that in Atkins v. Virginia (2002). In this ruling, the Court ruled that the
execution of an individual with ID was in violation of the 8th Amendment’s ban on cruel and
unusual punishments. The SCOTUS noted that offenders with ID are at a greater risk for an
unwarranted death sentence for a variety of reasons. As noted by Justice Stevens:

Mentally retarded persons frequently know the difference between right and wrong and
are competent to stand trial. Because of their impairments, however, by definition they
have diminished capacities to understand and process information, to communicate, to
abstract from mistakes and learn from experience, to engage in logical reasoning, to
control impulses, and to understand the reactions of others (p. 318).

Because of these impairments, the SCOTUS opined that neither of the underlying
justifications for the use of the death penalty (i.e., retribution or deterrence) applied to
individuals with ID. With regard to retribution, the Court cited that the severity of punishment is
dependent on the defendant’s culpability. To this end, Justice Stevens noted, “If the culpability
of the average murderer is insufficient to justify the most extreme sanction available to the State,
the lesser culpability of the mentally retarded offender surely does not merit that form of
retribution.” With regard to deterrence, Justice Stevens indicated:
The theory of deterrence in capital sentencing is predicated upon the notion that the increased severity of the punishment will inhibit criminal actors from carrying out murderous conduct. Yet it is the same cognitive and behavioral impairments that make these defendants less morally culpable—for example, the diminished ability to understand and process information, to learn from experience, to engage in logical reasoning, or to control impulses—that also make it less likely that they can process the information of the possibility of execution as a penalty and, as a result, control their conduct based upon that information (p. 320).

As a result of these issues, the SCOTUS categorically barred the use of this sanction with individuals with ID. Although this decision was fundamental in ensuring protections were in place for individuals with ID, the Court provided minimal guidance as to what qualified as ID and the procedures necessary to diagnose the condition. As a result, states were given much latitude in deciding how to fulfill this dictate.

**Procedural Differences in *Atkins* Determinations**

Due to the freedom given to the states, the rules governing *Atkins* determinations vary and do so in non-uniform ways. Procedural variations include, but are not limited to, differences in the definition of ID, when the question of ID can be raised (e.g., pre-trial or post-conviction), and the trier-of-fact. Although little is known regarding the effect of these procedural differences, it is possible that these factors affect the claimant’s success or failure.

**Definition of intellectual disability.** As the *Atkins* decision went into effect, many jurisdictions implemented definitions consistent with those of the American Psychiatric Association (APA; 2013) and the American Association of Intellectual and Developmental Disabilities (AAIDD; 2010), which are considered the principal criteria used in the diagnosis of
ID. Although the definitions are not identical, they are similar. According to the APA, the definition of and diagnostic criteria for ID are as follows:

Intellectual disability (intellectual developmental disorder) is a disorder with onset during the developmental period that includes both intellectual and adaptive functioning deficits in conceptual, social, and practical domains. The following three criteria must be met:

A. Deficits in intellectual functions, such as reasoning, problem-solving, planning, abstract thinking, judgment, academic learning, and learning from experience, confirmed by both clinical assessment and individualized, standardized intelligence testing.

B. Deficits in adaptive functioning that result in failure to meet developmental and sociocultural standards for personal independence and social responsibility. Without ongoing support, the adaptive deficits limit functioning in one or more activities of daily life, such as communication, social participation, and independent living, across multiple environments, such as home, school, work, and community.

C. Onset of intellectual and adaptive deficits during the developmental period (APA, 2013, p. 33).

According to the AAIDD (2010), “Intellectual disability is characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. The disability originates before age 18” (p. 5). Although this definition is very similar to that of the APA (2013), it differs slightly regarding the determination of adaptive functioning deficits. Broadly, adaptive functioning is broken into three domains:
conceptual, social, and practical. An individual’s adaptive functioning can be measured through the use of a standardized assessment, which provides the evaluator with standard scores to compare to that of the general population.

Although the APA recommends the use of a standardized measure to assess an individual’s adaptive behavior (AB), it does not require that a specific score be reached to establish the presence of an AB deficit. Instead, the APA holds an AB deficit is present if the individual requires support (i.e., help needed from the caretaker or other individuals) to execute certain tasks successfully in their daily functioning. The AAIDD, on the other hand, considers an individual to have a significant AB deficit if they earn a score at least two standard deviations below the mean in at least one of three measured domains (i.e., conceptual, social, or practical) (AAIDD, 2010).

Marking a change from the previous definitions provided by the APA, an individual’s intelligence quotient (IQ) score no longer determines the severity of ID (i.e., mild, moderate, severe, and profound). The APA decided these severity levels would be better assessed by taking into consideration how significantly an individual’s deficits (i.e., social, conceptual, and/or practical) impact their daily functioning. Of individuals diagnosed with ID, Zeldin and Bazzano (2016) indicated that 85%, 10%, 4%, and 1% of people fall into the categories of mild, moderate, severe, and profound, respectively. In contrast, the AAIDD removed levels of severity in 2010 to avoid classification of ID into one of the four distinct groups. Instead, the AAIDD evaluates individuals’ need for intensive support and views their functioning on a continuum rather than specific severity levels (AAIDD, 2010).

Given the procedural leeway given by SCOTUS, some states have utilized definitions that were more restrictive than or in conflict with those set by the APA and AAIDD. For
example, Florida, Arkansas, and Nebraska had implemented a strict cutoff score of 70 or below on IQ measures to be the determinant of ID. However, the ruling in *Hall v. Florida* (2014) overturned this procedure. In other jurisdictions, decisions about ID were made using evidence that was contrary to the prevailing standard of practice. For example, certain jurisdictions employed the use of stereotypes, such that the presence of adaptive strengths outweighed noted weaknesses in the determination of ID (Ex parte Briseno, 135 S.W.3d 1, 9, Tex. Crim. App. 2004; *Wiley v. State*, 2004). These practices were also recently deemed to be unconstitutional, as outlined in *Moore v. Texas* (2017). These cases highlight societal efforts to more consistently ensure accurate findings of ID based on current and clinically-accepted standards. Today, most states use either the APA’s or AAIDD’s definition for ID in *Atkins* proceedings.

**The trier-of-fact and timing of the determination.** Other procedural differences between jurisdictions include who makes the decision (i.e., judge or jury) and when the decision is made. The majority of states call for judges to make the determination, and this process is typically carried out in a pre-trial hearing. If the court decides the defendant has ID, the death penalty is no longer a sentencing option. However, in cases where the presiding judge ruled against an *Atkins* claim, evidence of ID can still be presented to a jury as a mitigating factor in the sentencing phase. The ability to bring forth this information is in line with *Woodson v. North Carolina* (1976) and *Lockett v. Ohio* (1978), where the SCOTUS deemed it unconstitutional to prevent or limit the presentation of any evidence that might be mitigating for the defendant during the penalty phase (Tassé & Blume, 2018).

Although judges are responsible for *Atkins* decisions in most states, nearly one-third of states involve juries in the determination of ID. That is, of the 29 states that currently have the death penalty, juries can decide upon the question of ID in approximately ten states; however,
these states vary in the way in which they carry out this task. In some states, juries are the sole triers-of-fact and make the determination during either the guilt-phase or the penalty-phase. In other states, if a defendant is unsuccessful in their pretrial hearing with the judge, they can raise the issue in later proceedings for a jury to consider (e.g., North Carolina and South Carolina). In most of the states that provide this option, the jury's determination is made during the sentencing hearing and considered a "special verdict;" in others, the decision occurs after the trial, but before the sentencing hearing. In these situations, if a jury determines that the individual meets criteria for ID, the death penalty is barred. In general, when juries are tasked with the decision, it is typically after they have been exposed to aggravating evidence (Tassé & Blume, 2018).

In states where judges are required to make the determination, defendants have at times appealed on the basis of their constitutional right to a jury; however, the majority of these appeals have failed. For example, in *State v. Grell* (2006), the court decided that the diagnosis of ID is not a “fact of the crime” and therefore is not encompassed by the defendant’s 6th Amendment right to an impartial jury of their peers. Similarly, in *Oats v. Jones* (2017), the Florida Supreme Court decided that barring a jury from making the ID determination did not violate the claimant’s constitutional rights. The Florida Supreme Court opined:

> Intellectual disability is not a necessary finding to impose a death sentence but is, rather, the opposite—a fact that bars death. Hurst, 202 So. 3d at 67. Therefore, nothing from the United States Supreme Court’s decisions in *Ring*, *Atkins*, *Hall*, or *Hurst v. Florida*, compel a conclusion either way on the issue of whether a judge or jury must determine that a criminal defendant is intellectually disabled (*Oats v. Jones*, 2017, p. 5).

The impact that procedural differences have on *Atkins* decisions, especially differences in the trier-of-fact, is relatively unknown (Blume, Johnson, & Seeds, 2010). An analysis of *Atkins*
decisions found claimants were far less successful when juries made the determination. Specifically, between 2008 and 2014, claimants were successful in 26% of decisions by a judge compared to only 4% of jury determinations (Blume, Johnson, Marcus, & Paavola, 2014). Given the significant weight of *Atkins* determinations, Blume and colleagues (2014) stressed the importance of ensuring that triers-of-fact make educated decisions about disability status free from bias. For this reason, they stressed the need for additional research to provide a better understanding of how differences in procedural approaches impact decision-making, particularly as it relates to differences in the trier-of-fact given the discrepancy in successful *Atkins* claims.

**Concerns Regarding Jury Decision-Making in *Atkins* Hearings**

**Attitudes toward ID.** One of the main concerns regarding the use of a jury as the trier-of-fact in *Atkins* hearings is the influence of misconceptions and stereotypes regarding the functional abilities of individuals with intellectual disability. Tobolowsky (2004) pointed to a primary concern regarding a jury's ability to make an unbiased and educated determination of ID. She suggested that jurors’ limited knowledge of the diagnostic underpinnings of ID, as well as a lack of experience in interpreting expert testimony and forming diagnostic conclusions, could contribute to an increase in inaccurate decisions. Furthermore, Blume and colleagues (2010) noted the distinct possibility that laypeople could misconstrue the demeanor of ID defendants as lacking remorse or misinterpret their adaptive deficits as evidence of future dangerousness.

Werner (2015) defines stereotypes as “knowledge structures or attitudes about a larger group of people that can be either positive or negative” (p. 262). Individuals living with an intellectual disability may be subject to considerable social stigmatization (Coleman, Brunell, & Haugen, 2015; Soder, 1990; Towler & Schneider, 2005), as well as prejudice and discrimination (Werner, 2015). One way in which the discrimination toward individuals with intellectual
disability can be seen is by considering the numerous changes in the diagnostic labels over the last century. For example, terms such as idiocy, imbecility, and mongolism were used in the late 19th century, which were modified to mental retardation or mental deficiency in the mid-20th century (Rennie, 2007; Werner & Roth, 2014). The changes in the diagnostic label have typically been in response to the use of the label as an offensive term (e.g., calling others an "idiot" or “retard”). These changes were proposed to reduce the stigma associated with ID, but the continuous need for modification suggests any diagnostic label will eventually be used in negative ways. Salvador-Carulla & Bertelli (2008) suggested this problem is a result of the stigmatization of the overall construct of ID, not just the terminology.

The stigma associated with ID includes a variety of stereotypes and misconceptions. Research has demonstrated that some perceive individuals with ID to be dangerous (Werner, 2015) and aggressive (Slevin & Sines, 1996). Another common misconception is the belief that the appearance of individuals with ID is comparatively different from that which is considered typical (McCaughey & Strohmer, 2005), which suggests that these individuals could be identified by physical features alone. The societal belief that individuals with ID are easily identifiable has been supported by Siperstein and Bak (1980) who found people generally believed all individuals with ID exhibited the same deficits, which allowed for easy identification. Musso, Barker, Proto, and Gouvier (2012) reported misconceptions regarding one’s ability to identify ID through physical features. In fact, nearly 60% of the participants believed mild ID could sometimes be easy to identify, whereas other participants believed it was “often” or “almost always” easy to identify (14.2% and 4.4%, respectively).

Another common misconception regarding individuals with ID is that their degree of impairment is thought to be much more severe than what is most common (Siperstein & Bak,
Even though approximately 85% of individuals with ID are classified as having mild impairment (Zeldin & Bazzano, 2016), Doane and Salekin (2009) found the leading perception of a person with ID is of someone diagnosed with moderate to severe levels of impairment. Research has shown that people think individuals with ID depend on others for most of their needs and are unable to function in accordance with social norms (McCaughey & Strohmer, 2005). However, in reality, individuals with mild impairment are primarily able to learn practical life skills and function independently in their daily lives (AAIDD, 2010). Despite this, many people believe that individuals with mild ID struggle across self-care, practical skills, and relational milestones (Musso et al., 2012).

In their study, Musso and colleagues (2012) surveyed participants’ perceptions about what individuals with mild ID are capable of doing and how they typically function in life. Participants expected that people with mild ID would have problems in their ability to take care of themselves (89%), dress themselves (70.5%), and complete basic hygienic needs without being told (77.3%). They expected individuals with ID would also have difficulty managing money (95.1%), using public transportation (78%), and making simple decisions (76%). Participants also reported their belief that people with mild ID “almost never” held a job (29.3%), married (23.7%), or parented children (35.7%). As these results suggest, societal beliefs regarding the capabilities of individuals with ID grossly overestimate the degree of impairment associated with mild ID, and thus, grossly underestimate the abilities of most individuals with an ID diagnosis.

In *Atkins* cases, the concern is that the misconceptions result in the under-identification of individuals with ID because these individuals do not meet the expectations of the triers-of-fact. Importantly, there is evidence to suggest stereotypical thinking has affected actual legal
determinations in *Atkins* cases (e.g., determining someone does not qualify for a diagnosis because of strengths in adaptive functioning; *Commonwealth v. Vandiover*, 2009; *Neal v. State*, 2008). There is also the risk that juries charged with making an ID determination during the sentencing phase may not fully comprehend the distinct separation between their finding of a defendant’s cognitive functioning and other issues of culpability (*Richardson v. State*, 1993).

**Crime heinousness.** Compounding concerns regarding the influence of misconceptions, stereotypes, and biases on ID determinations, Tobolowsky (2004) raised concerns regarding the possible impact of extraneous evidence (e.g., heinous crime details) on juror decision making in *Atkins* hearings. Despite its lack of relevance to the diagnostic opinion, the author believed such details would likely be considered by the jurors and ultimately would affect the jury’s decision; this was thought to be particularly true during the sentencing phase. Given what is known about the impact of perceptions of heinousness, as well as the earlier noted problems related to the subjectivity of the “heinous, atrocious, and cruel” aggravating factor, these concerns were not unwarranted.

**Research on heinousness and legal decision-making.** In a review of capital cases, the crime’s level of heinousness was shown to be a critical factor in juror decision-making (Costanzo & Costanzo, 1992). This finding is supported by empirical studies that have also demonstrated a relationship between crime heinousness and juror decision-making; however, the studies that have directly evaluated this relationship have varied with regard to sample (e.g., real jurors vs. mock jurors) and the way in which heinousness was manipulated (Finkel & Duff, 1991; Hendrick & Shaffer, 1975; Hester & Smith, 1973; Reardon et al., 2007; White, 1987). Furthermore, not all studies have conducted a manipulation check to ensure their manipulation of crime details produced a significant change in perceived heinousness. Because of this, it is
difficult to conclude that the findings can be attributed to participants’ perceptions of heinousness.

Hester and Smith (1973) were among the first to research the influence of heinousness in capital cases. The researchers wrote two crime vignettes that differed in victim characteristics (i.e., young female versus male gang member) and assessed participants’ perceptions of heinousness. Through this manipulation, they found that participants perceived the murder of a young female as significantly more heinous than that of a gang member. Next, the researchers assessed participants’ conviction rates across conditions that differed in both crime heinousness (i.e., one of the two vignettes) and sentencing options (i.e., either mandatory death sentence or imprisonment). Overall, the researchers found participants were more likely to acquit defendants when it would result in a mandatory death sentence compared to imprisonment (i.e., a conviction rate of 30% versus 50%); however, the heinousness of the crime lessened this effect. That is, participants exposed to the murder of the young female convicted the defendant at a higher rate (i.e., 39%) compared to those exposed to the murder of the gang member (i.e., 20%). The researchers also found that participants perceived the defendant in the more heinous condition to be more dangerous than the other defendant, which they believed contributed to participants’ increased willingness to convict a defendant even if it meant sentencing him to death. Based on their findings, the researchers concluded that as individuals’ perceptions of heinousness increased, so did their willingness to impose the death penalty.

Hendrick and Shaffer (1975) conducted a similar study to that of Hester and Smith (1973) previously described. However, there was a notable difference in the way in which heinousness was manipulated. In this study, the researchers evaluated the difference in legal decisions between four homicide cases, each involved a victim having been beaten to death. The cases
varied in the number of perpetrators (i.e., one or five) and crime heinousness (i.e., presence or absence of post-mortem mutilation). When asked to sentence the defendant between five and 99 years, participants in the heinous conditions (i.e., perpetrator(s) engaged in post-mortem mutilation) gave longer sentences (i.e., an average of 72.05 years) than those in the less heinous conditions (i.e., absence of post-mortem mutilation), who assigned an average of 21.7 years. As participants in the heinous conditions gave sentences that were, on average, approximately fifty years longer than those in the less heinous conditions, the authors concluded that heinousness of the crime affected sentencing decisions.

Consistent with the findings of Hendrick and Shaffer (1975), White (1987) also concluded that sentencing decisions were impacted by jurors’ perceptions of crime heinousness. Mock jurors were asked to assess their penalty decisions for one of three homicide cases. In two of the cases, a single female victim was shot and killed during a robbery. In the third case, three females were kidnapped and murdered by strangulation, followed by a gunshot wound, in “a series of heinous murders” (p. 118). The defendant attempted to murder a fourth individual, but she was able to escape and assist in his arrest. Results indicated that participants gave the most punitive sentences to the crime deemed heinous by the researcher. It is important to note, however, that participants’ perceptions of heinousness for the various crimes were not evaluated, and thus, it cannot be confirmed their perceptions matched that of the author’s.

In another study, Finkel and Duff (1991) evaluated both the rate of conviction and imposed penalty for four defendants (i.e., the getaway driver, the lookout, the sidekick, and the triggerman) who varied in their level of involvement and culpability in a homicide. These legal decisions were assessed across four conditions (i.e., three felony murder cases and one first-degree murder case) with unique crime scenarios to evaluate changes due to varying crime
details. The four conditions all resulted in the death of a store clerk during a robbery but differed with regard to the way in which the store clerk was killed. In the first two felony-murder conditions, the victim either died from a heart attack or from an accidental, self-inflicted gunshot wound while trying to defend himself against the perpetrator. In the third felony-murder condition, which the researchers labeled as the “heinous” condition, the triggerman “wantonly [beat] the clerk with the pistol and [emptied] six shots into him,” resulting in the clerk’s death (p. 409). The fourth condition was unique in that the triggerman premeditated the murder and shot the store clerk six times, which qualified for a charge of first-degree murder. The researchers found both the conviction rate and the likelihood of a death penalty recommendation significantly increased for the triggerman in the “heinous” felony-murder (i.e., conviction rate = 88%; likelihood of death sentence = 31%), as compared to the other felony-murder conditions (i.e., conviction rate = 63% and 79%; likelihood of death sentence = 7.7% and 13%). Further, when the crime was described as premeditated, mock jurors were even more likely to convict (92%) and sentence the triggerman to death (66.7%).

McPherson (2002) conducted a two-part study using a sample of crime photographs and brief crime descriptions from 54 capital cases. First, participants rank-ordered the crimes’ heinousness (i.e., ranked as either 1, 2, or 3 from least to most heinous) and provided the reasoning for their determinations. Interestingly, the researcher noted that many of the crimes were ranked as both the least and the most heinous by various raters providing more support regarding the subjective nature of this aggravator. The researcher’s review of the qualitative responses revealed significant discrepancies in participants’ reasoning behind their perceptions of heinousness. Factors that appeared to influence opinions included the defendant’s intent and use of unnecessary violence, as well as the victim’s level of suffering, age, innocence, and
dependency. Although there was overlap in some participants’ reasoning, their definitions or applications of such reasoning varied. For example, in the murder of sleeping children, one participant ranked the crime as the least heinous because the children were asleep and therefore did not suffer; however, another participant ranked the crime as the most heinous given the victims were innocent children. These results indicate that even when individuals share perspectives on crime factors that constitute heinousness, they may emphasize different components of the crime (e.g., victim suffering vs. victim innocence/age) as the basis for their heinousness determinations.

In the second part of the study, McPherson (2002) used participant rankings to compute median heinousness scores for each crime and analyze participants’ perceptions of heinousness against the cases’ outcomes (i.e., whether or not the death penalty was imposed). In general, the cases in which the defendants were sentenced to death evidenced higher median scores for heinousness; however, this was not consistent across all cases. Although defendants in 95% of cases that were ranked as least heinous (i.e., medians of 1.1 to 1.9) were given alternative sentences, defendants in the other 5% of cases were sentenced to death. Following the predicted trend, defendants in 78% of the cases that were ranked as moderately heinous (i.e., medians of 2.0 to 2.9) were given nondeath sentences, whereas defendants in the other 32% of cases received a death sentence. The largest association between crime heinousness and death sentences was seen in cases with a rank of 3; defendants in 43% of these cases were sentenced to death, whereas defendants in the other 57% of cases were given alternative sentences (McPherson, 2002). Overall, researchers have shown that a crime’s heinousness can play an important role in juror decision-making regarding culpability and punishment.
Research on heinousness and legal determinations of ID. Given the previous research on the impact of heinousness, it is possible that perceptions of heinousness could negatively influence jurors’ interpretation of clinical evidence in Atkins hearings. At present, only one group of researchers has investigated the potential impact of crime heinousness on jurors’ diagnostic decisions in legal proceedings. In a two-part study, Reardon and colleagues (2007) evaluated the differences in legal outcomes for defendants with claimed mental disorders across varying severity levels (i.e., either ID or paranoid schizophrenia; less severe or more severe). Crime heinousness was manipulated through the crime details, with the non-heinous crime explained as a “botched robbery in which the defendant killed a husband and wife” (p. 547), and the heinous crime expanded to explain the defendant also “raped the victim, slit her throat, and cut off her left hand” (p. 548). Regarding the manipulation of ID, in the less severe condition, the defendant was described as having an intelligence quotient (IQ) of 72 and functioning at the level of a 10-year-old, whereas in the more severe condition, the defendant was described as having an IQ of 59 and functioning at the level of a 4-year-old. For the manipulation of paranoid schizophrenia, severity levels varied based on the intrusiveness of the symptoms. In the less severe condition, the defendant heard the voice of his sister and “overseers talking to him during his job” (p. 548), whereas in the more severe condition, he also heard and talked back to voices on the television.

Using a sample of death-qualified mock jurors (i.e., individuals eligible to serve on a jury where the death penalty is a possibility), the researchers examined whether crime heinousness influenced participants’ beliefs about the defendant’s mental disorder status. Importantly, this study included a few design limitations. First, when Reardon and colleagues (2007) tested for the success of their manipulation between the “low” and “high” heinousness conditions, they found no statistically significant differences in participants’ perceptions of heinousness. Rather, the
authors reported, “the manipulation of heinousness only marginally influenced perceptions of heinousness” (p. 549), which they attributed to the perception of both crimes as very heinous (M = 8.29 out of 9). As a result, conclusions regarding the impact of crime heinousness on participants’ beliefs about the defendant’s mental disorder status are limited. Second, in their analysis, the researchers did not investigate ID and schizophrenia separately, but rather, collapsed these variables into a single “mental disorder” construct. That is, regardless of whether the defendant claimed ID or schizophrenia, they were simply grouped into “less severe” and “more severe” impairment conditions. For this reason, the impact of heinousness, specifically on ID outcomes, cannot be concluded.

Despite these limitations, the researchers reported significant interactions between crime heinousness, the severity of mental health problems, and mock jurors’ mental disorder verdicts. In particular, when participants were exposed to the more heinous crime, their opinions regarding the defendant’s mental disorder status depended on the severity of their impairment. Specifically, when the defendant’s impairments were less severe (i.e., higher IQ or less intrusive symptoms of schizophrenia), mock jurors were more likely to rule that the defendant had a mental disorder. However, when the defendant’s impairments were more severe (i.e., lower IQ or more intrusive symptoms of schizophrenia), mock jurors were less likely to conclude that the defendant had a mental disorder (Reardon et al., 2007). Furthermore, the researchers noted crime heinousness and severity of mental health impairment interacted with the mock jurors’ decisions regarding punishment. When the defendant was accused of the more heinous crime, participants’ likelihood of sentencing the defendant to death was related to the severity level of his mental disorder. That is, when the defendant was less impaired, participants were less likely to
recommend the death penalty, whereas when the defendant was more impaired, participants were more likely to recommend the death penalty.

In sum, the results of the Reardon et al. (2007) study demonstrated that when the defendant was accused of the more heinous crime and claimed more severe deficits, participants were less likely to opine the defendant had a mental disorder and were more likely to sentence him to death. According to the researchers, the combination of heinous crime details and evidence of a mental disorder may have increased mock jurors’ perceptions of future dangerousness, which may have subsequently affected their sentencing decisions. These results demonstrate the potential for non-clinical factors (e.g., crime heinousness, perceived dangerousness) to influence legal rulings on clinical issues (i.e., ID status). Given the potential life and death implications of such decisions, it is critical for researchers to investigate the potential impact of jurors’ perceptions of crime heinousness, in addition to relevant personal factors (e.g., emotional processing, attitudes, dispositional traits), on their decision-making in Atkins hearings.

The Current Study

While the literature on the factors that affect jury decision-making in typical capital proceedings is extensive, few studies have investigated the impact of individual and case-relevant factors on juror decision-making in Atkins cases. Although the determination of intellectual disability is qualitatively different from traditional jury decisions concerning legal culpability, it is reasonable to assume that jurors’ decisions may be influenced by factors that are not clinically relevant to the diagnosis of ID. Despite the importance of these determinations, there remains a paucity of evidence on ways in which individual attitudes and biases, as well as factors related to the crime, affect the decision-making process. The purpose of the current study
was to explore the impact of empirically and conceptually relevant constructs on the legal
determination of ID in a sample of capital jury-eligible individuals.

To date, there is limited research on *Atkins* decisions and relevant decision-making
factors. Of the research that does exist, researchers have primarily focused on examining judicial
determinations and overlooked jury decision-making. This focus is likely because judges make
the determination of ID in the majority of cases. However, there is a critical need for researchers
to address factors related to juror decision making when diagnosing intellectual disability. Blume
and colleagues’ (2014) finding that claimants are far less successful when juries are the trier-of-
fact, prompted their call for research to provide a better understanding of differences in
determinations based on the trier-of-fact (i.e., judges versus jurors).

Given the complex nature of ID, the vulnerable nature of this population, and the ultimate
life and death implications of *Atkins* determinations, it is important to gain a better understanding
of factors that may influence decision-making in *Atkins* cases. To address these gaps in the
professional literature, the current study aimed to provide insight into whether factors not
relevant to the claimant’s qualification for protection under *Atkins v. Virginia* influence the
determination of intellectual disability. Of interest were mock jurors’ perceptions of the crime’s
heinousness, as well as other juror characteristics (i.e., attitudes toward ID, legal
authoritarianism, and punitive attitudes). Furthermore, in light of the CEST, this study also
investigated mock jurors’ emotional experiences during the legal proceedings (e.g., anger,
disgust, moral outrage, and empathy) and their impact on ID determinations.

The current study utilized a between-subjects design. Jury-eligible participants listened to
an *Atkins* hearing in which they heard testimony from both a defense-hired and prosecution-hired
expert witness who had different opinions regarding the claimant’s qualification for an ID
diagnosis (i.e., one expert opined that the claimant had ID and the other opined that the claimant did not). The two conditions differed by the crime vignette used (i.e., either a “low heinous” crime or “high heinous” crime) to describe the murder for which the claimant had already been found guilty. The primary dependent measures were the participants’ categorical determination of the claimant’s ID status (i.e., ID or Not ID), as well as their rating of how convinced they were that the claimant had ID (i.e., on a scale from one to seven).

**Hypotheses**

**Hypothesis 1:** Participants in the high heinousness condition would be less likely to find the claimant to have ID (i.e., dichotomous determination of ID) compared to those in the low heinousness condition.

**Hypothesis 2:** Participants in the high heinousness condition would be less convinced the claimant had ID (i.e., ID convinced rating) compared to those in the low heinousness condition.

**Hypothesis 3:** Participants higher in legal authoritarianism, as measured by their total score on the RLAQ-23 (Revised Legal Authoritarianism Questionnaire-23; Kravitz, Cutler, & Brock, 1993), would be less likely to find the claimant to have ID than those lower in this construct.

**Hypothesis 4:** Participants with more negative attitudes toward individuals with ID, as measured by their total score on the CLAS-MR (Community Living Attitude Scale – Mental Retardation; Henry, Keys, & Balcazar, 1996), would be less likely to find the claimant to have ID.

**Hypothesis 5:** Participants who endorsed higher levels of empathy toward the victim, as measured by their index score on the developed Empathy Questionnaire (Batson & Coke,
1981), would be less likely to find the claimant to have ID than those with lower levels of empathy toward the victim.

**Hypothesis 6:** Participants who endorsed higher levels of empathy toward the claimant, as measured by their index score on the developed Empathy Questionnaire (Batson & Coke, 1981), would be more likely to find the claimant to have ID than those with lower levels of empathy toward the claimant.

**Exploratory Hypothesis 1:** Statistical analyses were run to examine how the proposed constructs (i.e., attitudes toward ID, empathy, and legal authoritarianism) independently, and in conjunction with perceived heinousness, influenced how convinced participants were that the claimant had ID.

**Exploratory Hypothesis 2:** In conjunction with the initially proposed variables, another statistical analysis was run to examine how three additional variables (i.e., change in negative emotionality, moral outrage, and punitiveness) impacted how convinced participants were the claimant had ID.

**Exploratory Hypothesis 3:** Mediation analyses were run to examine how different juror experiences (i.e., empathy, change in negative emotionality, and moral outrage) mediated the relationship between perceived heinousness and how convinced participants were the claimant has ID.
CHAPTER 2
METHODOLOGY

Participants

Inclusion criteria. Participants were recruited from the Psychology 101 (PY 101) subject pool at the University of Alabama. Inclusion criteria for the current study were two-fold. First, students must have met the national juror qualifications (i.e., they must be a citizen of the United States, at least 18 years of age, proficient in the English language, and not have been convicted of a felony). Second, all participants had to be death-qualified (i.e., willing to impose the death penalty if warranted) \((\text{Wainwright v. Witt, 1985}; \text{Witherspoon v. Illinois, 1968})\). Death-qualification is important in that jurors must be willing to consider all penalty options (i.e., life without parole or the death penalty) without interference from their personal views on capital punishment. In capital proceedings, jury qualification questions are asked before the jury is empaneled and individuals unwilling to impose the death penalty are stricken from the jury pool. The death qualification question used for the current study was that used by Stevenson, Bottoms, and Diamond (2010, p. 10), with minor adaptations:

Select one of the four response options that best describes your position:

1. If the defendant were found guilty of a murder for which the law allowed the jury to impose the death sentence, I would always vote for the death penalty.
2. I am in favor of the death penalty but would not necessarily vote for it in every case where the law allowed the jury to choose it.
3. I have certain reservations about the death penalty, but they would not prevent or substantially interfere with my voting for a death sentence if the facts of the case showed that the defendant should be given a death sentence.

4. No matter what the facts of the case were, I would never vote for the death penalty due to my strong reservations.

Participants who selected either response two or response three were considered “death-qualified” and were eligible for the study.

**Demographic characteristics.** A total of 490 participants completed the study. Data from 78 individuals were excluded from analyses for failing to meet death-qualification standards, and an additional 40 participants were excluded due to failure of embedded checks for attention. After the removal of 118 participants, the analyses were conducted using data from 372 participants who ranged in age from 18 to 29 (\(M = 18.77, SD = 1.24\)). 68.8% of participants self-identified as female, whereas the remaining 31.2% self-identified as male. The majority of participants were Caucasian (81.9%), whereas the remaining participants were African American (11.4%), Asian (1.4%), Hispanic (1.1%), Biracial (0.8%), and Other (3.5%).

The majority of participants endorsed an affiliation with the republican party (49%), followed by no affiliation (23.7%), the democratic party (23.2%), and other (4.1%). Most participants indicated they were raised in the South (68.4%), whereas others indicated they were raised in the Northeast (13.2%), Midwest (9.2%), West (7.3%), and a variety of regions across the United States (0.8%). A small percentage of participants (1.2%) indicated that they were from abroad but had obtained citizenship in the United States. The participant demographics of this phase were consistent with those typically found for students enrolled in the university’s Psychology 101 course.
Table 1

Frequencies and Percentages for Demographic Characteristics of Participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Low Heinousness</th>
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<th>High Heinousness</th>
<th></th>
<th>Total</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
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<td>%</td>
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</tr>
<tr>
<td>Male</td>
<td>61</td>
<td>32.9%</td>
<td>55</td>
<td>29.4%</td>
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<td>31.2%</td>
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<tr>
<td>Female</td>
<td>124</td>
<td>67.1%</td>
<td>132</td>
<td>70.6%</td>
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<td>68.8%</td>
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<tr>
<td>Age</td>
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<td>18 - 22</td>
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<td>183</td>
<td>97.9%</td>
<td>364</td>
<td>98.4%</td>
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<tr>
<td>23 – 29</td>
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<td>1.1%</td>
<td>4</td>
<td>2.1%</td>
<td>6</td>
<td>1.6%</td>
</tr>
<tr>
<td>Race</td>
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<td></td>
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<tr>
<td>White</td>
<td>152</td>
<td>82.6%</td>
<td>151</td>
<td>81.2%</td>
<td>303</td>
<td>81.9%</td>
</tr>
<tr>
<td>Black</td>
<td>19</td>
<td>10.3%</td>
<td>23</td>
<td>12.4%</td>
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<td>11.4%</td>
</tr>
<tr>
<td>Asian</td>
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<tr>
<td>Biracial</td>
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<td>0.0%</td>
<td>3</td>
<td>1.6%</td>
<td>3</td>
<td>0.8%</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>3.9%</td>
<td>6</td>
<td>3.2%</td>
<td>13</td>
<td>3.5%</td>
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<tr>
<td>College Education</td>
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<tr>
<td>First-year</td>
<td>312</td>
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<td>87.4%</td>
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<tr>
<td>Second-year</td>
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<tr>
<td>Third-year</td>
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<tr>
<td>Fourth-year</td>
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<td>0.3%</td>
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</table>

Note. Gender N = 372; Age N = 370; Race N = 370; Education N = 357

Of the 372 participants, only four individuals indicated they had served on a jury. A small percentage of individuals also endorsed having family members who work within the legal system; four individuals were related to a judge (1.1%), 20 were related to a defense attorney (5.4%), 12 were related to a prosecuting attorney (3.2%), and 36 were related to another type of legal professional (9.7%). The majority of participants (78.8%) indicated they had some knowledge about or experience with individuals with developmental disabilities. Their experiences were from school (59.9%), employment settings (19.4%), and volunteer
opportunities (50.8%). Some of these individuals also endorsed their experience resulting from having a family member (30.4%) or a friend with a developmental disability (38.7%).

**Materials**

**Demographic form** (Appendix A). Characteristics of the sample were collected in written format and included questions pertaining to participants’ age, gender, race, place of birth, and political affiliation. Because all participants were enrolled in college, they were asked to report the number of semesters they have completed, their academic major, and both college and high school GPA. Participants were also asked to indicate whether they have served on a jury or have any immediate family members who work within the legal system (e.g., judge, attorney, etc.). Additionally, participants were asked if they, or someone they are close to, have ever been the victims of a violent crime. If they felt comfortable in doing so, they were asked to provide additional information about the crime. Finally, questions about the participants’ knowledge about or experience with individuals with a developmental disability were also included in this form.

**Statement of seriousness** (Appendix B). Participants were read a brief announcement that stressed the importance of legal research and the need for their attention and cooperation to ensure results can be interpreted and trusted.

**Jury instructions 1** (Appendix C). To orient participants to their role and the process of an *Atkins* hearing, participants were provided with the first set of jury instructions before the presentation of evidence. Instructions were provided in both auditory and visual formats (i.e., played on an audio recording and displayed on a PowerPoint slide). The instructions were modeled after jury instructions used by local circuit court judges.
Crime description (Appendix D). The Crime Description served as the study’s manipulation of heinousness. The description was provided in both auditory and visual formats (i.e., played on an audio recording and displayed on a PowerPoint slide) and included details of the crime that led to the claimant being convicted of capital murder. Participants were provided one of two descriptions that varied by level of heinousness (i.e., low or high), thereby creating two conditions. The descriptions differed on two crime elements that research has found to impact perceptions of heinousness: the age of the victim and the method of killing (Applegate, 2017). Although a variety of crime factors have been shown to impact perceptions of heinousness, to control for confounds the differences between the crime descriptions were limited to these two factors. Applegate (2017) found that crimes with an elderly victim were perceived as more heinous than the murder of a middle-aged adult. Additionally, perceptions of heinousness were higher when an individual was killed by blunt force trauma compared to asphyxiation. Based on these results, the following descriptions were created and used in the study as the heinousness manipulation for the two conditions:

**Low Condition:** Mr. Andrew Moreland has been found guilty of the murder of Mr. Matthew Becker during the course of a robbery. On the night of March 1st, the claimant, Mr. Moreland, broke into a hotel room where he encountered Mr. Becker, a 40-year-old man. Mr. Becker had been asleep, but he awoke when he heard someone enter the room and a struggle ensued. During the struggle, Mr. Moreland held a pillow over Mr. Becker’s face until he was no longer breathing. The medical examiner determined Mr. Becker died as a result of asphyxiation, or in other words, a loss of oxygen to his brain.

**High Condition:** Mr. Andrew Moreland has been found guilty of the murder of Mr. Matthew Becker during the course of a robbery. On the night of March 1st, the claimant,
Mr. Moreland broke into a hotel room where he encountered Mr. Becker, a 75-year-old man. Mr. Becker had been asleep, but he awoke when he heard someone enter the room and a struggle ensued. During the struggle, Mr. Moreland beat Mr. Becker with his closed fists until he died. The medical examiner determined Mr. Becker died as the result of blunt force trauma to the head.

Although the results from Applegate (2017) demonstrated significant differences between heinousness ratings based on various crime factors, the overall ratings of heinousness were high across all factors. Participants’ perceptions of what crime factors were more or less heinous varied and demonstrated that what is heinous to one may not be to another. As a result, participants in the current study were asked to rate the crime description’s heinousness on a scale of 0 (not at all heinous) to 100 (extremely heinous) to measure the strength of the manipulation. In doing so, a second method for examining the impact of heinousness was available to the researcher (i.e., ratings of perceived heinousness).

**Intellectual disability information sheet** (Appendix E). Participants were provided with an information sheet that outlined the two leading definitions of ID. The definitions presented by the American Psychiatric Association (APA, 2013) and the American Association of Intellectual and Developmental Disabilities (AAIDD, 2010) are both widely accepted and regularly used in the determination of ID. For this reason, both definitions were given to participants for their consideration.

**Atkins hearing transcript** (Appendix F). To provide participants with the evidence in the case, they were given a printed transcript of an Atkins hearing. The case transcript was adapted from a real case with all identifying information changed. The case selected for this study was one in which the claimant was successful in their Atkins claim, but the case went
through multiple appeals suggesting the determination was debatable. Chen (2013) originally adapted and piloted the transcript for use in her dissertation. *Atkins* hearings are often lengthy and include dialogue that is repeated multiple times via a variety of witnesses (e.g., friends, family, teachers). The original hearing transcript was 571 pages in length (102,300 words), which included testimony from family, friends, acquaintances, and law officials.

All testimony from individuals other than the expert witnesses was removed to reduce the length of the transcript. Their testimony was screened for relevance and limited to the components deemed essential to deciding the claimant’s ID status (i.e., intellectual functioning, adaptive behavior, and age of onset). Furthermore, information was added to the transcript to ensure both expert witnesses’ testimonies were equivalent regarding the assessment procedures they administered. Results from the pilot testing revealed 52% of mock jurors found the claimant to have ID, while 48% found him not to have ID, suggesting the transcript did not heavily favor one side over the other (Chen, 2013).

Only minor changes were made to the transcript used by Chen (2013). Testimonies from the expert witnesses included evidence that both supported and refuted a diagnosis of ID. Both experts’ testimonies included evidence obtained from their evaluations of the claimant which led to their clinical opinions (e.g., results from intelligence and achievement tests, background and historical data obtained from multiple sources related to the individual’s adaptive functioning). The claimant’s expert noted significant deficits in his adaptive behavior, which paired with his intellectual deficits qualified him for a diagnosis of ID. The state’s expert, on the other hand, discussed Mr. Moreland’s strengths and concluded these strengths contributed to his determination that a diagnosis of Borderline Intellectual Functioning was more suitable. After all changes were made, the resulting transcript used in the current study was 20 single-spaced pages
long and contained 7,607 words. The Flesch-Kincaid Grade Level Test revealed the document’s readability fell at a 7.8-grade level.

**Transcript audio recording.** In the current study, an audio recording of the transcript was created for participants to listen to while simultaneously following along on their paper copy. The audio recording was used to ensure that all participants, regardless of reading speed and comprehension, were exposed to the evidence in the same amount of time. The audio recording of the transcript included the voices of five individuals, each of whom depicted one of the five individuals involved in the *Atkins* hearing (i.e., judge, prosecutor, defense attorney, state’s witness, and claimant’s witness). Once created, the recording was converted into an audio file to be played on the classroom’s speakers. From start to finish, the audio recording was 44 minutes and 44 seconds long.

**Jury instructions 2** (Appendix G). At the end of the presentation of evidence, participants were provided with the second set of jury instructions. Instructions were provided in both auditory and visual formats (i.e., played on an audio recording and displayed on a PowerPoint slide). The instructions were modeled after jury instructions used by local circuit court judges, and they were similar to those read by a judge at the end of the hearing before jurors are dismissed to deliberate. The purpose of the instructions was to inform participants that they were required to decide whether the claimant qualifies for a diagnosis of ID.

**Legal determination questionnaire** (Appendix H). The Legal Determination Questionnaire was created to evaluate the participants’ determinations of ID, as well as the factors that contributed to their decision. The first two questions assessed participants’ categorical and continuous decisions regarding the claimant’s ID status: “Do you think Mr. Moreland has ID?” (yes or no) and “How convinced are you that Mr. Moreland has ID?” (on a
scale from one [not at all convinced] to seven [strongly convinced]). Following the determination of ID, participants were asked a series of questions related to the factors that contributed to their decision-making, including one open-ended question to assess which factors presented in testimony were most important in their ultimate decision.

**Case evaluation form** (Appendix I). The Case Evaluation Form was designed to assess a variety of participant attitudes and decisions regarding the selected case and its outcome. Regardless of participants’ ID determinations, participants were asked questions assessing their sentencing decisions, as well as more general questions about their attitudes toward and perceptions of claimants with possible intellectual and adaptive behavior deficits.

**Measures**

**Community Living Attitude Scale – Mental Retardation** (CLAS-MR; Appendix J). The CLAS-MR (Henry et al., 1996) is a questionnaire designed to assess attitudes toward individuals with ID. The questionnaire consists of 40 Likert-style items that make up four scales: Empowerment, Exclusion, Sheltering, and Similarity. The response options ranged from one to six, with total scores ranging from 40 to 240. High scores on the CLAS-MR are indicative of stereotypical beliefs regarding ID individuals, including beliefs that individuals diagnosed with ID exhibit fewer abilities and should have fewer rights. At the time this measured was published, the terminology for Intellectual Disability was “Mental Retardation,” which is now obsolete. As a result, items were changed to reflect current terminology and labels.

**Empathy Questionnaire** (Appendix K). Batson and Coke (1981) identified ten adjectives useful in the assessment of empathic feelings toward a person, group of people, or another subject. Through a factor analysis, six primary adjectives related to various emotional states associated with empathy emerged: sympathetic, moved, compassionate, tender, warm, and
soft-hearted (Cronbach’s alpha = 0.83). To assess individuals’ empathy, the developers proposed six items, which ask participants to rate how they feel toward a given person, group, or subject on a scale of one (not at all) to seven (extremely). For example, “How sympathetic do you feel toward the victim?” An “empathy index” is then calculated by averaging the participants’ six ratings, with higher scores representing more empathic feelings toward the particular individual. In this study, participants were administered the questionnaire twice in order to assess their empathy toward both the victim and the claimant. In doing so, an Empathy Index toward the Victim (EIV) and Empathy Index toward the Claimant (EIC) were computed.

**Revised Legal Attitudes Questionnaire-23** (RLAQ-23; Appendix L). The RLAQ-23 (Kravitz, Cutler, & Brock, 1993) was designed to assess legal authoritarianism. The 23 Likert-style questions, with response options ranging from one (strongly disagree) to six (strongly agree), provide researchers with a total score of legal authoritarianism, with higher scores being indicative of more authoritarian attitudes related to the legal system. Individuals with higher scores are more accepting of the beliefs, values, norms, and rules of the legal system. In addition to an overall score, three subscale scores can be calculated: authoritarianism, anti-authoritarianism, and equalitarianism. According to the developers, individuals with higher total scores on the measure are more likely to prefer the conviction of a defendant (1993). In comparison to other measures of legal authoritarianism, the RLAQ-23 has demonstrated acceptable reliability (r = .83) and construct validity (r = .57, .51) (Kravitz et al., 1993).

**Punitive Orientation Scale** (PUN; Appendix M). The PUN (Smith & Capps, 2000) measures the personality trait of punitiveness, which is defined as “a distinct personality trait relating to the treatment of children/physical punishment, advocating severe punishments for those convicted of crimes, and a general tendency to opt for punitive actions over leniency”
(Capps, 2002, p. 265). The 15 items are answered using a 9-point Likert scale that ranges from negative four (strongly disagree) to positive four (strongly agree) to produce overall scores that range from -60 to 60. Higher scores on the PUN reflect more punitive attitudes. Capps (2002) reported the scale’s Cronbach’s alpha to be 0.70 and found punitiveness to relate to legal authoritarianism, right-wing authoritarianism, and social dominance.

**Moral Outrage Scale – Modified** (MOS-M; Appendix N). The MOS-M (Wiley & Bottoms, 2013) was developed to assess mock jurors’ feeling of moral outrage toward a defendant accused of child sexual abuse. The researchers adapted the scale from Skitka, Bauman, and Mullen’s (2004) 9-item Moral Outrage Scale, which was initially designed to assess participants’ thoughts, feelings, and behaviors in the aftermath of the terrorist attacks on September 11, 2001. The MOS-M is composed of four items, which participants are asked to respond to using a 6-item scale that ranges from one (strongly disagree) to six (strongly agree) after reading a scenario (dependent on and specific to a researcher’s study). The four responses are averaged for an overall moral outrage level. The developers reported a Cronbach’s alpha of 0.82 and mean inter-item correlation of 0.53; however, no other psychometric information was provided by the test developers.

**Juror Negative Affect Scale** (JUNAS; Appendix O). The JUNAS was developed by Bright and Goodman-Delahunty (2006) to assess jurors’ negative affect and emotional changes during legal proceedings. The measure is comprised of 30 items, which make up four subscales: fear/anxiety, anger, sadness, and disgust. Each item is simply a word related to one of the four subscales (e.g., tense, annoyed, discouraged, repulsed). The first three subscales were developed using items from the Profile of Mood States (McNair, Lorr, & Droppelman, 1981) and the Positive and Negative Affect Scale (Watson, Clark, & Tellegen, 1988). Bright and Goodman-
Delahunty created the fourth scale by adding parallel items that were synonyms of the word “disgust.” For each item, participants were asked to circle the response that best described how they were feeling at that moment. Measurement was on a 5-point scale that ranged from one (not at all) to five (extremely). In this study, participants completed the JUNAS two times. First, they completed it before exposure to any case materials to provide a baseline measure of negative affect (JUNAS-1). After the presentation of the hearing and case materials, participants completed the measure again (JUNAS-2). JUNAS total scores were computed for the JUNAS-1 and JUNAS-2, which were then used to compute a total pre-post difference score. Higher change scores reflected a greater experience of negative emotionality resulting from the case presentation. Psychometric information was not provided by the test developers.

**Procedure**

**Participant sign-up** (Appendix P). The study’s description and recruitment information were posted on SONA, the online subject pool portal utilized by the Department of Psychology. Interested students were provided with the first set of inclusion criteria, the national juror qualifications, to determine whether they were eligible to participate in the study. Interested and eligible students were then provided instruction on how to sign up online for one of the available sessions. Through the SONA system, students were able to view a list of available timeslots and select their desired session. The posted sessions provided a description of the time and location for each data collection session.

All sessions were scheduled for three hours and took place in the university’s psychology building. Participants were randomly assigned to one of two conditions (i.e., low heinousness or high heinousness) based on their allotted session. The condition of each session was decided using an online research-randomizing tool (www.randomizer.org). Per the subject pool
guidelines, students were responsible for attending their scheduled session or canceling their participation within the allotted timeframe (i.e., by 9:00 PM the night before their scheduled timeslot) to not receive a no-show penalty. Over the course of three months, 45 three-hour study sessions were conducted with an average of 10 participants in each session (range = 2 to 28).

**Eligibility.** At the start of the session, the researcher reviewed the first set of inclusion criteria already known by the participants (i.e., the national juror qualifications listed on SONA) to ensure all participants met the criteria. The inclusion criteria were read aloud and displayed on a PowerPoint slide. Participants who did not meet the criteria were to be excluded from participation; however, all participants that arrived for their session stated that they met the eligibility criteria.

**Information statement** (Appendix Q). After a review of inclusion criteria, the participant information sheet was distributed, and participants were given time to review the document and to ask questions. Once all questions had been answered, students that wished to continue with the study were then instructed to place their belongings at the front of the classroom. This provision was included to decrease distraction during data collection.

**Assignment of participant number.** Participants were given a large envelope with a random number written on the front. They were instructed to write this number on all documents given to them throughout the study. The researcher stressed the importance of not writing their name on any study materials. Throughout the study session, participants were reminded to ensure their number was written on all study materials. Furthermore, the undergraduate research assistant ensured that participants’ numbers were written on all documents before they were turned in at the end of the session.
**Stimulus material presentation.** In order to identify individuals who did not pay adequate attention to the hearing and study’s measures, three questions were included on various materials to assess their attention. To account for order-effects, study sessions presented stimulus materials in one of two possible orders. The two orders differed in the timing of the presentation of three questionnaires: the CLAS-MR, RLAQ-23, and PUN. In Order A, these questionnaires were completed before participants listened to the hearing, whereas in Order B, they were completed after the hearing. Table 2 outlines the order of all study materials in both conditions. An additional table that includes a numbered list of the orders is included in the appendices (Appendix R).

Table 2

<table>
<thead>
<tr>
<th>Stimulus Material Presentation by Order</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Order A</td>
<td>Order B</td>
</tr>
<tr>
<td>Death Qualification Questionnaire</td>
<td>Death Qualification Questionnaire</td>
</tr>
<tr>
<td>Juror Negative Affect Scale–1</td>
<td>Juror Negative Affect Scale–1</td>
</tr>
<tr>
<td><em>Community Living Attitude Scale–MR</em></td>
<td>Statement of Seriousness</td>
</tr>
<tr>
<td><em>Revised Legal Authoritarianism Questionnaire–23</em></td>
<td>Crime Vignette (either low or high)</td>
</tr>
<tr>
<td>Punitive Orientation Scale</td>
<td>Jury Instructions – 1</td>
</tr>
<tr>
<td>Statement of Seriousness</td>
<td>ID Information Sheet and Hearing Transcript</td>
</tr>
<tr>
<td>Crime Vignette (either low or high)</td>
<td>Jury Instructions – 2</td>
</tr>
<tr>
<td>Juror Negative Affect Scale–2</td>
<td>Legal Determination Questionnaire</td>
</tr>
<tr>
<td>ID Information Sheet and Hearing Transcript</td>
<td>Case Evaluation Form</td>
</tr>
<tr>
<td>Jury Instructions – 2</td>
<td>Juror Negative Affect Scale–2</td>
</tr>
<tr>
<td>Legal Determination Questionnaire</td>
<td>Empathy Questionnaire</td>
</tr>
<tr>
<td>Case Evaluation Form</td>
<td>Moral Outrage Scale</td>
</tr>
<tr>
<td>Juror Negative Affect Scale–2</td>
<td><em>Community Living Attitude Scale–MR</em></td>
</tr>
<tr>
<td>Empathy Questionnaire</td>
<td><em>Revised Legal Authoritarianism Questionnaire–23</em></td>
</tr>
<tr>
<td>Moral Outrage Scale</td>
<td>Punitive Orientation Scale</td>
</tr>
</tbody>
</table>

After each participant completed all study materials, participants were asked to provide their name and CWID on the Credit Log (Appendix S) to be granted credit for their participation. They were then given a Debriefing Form (Appendix T) and provided the opportunity to ask questions before
being dismissed from the study. In case questions arose later, the debriefing form included contact
information for the researcher and the Institutional Review Board.
CHAPTER 3

RESULTS

Manipulation Check

The current study utilized a between-subjects design. Participants were randomly assigned to one of two conditions: the high heinousness condition or the low heinousness condition. To be able to ensure the manipulation of heinousness was effective, each participant was asked to rate their perception of the crime’s heinousness on a scale of 0 (not at all heinous) to 100 (extremely heinous). To check the manipulation, an independent-samples t-test was run to determine whether the crimes used in each condition elicited significantly different perceptions of heinousness. There were 187 participants in the high condition and 185 participants in the low condition. There were no extreme outliers in the data, as assessed by inspection of a boxplot for values greater than three box-lengths from the edge of the box. Heinousness ratings for each condition were normally distributed, as assessed by inspection of the Normal Q-Q Plot. There was homogeneity of variances for heinousness ratings for the high and low conditions, as assessed by Levene's test for equality of variances ($p = .09$).

The crime was perceived as slightly more heinous in the high condition ($M = 71.43, SD = 18.53$) than in the low condition ($M = 69.59, SD = 20.48$). The heinousness rating in the high condition was 1.83 (95% CI [-2.15 to 5.82]) points higher than the heinousness rating in the low condition. However, there was not a statistically significant difference in the heinousness rating between the high and low conditions, $t(369) = .90, p = .367$; essentially participants in both conditions considered their scenarios to be very heinous. Although the manipulation did not
work, the planned analyses were still run in order to test the proposed hypotheses. However, for hypotheses 1 and 2, supplemental analyses were conducted to investigate the impact of heinousness using participants’ ratings of perceived heinousness instead of their assigned condition. Table 3 provides descriptive statistics for participants’ perceptions of heinousness in both conditions, as well the mean and standard deviation of overall perceptions (i.e., both conditions combined).

Table 3

**Descriptive Statistics for Perceived Heinousness**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Heinousness</td>
<td>69.59</td>
<td>20.48</td>
</tr>
<tr>
<td>High Heinousness</td>
<td>71.43</td>
<td>18.53</td>
</tr>
<tr>
<td>Overall</td>
<td>70.51</td>
<td>19.52</td>
</tr>
</tbody>
</table>

*Note.* Perceptions were measured on a scale from 1 (not at all heinous) to 100 (extremely heinous).

**Descriptive Statistics and Correlation Analyses**

Table 4 provides descriptive statistics for all other study variables. Zero-order correlations for all study variables are reported in Table 5.

Table 4

**Descriptive Statistics and Scales of Measurement for Study Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID Categorical</td>
<td>0.47</td>
<td>0.50</td>
<td>ID or Not ID</td>
</tr>
<tr>
<td>ID Convinced</td>
<td>3.73</td>
<td>1.47</td>
<td>1 (not at all) to 7 (very)</td>
</tr>
<tr>
<td>RLAQ-23</td>
<td>84.76</td>
<td>12.04</td>
<td>1 (SD) to 6 (SA)</td>
</tr>
<tr>
<td>PUN</td>
<td>79.04</td>
<td>9.72</td>
<td>-4 (SD) to 4 (SA)</td>
</tr>
<tr>
<td>CLAS-MR</td>
<td>102.88</td>
<td>22.18</td>
<td>1 (SD) to 6 (SA)</td>
</tr>
<tr>
<td>EIV</td>
<td>4.92</td>
<td>1.49</td>
<td>1 (not at all) to 7 (extremely)</td>
</tr>
<tr>
<td>EIC</td>
<td>2.59</td>
<td>1.39</td>
<td>1 (not at all) to 7 (extremely)</td>
</tr>
<tr>
<td>JUN Change</td>
<td>1.02</td>
<td>8.28</td>
<td>1 (not at all) to 5 (extremely)</td>
</tr>
<tr>
<td>MOS-M</td>
<td>2.75</td>
<td>1.00</td>
<td>1 (SD) to 6 (SA)</td>
</tr>
</tbody>
</table>

*Note.* N range = 340 to 372; SD = Strongly Disagree, SA = Strongly Agree
Table 5

Zero-order Correlations for Study Variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>7</th>
<th>8</th>
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<th>10</th>
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<tbody>
<tr>
<td>1. ID Cat.</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. ID Conv.</td>
<td>.79**</td>
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<td></td>
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<tr>
<td>3. PH</td>
<td>-.16**</td>
<td>-.22**</td>
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<tr>
<td>4. RLAQ-23</td>
<td>-.12*</td>
<td>-.11*</td>
<td>.05</td>
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<td>5. PUN</td>
<td>-.10</td>
<td>-.05</td>
<td>.02</td>
<td>.08</td>
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<tr>
<td>6. CLAS-MR</td>
<td>.00</td>
<td>.00</td>
<td>.08</td>
<td>.14*</td>
<td>.06</td>
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<tr>
<td>7. EIV</td>
<td>-.03</td>
<td>-.07</td>
<td>.20**</td>
<td>.11*</td>
<td>.07</td>
<td>-.06</td>
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<td>8. EIC</td>
<td>.26**</td>
<td>.27**</td>
<td>-.28**</td>
<td>-.16**</td>
<td>-.03</td>
<td>-.10</td>
<td>-.20**</td>
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<tr>
<td>9. JUN Change</td>
<td>-.02</td>
<td>.06</td>
<td>.03</td>
<td>.02</td>
<td>.05</td>
<td>.04</td>
<td>.05</td>
<td>-.11*</td>
<td></td>
<td></td>
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<tr>
<td>10. MOS-M</td>
<td>-.28**</td>
<td>-.34**</td>
<td>.37**</td>
<td>.20**</td>
<td>0.10</td>
<td>.23**</td>
<td>.27**</td>
<td>-.37**</td>
<td>0.10</td>
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</tr>
</tbody>
</table>

Note. **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed). N ranged from 322 to 372; 1. ID Categorical Degeneration, 2. ID Convinced Rating, 3. Perceived Heinousness, 4. Revised Legal Authoritarianism-23 Total Score, 5. Punitive Orientation Scale Total Score, 6. Community Living Attitude Scale-MR Total Score, 7. Empathy Index toward the Victim, 8. Empathy Index toward the Claimant, 9. JUNAS Change Score, 10. Moral Outrage Scale-Modified Total Score.

Hypothesis 1

It was hypothesized that participants in the high heinousness condition would be less likely to find the claimant had ID compared to those in the low heinousness condition. As planned, to determine whether the dichotomous determination of ID differed between the conditions, the test of two proportions used was the chi-square test of homogeneity. After the hearing, 84 (44.9%) participants found the claimant to have ID in the high condition, whereas 92 (49.7%) participants found the claimant to have ID in the low condition, a non-statistically significant difference in proportions of -.05, p = .353.

Given the two conditions were not significantly different from one another with regard to perceptions of heinousness, a supplemental analysis was conducted using the participants’ rating of perceived heinousness as opposed to the assigned condition. Using this continuous independent variable, a binomial logistic regression was performed to ascertain the effects of perceptions of heinousness on the likelihood that the claimant was deemed to have ID. Linearity
of the continuous variable with respect to the logit of the dependent variable was assessed via the Box-Tidwell (1962) procedure. Based on this assessment, the continuous independent variable was found to be linearly related to the logit of the dependent variable. There were no standardized residuals.

The logistic regression model was statistically significant, $\chi^2(1) = 9.33, p = .002$. The model explained 3.3% (Nagelkerke $R^2$) of the variance in ID determinations and correctly classified 54.7% of cases. Sensitivity was 33%, specificity was 74.4%, positive predictive value was 53.7%, and negative predictive value was 55.1%. The predictor variable, perceived heinousness, was statistically significant (as shown in Table 6). For each unit reduction in perceived heinousness, the odds of the claimant being deemed to have ID increased by a factor of 1.01 (95% CI for odds ratio of 1.02 to 1.00). Figure 1 depicts the predicted probability of the claimant being found ID based on ratings of perceived heinousness.

| Logistic Regression Predicting Likelihood of ID Determination based on Perceived Heinousness |
|---------------------------------|-------|-------|-------|-----|--------|--------|--------|
|                                | $B$   | SE    | Wald  | $df$ | $p$    | Odds Ratio | 95% CI for Odds Ratio |
| Perceived Heinousness           | -0.02 | 0.01  | 8.92  | 1    | .003   | 0.98      | 0.97   | 0.99   |
| Constant                       | 1.07  | 0.41  | 6.90  | 1    | .009   | 2.91      |        |        |
Hypothesis 2

It was hypothesized that participants in the high heinousness condition would be less convinced the claimant has ID compared to those in the low heinousness condition. As planned, an independent-samples t-test was run to determine if there were differences in how convinced participants were in their ID determinations between the low and high conditions. As assessed by inspection of a boxplot for values greater than 1.5 box-lengths from the edge of the box, there were no outliers in the data. Participants ratings were normally distributed for both high and low conditions (assessed by visual inspection of Normal Q-Q Plots), and there was homogeneity of variances (assessed by Levene's test for equality of variances, $p = .535$). Participants in the low
heinousness condition were slightly more convinced in their ID determinations ($M = 3.81, SD = 1.49$) than those in the high condition ($M = 3.66, SD = 1.44$). However, there was not a statistically significant difference in convinced ratings between the low and high conditions, $M = -0.15$, 95% CI [-0.45 to 0.15], $t(369) = -1.00, p = .318$.

To account for the failed manipulation, a supplemental analysis was conducted using participants’ rating of perceived heinousness as opposed to their assigned conditions. A linear regression was run to understand the effect of perceived crime heinousness on how convinced participants were in their determination of ID. To assess linearity, a scatterplot of convinced ratings against perceived heinousness ratings with a superimposed regression line was plotted. Visual inspection of these two plots indicated a linear relationship between the variables. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.81. There were no outliers in the sample. As assessed by visual inspection of a plot of standardized residuals versus standardized predicted values, homoscedasticity was present. Residuals were normally distributed as assessed by visual inspection of a normal probability plot. Participants’ perceptions of crime heinousness were a statistically significant predictor of how convinced they were in their ID determinations, $F(1, 368) = 18.28, p < .001$, accounting for 4.7% of the variation in convinced ratings with adjusted $R^2 = 4.5\%$ (as shown in Table 7).

Table 7

<table>
<thead>
<tr>
<th>Summary of Linear Regression Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>---------------------------</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>Perceived Heinousness</td>
</tr>
</tbody>
</table>

*Note. * $p < .05; B =$ unstandardized regression coefficient; $SE_B =$ Standard error of the coefficient; $\beta =$ standardized coefficient
Hypothesis 3

It was hypothesized that participants higher in legal authoritarianism would be less likely to find the claimant had ID. A binomial logistic regression was performed to ascertain the effect of legal authoritarianism on the likelihood of a claimant being deemed ID. Linearity of the continuous variables with respect to the logit of the dependent variable was assessed via the Box-Tidwell (1962) procedure. A Bonferroni correction was applied using all three terms in the model resulting in statistical significance being accepted when \( p < .0016667 \) (Tabachnick & Fidell, 2014). Based on this assessment, the continuous independent variable was found to be linearly related to the logit of the dependent variable, \( p = .112 \). There were no outliers.

The logistic regression model was statistically significant, \( \chi^2(1) = 4.70, p = .03 \). The model explained 1.8\% (Nagelkerke \( R^2 \)) of the variance in ID determinations and correctly classified 52.3\% of cases. Sensitivity was 29.3\%, specificity was 72.7\%, positive predictive value was 49.0\%, and negative predictive value was 53.5\%. Participants’ level of legal authoritarianism (as measured by the RLAQ-23 total score) was a significant predictor (as shown in Table 8). For each unit reduction on the RLAQ-23, the odds of being found to have ID increases by a factor of 1.02 (e.g., inverted odds ration \([1/.981]\)).

Table 8

<p>| Logistic Regression Predicting Likelihood of ID Determination based on RLAQ-23 |
|-------------------------------|-----------------|------------|-----------|----------|-------------------|-------------------|</p>
<table>
<thead>
<tr>
<th></th>
<th>( B )</th>
<th>SE</th>
<th>Wald</th>
<th>df</th>
<th>( p )</th>
<th>Odds Ratio</th>
<th>95% CI for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLAQ-23</td>
<td>-0.02</td>
<td>0.01</td>
<td>4.61</td>
<td>1</td>
<td>.032</td>
<td>0.98</td>
<td>0.96 - 1.00</td>
</tr>
<tr>
<td>Constant</td>
<td>1.53</td>
<td>0.77</td>
<td>3.93</td>
<td>1</td>
<td>.048</td>
<td>4.62</td>
<td></td>
</tr>
</tbody>
</table>

68
Hypothesis 4

It was hypothesized that participants with more negative attitudes toward individuals with ID, as measured by their total score on the CLAS-MR (Henry et al., 1996), would be less likely to find that the claimant has ID. A binomial logistic regression was performed to ascertain the effects of attitudes toward ID on the likelihood that participants would be determined to have ID. Linearity of the continuous variables with respect to the logit of the dependent variable was assessed via the Box-Tidwell (1962) procedure. A Bonferroni correction was applied using the three terms in the model resulting in statistical significance being accepted when $p < .016667$ (Tabachnick & Fidell, 2014). Based on this assessment, the independent variable was found to be linearly related to the logit of the dependent variable. There were no outliers, so all data were kept in the analysis.

The logistic regression model was not statistically significant, $\chi^2(1) = .73, p = .395$. The model explained 0.3% (Nagelkerke $R^2$) of the variance in ID determinations and correctly classified 51.3% of cases. Sensitivity was 16.9%, specificity was 82.9%, positive predictive value was 47.5%, and negative predictive value was 52.1%. The predictor variable, the total score on the CLAS-MR, was not statistically significant (as shown in Table 9).

Table 9

<p>| Logistic Regression Predicting Likelihood of ID Determination based on CLAS-MR |
|---|-----|-----|-----|-----|---|-----------|</p>
<table>
<thead>
<tr>
<th>B</th>
<th>SE</th>
<th>Wald</th>
<th>$df$</th>
<th>$p$</th>
<th>Odds Ratio</th>
<th>95% CI for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLAS-MR</td>
<td>-0.01</td>
<td>0.01</td>
<td>0.72</td>
<td>1</td>
<td>.395</td>
<td>0.99</td>
</tr>
<tr>
<td>Constant</td>
<td>0.80</td>
<td>1.05</td>
<td>0.58</td>
<td>1</td>
<td>.445</td>
<td>2.23</td>
</tr>
</tbody>
</table>

69
Hypothesis 5

It was hypothesized that the dichotomous determination of ID would be impacted by both empathy toward the victim and empathy toward the claimant. First, a binomial logistic regression was performed to ascertain the effect of empathy toward the victim on the likelihood that participants determine the claimant to have ID. Linearity of the continuous variables with respect to the logit of the dependent variable was assessed via the Box-Tidwell (1962) procedure. A Bonferroni correction was applied using all three terms in the model (i.e., empathy toward victim, the interaction of the empathy variable and its natural log transformation, and the intercept) resulting in statistical significance being accepted when \( p < .016667 \) (Tabachnick & Fidell, 2014). Based on this assessment, the continuous independent variable was not found to be linearly related to the logit of the dependent variable, evidenced by a significant interaction term in the model \( (p = .003) \). To correct this problem, a square transformation was applied to the continuous independent variable (i.e., empathy toward the victim). Linearity was reassessed using the Box-Tidwell procedure (1962). After the transformation, the transformed version of the original variable was found to be linearly related to the logit of the dependent variable \( (p = .018) \).

Two binomial logistic regressions were conducted: one using the original variable and one using the transformed variable. A comparison of results revealed the model’s significance did not change as the result of the square transformation. Because the results did not differ, the results of the binomial logistic regression using the original variable are reported below. The logistic regression model was not statistically significant, \( \chi^2(1) = .41, p = .524 \). The model explained 0.1% (Nagelkerke R\(^2\)) of the variance in ID determinations and correctly classified 49.5% of cases. Sensitivity was 5.2%, specificity was 89.2%, positive predictive value was 30%,
and negative predictive value was 51.2%. Empathy toward the victim was not a statistically significant predictor variable (as shown in Table 10).

Table 10

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>Odds Ratio</th>
<th>95% CI for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIV</td>
<td>-0.05</td>
<td>0.07</td>
<td>0.41</td>
<td>1</td>
<td>.524</td>
<td>0.96</td>
<td>0.83, 1.10</td>
</tr>
<tr>
<td>Constant</td>
<td>0.11</td>
<td>0.36</td>
<td>0.10</td>
<td>1</td>
<td>.758</td>
<td>1.12</td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 6

A binomial logistic regression was conducted to determine the impact of participants’ empathy toward the claimant on ID determinations. Linearity of the continuous variables with respect to the logit of the dependent variable was assessed via the Box-Tidwell (1962) procedure. A Bonferroni correction was applied using all three terms in the model resulting in statistical significance being accepted when \( p < .016667 \) (Tabachnick & Fidell, 2014). Based on this assessment, the continuous independent variable was not found to be linearly related to the logit of the dependent variable, as the interaction term was again significant (\( p = .002 \)). To correct this problem, a square transformation was applied to the continuous independent variable (i.e., empathy toward the claimant). Linearity was reassessed using the Box-Tidwell procedure (1962), but the transformed version of the original variable was also not found to be linearly related to the logit of the dependent variable (\( p < .001 \)). Although the assumption of linearity was not met, the results from the original binomial logistic regression using the untransformed data are reported.

The logistic regression model was statistically significant, \( \chi^2(1) = 25.03, p < .001 \). The model explained 8.7% (Nagelkerke \( R^2 \)) of the variance in ID determinations and correctly
classified 66.1% of cases. Sensitivity was 52.8%, specificity was 78.1%, positive predictive value was 68.4%, and negative predictive value was 64.8%. Empathy toward the claimant was a statistically significant predictor variable (as shown in Table 11).

Table 11

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>Odds Ratio</th>
<th>95% CI for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>EIC</td>
<td>0.39</td>
<td>0.08</td>
<td>22.81</td>
<td>1</td>
<td>&lt;.001</td>
<td>1.48</td>
<td>1.26</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.12</td>
<td>0.24</td>
<td>22.59</td>
<td>1</td>
<td>&lt;.001</td>
<td>0.33</td>
<td>1.74</td>
</tr>
</tbody>
</table>

Exploratory Hypothesis 1

As planned, a multiple regression was used to examine how the constructs of legal authoritarianism, negative attitudes toward ID, and empathy independently, and in conjunction with heinousness, influence how convinced participants were that the claimant had ID. First, a multiple regression was run to predict convinced ratings from total scores of the RLAQ-23, CLAS-MR, Empathy Index toward the Victim, and Empathy Index toward the Claimant. There was linearity as assessed by partial regression plots and a plot of studentized residuals against the predicted values. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.889. There was homoscedasticity, as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values. There was no evidence of multicollinearity, as assessed by tolerance values greater than 0.1. There were no studentized deleted residuals greater than ±3 standard deviations, no leverage values greater than 0.2, and values for Cook's distance above 1. The assumption of normality was met, as assessed by a Q-Q Plot. The multiple regression model statistically significantly predicted participants’ convinced ratings in their ID determinations, \( F(4, 325) = 7.12, \ p < .001 \). \( R^2 \) for the overall model was 8.1% with an
adjusted $R^2$ of 6.9%. Of the four variables, empathy toward the claimant was the only significant predictor of how convinced participants were the claimant had ID, $p < .001$. Regression coefficients and standard errors can be found in Table 12.

Table 12

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE_B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>4.04</td>
<td>0.95</td>
<td></td>
</tr>
<tr>
<td>RLAQ-23 Total Score</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.07</td>
</tr>
<tr>
<td>CLAS-MR Total Score</td>
<td>0.00</td>
<td>0.01</td>
<td>-0.02</td>
</tr>
<tr>
<td>Empathy Index – Victim</td>
<td>-0.01</td>
<td>0.05</td>
<td>-0.01</td>
</tr>
<tr>
<td>Empathy Index – Claimant</td>
<td>0.28</td>
<td>0.06</td>
<td>0.26*</td>
</tr>
</tbody>
</table>

*Note. * $p < .05$; $B =$ unstandardized regression coefficient; $SE_B =$ Standard error of the coefficient; $\beta =$ standardized coefficient

Next, a hierarchical multiple regression was run to determine if the addition of perceived heinousness improved the prediction of confidence ratings over and above the four variables alone. See Table 13 for full details on each regression model. The full model of RLAQ-23, CLAS-MR, Empathy Indices, and Perceived Heinousness to predict confidence ratings (Model 2) was statistically significant, $R^2 = .102, F(5, 324) = 7.35, p < .001$, adjusted $R^2 = .088$. The addition of perceived heinousness to the prediction of confidence ratings led to a statistically significant increase in $R^2$ of .021, $F(1, 324) = 7.71, p = .006$. 
Table 13

*Hierarchical Multiple Regression Predicting ID Convinced Ratings from RLAQ-23, CLAS-MR, Empathy Indices, and Perceived Heinousness*

<table>
<thead>
<tr>
<th>Variable</th>
<th>ID Convinced Ratings</th>
<th>Model 1</th>
<th>B</th>
<th>β</th>
<th>Model 2</th>
<th>B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td><strong>4.04</strong></td>
<td>-</td>
<td><strong>4.72</strong></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>RLAQ-23 Total Score</td>
<td>-0.01</td>
<td>-0.07</td>
<td>-0.01</td>
<td>-0.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLAS-MR Total Score</td>
<td>-0.00</td>
<td>-0.02</td>
<td>-0.00</td>
<td>-0.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy Index – Victim</td>
<td>-0.01</td>
<td>-0.01</td>
<td>0.02</td>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy Index – Claimant</td>
<td><strong>0.27</strong></td>
<td>0.26</td>
<td><strong>0.24</strong></td>
<td>0.22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Heinousness</td>
<td></td>
<td></td>
<td>-0.01</td>
<td><em>p &lt; .05</em></td>
<td>-0.15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(R^2\) 0.08 0.10
\(F\) **7.12** **7.35**
\(\Delta R^2\) 0.08 0.02
\(\Delta F\) **7.12** **7.71**

*Note. * *p < .05, **p < .001.*

**Exploratory Hypothesis 2**

In addition to the proposed variables, additional variables of interest were included to assess their impact on how convinced participants were the claimant had ID. The added variables included a measure of participants’ change in negative emotionality, moral outrage, and punitiveness. A multiple regression that included all proposed and added variables was run to investigate the effect of these additional variables. There was linearity as assessed by partial regression plots and a plot of studentized residuals against the predicted values. The Durbin-Watson statistic of 1.880 showed that there was independence of residuals. Furthermore, a visual inspection of a plot of studentized residuals versus unstandardized predicted values revealed there was homoscedasticity.

As assessed by tolerance values greater than 0.1, there was no evidence of multicollinearity nor were there any studentized deleted residuals greater than ±3 standard deviations or values for Cook's distance above 1. There was one leverage value greater than 0.2,
which led to the removal of one participant’s data points. The assumption of normality was met, as assessed by a Q-Q Plot. The multiple regression model statistically significantly predicted confidence ratings, $F(8, 282) = 6.43$, $p < .001$. $R^2$ for the overall model was 15.4% with an adjusted $R^2$ of 13.0%. Of the eight variables, only two were statistically significant in the prediction, $p < .05$, empathy toward the claimant and moral outrage. Regression coefficients and standard errors can be found in Table 14.

Table 14

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE_B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>5.12</td>
<td>1.15</td>
<td></td>
</tr>
<tr>
<td>Perceived Heinousness</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.11</td>
</tr>
<tr>
<td>Legal Authoritarianism</td>
<td>0.00</td>
<td>0.01</td>
<td>-0.02</td>
</tr>
<tr>
<td>Negative Attitudes toward ID</td>
<td>0.00</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>Empathy Index – Victim</td>
<td>0.05</td>
<td>0.06</td>
<td>0.05</td>
</tr>
<tr>
<td>Empathy Index – Claimant</td>
<td>0.17</td>
<td>0.07</td>
<td>*<em>0.15</em></td>
</tr>
<tr>
<td>Change in Negative Emotionality</td>
<td>0.02</td>
<td>0.01</td>
<td>0.09</td>
</tr>
<tr>
<td>Moral Outrage</td>
<td>-0.38</td>
<td>0.10</td>
<td>*<em>-0.26</em></td>
</tr>
<tr>
<td>Punitiveness</td>
<td>0.00</td>
<td>0.01</td>
<td>-0.02</td>
</tr>
</tbody>
</table>

Note. * $p < .05$; $B$ = unstandardized regression coefficient; $SE_B$ = Standard error of the coefficient; $\beta$ = standardized coefficient

**Exploratory Hypothesis 3**

**Empathy toward the claimant.** A simple mediation analysis was conducted using ordinary least squares path analysis; individuals’ perceptions of heinousness indirectly influenced how convinced they were the claimant had ID through its effect on empathy toward the claimant. As can be seen in Figure 2 and Table 15 participants who perceived the crime to be more heinous, felt less empathic toward the claimant than those who perceived the crime to be less heinous ($a = -0.020$), and those who felt more empathic toward the claimant were more convinced he had ID ($b = 0.247$). A bootstrap confidence interval for the indirect effect ($ab = -0.005$) based on 5,000 bootstrap samples was entirely below zero (-0.009 to -0.002). There was
evidence that perceptions of heinousness influenced how convinced participants were independent of its effects on empathy toward the claimant ($c' = -0.012, p = .003$).

Figure 2

_Simple Mediation Model for Empathy toward the Claimant as Mediator_

Table 15

_Model Coefficients for Empathy toward the Claimant_

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Empathy toward Claimant</th>
<th>Convinced ID</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>SE</td>
</tr>
<tr>
<td>Perceived Heinousness</td>
<td>$a$</td>
<td>-0.020</td>
</tr>
<tr>
<td>Empathy - Claimant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>$i_M$</td>
<td>3.968</td>
</tr>
</tbody>
</table>

$R^2 = 0.08$

$F(1, 368) = 30.18, p < .001$

$R^2 = 0.10$

$F(2, 367) = 19.91, p < .001$
**Moral outrage.** Based on a simple mediation analysis using ordinary least squares path analysis, individuals’ perceptions of heinousness indirectly influenced how convinced they were the claimant had ID through its effect on moral outrage. As can be seen in Figure 3 and Table 16, participants who perceived the crime to be more heinous endorsed higher levels of moral outrage than those who perceived the crime to be less heinous (a = 0.019), and those who experienced higher levels of moral outrage were less convinced the claimant had ID (b = -0.442). A bootstrap confidence interval for the indirect effect (ab = -0.008) based on 5,000 bootstrap samples was entirely below zero (-0.012 to -0.005). There was evidence that perceived heinousness influenced how convinced participants were independent of its effects on moral outrage (c’ = -0.009, p = .027).

Figure 3

*Simple Mediation Model for Moral Outrage as Mediator*
Table 16

Model Coefficients for Moral Outrage

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Moral Outrage</th>
<th>Consequent</th>
<th></th>
<th></th>
<th>Convinced ID</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>SE</td>
<td>p</td>
<td>Coef.</td>
<td>SE</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>Perceived Heinousness a</td>
<td>0.019</td>
<td>0.003</td>
<td>&lt; .001</td>
<td>-0.009</td>
<td>0.004</td>
<td>.027</td>
<td></td>
</tr>
<tr>
<td>Moral Outrage b</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>-0.442</td>
<td>.078</td>
<td>&lt; .001</td>
<td></td>
</tr>
<tr>
<td>Constant i_M</td>
<td>1.417</td>
<td>0.186</td>
<td>&lt; .001</td>
<td>5.602</td>
<td>0.295</td>
<td>&lt; .001</td>
<td></td>
</tr>
</tbody>
</table>

$R^2 = 0.14$
$F(1, 357) = 55.75, p < .001$

$R^2 = 0.13$
$F(2, 356) = 26.78, p < .001$

Although these two variables were found to mediate the relationship between perceptions of heinousness and how convinced participants were the claimant had ID, the same was not true for participants’ empathy toward the victim and their change in negative emotionality (i.e., JUNAS change score). These findings make sense given that these variables were not significantly correlated with participants’ convinced ratings. Despite the lack of correlation, simple mediation analyses were conducted using ordinary least squares path analysis to assess the proposed relationships.

To assess empathy toward the victim, the mediation model included individuals’ perceptions of heinousness as the independent variable, participants’ empathy toward the victim index score as the mediator, and how convinced participants were the claimant had ID as the dependent variable. Results indicated that 4.8% of the variance in predicting convinced ratings was accounted for by this model. None of the indirect effects were found to significantly differ from zero, given that for each the bootstrap confidence interval straddled zero (i.e., -0.0023 to 0.0014, -0.0016 to 0.0009, and -0.0306 to 0.0184). However, the direct effect was statistically significant ($B = -0.0161, SE = .0039, p < .001$), which suggests that participants perceptions of...
heinousness were closely related to how convinced they were the claimant had ID independent of their empathy toward the victim.

To assess the change in negative emotionality, the mediation model included individuals’ perceptions of heinousness as the independent variable, participants’ JUNAS change score as the mediator, and how convinced participants were the claimant had ID as the dependent variable. Results indicated that 4.3% of the variance in predicting convinced ratings was accounted for by this model. None of the indirect effects were found to significantly differ from zero, given that for each the bootstrap confidence interval straddled zero (i.e., -.0003 to .0011, -.0002 to .0008, and -.0037 to .01443). However, the direct effect was statistically significant ($B = -.0161, SE = .0039, p < .001$), which suggests participants perceptions of heinousness were closely related to how convinced they were the claimant had ID independent of their change in negative emotionality.
CHAPTER 4
DISCUSSION

Research has documented a range of extralegal factors that can influence jurors’ legal decision-making (Bornstein & Greene, 2011; Feigenson, 2016; Jones et al., 2015; Nunez et al., 2016). However, most of this research has focused on decisions regarding culpability and sentencing. The present study extended prior research by assessing the extent to which various crime and juror characteristics influence determinations of Intellectual Disability (ID) in Atkins hearings. Characteristics examined include mock jurors’ perceptions of crime heinousness, their emotional responses to trial evidence, and their attitudes regarding both legal authoritarianism and individuals with ID. Given that the finding of ID in Atkins cases should be based on the relevant clinical information (e.g., intelligence, adaptive behavior, pertinent history), it is important to understand how these extraneous factors can influence juror decision-making. There remains a paucity of research on this topic, despite the real-life and death outcomes that result from Atkins decisions.

The findings of the current study suggest that various extralegal and extraclinical factors that affect broader legal decision-making can also influence mock jurors’ diagnostic opinions. Participants’ perceptions of heinousness, their emotions, and their attitudes were all shown to have an impact on their decisions regarding the claimant’s ID status. As hypothesized, individuals who perceived the crime to be more heinous on a continuous rating scale were less likely to conclude the claimant had ID and were less convinced of his ID status. Participants’ empathy also influenced their judgments of the claimant’s ID status, although this finding was
dependent upon to whom the feelings were directed. As predicted, participants who endorsed increased feelings of empathy toward the claimant were more likely to conclude he had ID. However, in contrast to study predictions, participants’ empathy toward the victim did not significantly affect their conclusions. With regard to participant attitudes, those who endorsed higher levels of legal authoritarianism were less likely to find the claimant to have ID, consistent with the stated hypothesis. However, diverging from predicted findings, participants’ negative attitudes toward individuals with ID did not influence their decisions regarding ID status. The discussion that follows considers each of these findings in the context of the nature and background of the studied variables.

While the above-noted factors are important to consider independently, a reasonable interpretation is that a combination of such factors would more compellingly influence jurors’ decisions. For this reason, exploratory analyses examined the interactive effects among heinousness and other variables of interest (i.e., scaled perceptions of heinousness, empathy, legal authoritarianism, and attitudes toward ID). When these initially proposed variables were examined together, perceptions of heinousness and empathy toward the claimant were found to be significant predictors of how convinced participants were the claimant had ID. However, the addition of change in negative emotionality, moral outrage, and punitiveness caused an interesting shift in this dynamic. Specifically, the introduction of moral outrage overrode the influence of perceptions of heinousness. As a consequence, in this more comprehensive model, the remaining significant predictors were limited to two emotional variables (i.e., empathy toward the claimant and moral outrage). When participants endorsed less empathy toward the claimant and higher levels of moral outrage, they were less convinced of the claimant’s qualification for an ID diagnosis.
Given these findings, additional analyses were run to examine the relationship between perceptions of heinousness and emotional reactions to trial evidence and how that relationship subsequently affected participants’ decisions. The findings from these mediation analyses indicated that participants’ perceptions of heinousness influenced how convinced they were that the claimant had ID, through their impact on empathy toward the claimant and moral outrage. That is, individuals who perceived the crime to be less heinous endorsed higher levels of empathy toward the claimant, and, in turn, were more convinced the claimant had ID. Conversely, individuals who perceived the crime to be more heinous endorsed higher levels of moral outrage, and subsequently, were less convinced the claimant had ID. The following discussion provides interpretations of these findings in light of available research and suggests implications for the legal and research fields.

The Impact of Heinousness

The Manipulation of Heinousness

In the current study, the researcher attempted to dichotomize heinousness into a “low” and “high” condition through the use of two crime vignettes. It was anticipated that the presentation of these two crimes would elicit significantly different perceptions of heinousness to serve as the study’s main manipulation; however, this was not the case. Although the “low heinousness” condition’s overall mean rating of perceived heinousness (69.59) was slightly lower than the “high” condition’s (71.43), the difference was not statistically significant. In order to address the meaning of this manipulation check, the impact of heinousness on ID judgments was still investigated by comparing the differences between the two conditions, as proposed. However, the results were not significant because of similarities in perceptions of heinousness in the low and high conditions.
Although results from Applegate (2017) revealed significant differences between the perceived heinousness of various crime factors, the range of means was limited, given that all factors elicited “high” levels of heinousness. On a scale of 0 (not at all heinous) to 100 (extremely heinous), the mean ratings of the examined factors ranged from 68.28 to 93.38. Furthermore, for all 43 vignettes in this 2017 study, participants’ mean rating of heinousness was 81.28. While all factors were generally perceived as heinous, individuals’ differing heinous ratings suggest personal biases, experiences, and traits can influence one’s perceptions. The high ratings of heinousness across the board, even in factors found to be “less heinous” than others, suggests that murder is intrinsically heinous. Together, results from previous research (Applegate, 2017; Costanzo & Costanzo, 1992; Finkel & Duff, 1991; Hendrick & Shaffer, 1975; Hester & Smith, 1973; McPherson, 2002; White, 1987) and the current study shed light on a recurrent theme: what is heinous to one individual, may not be heinous to another.

**Perceptions of Heinousness and the Determination of ID**

Because of the similarities in perceptions between the low and high conditions, additional analyses were run to consider the study’s hypotheses using individuals’ reported perceptions of heinousness. The following discussion draws on the continuous ratings of heinousness. Broadly speaking, the current study’s results provide support for the notion that crime heinousness can impact juror decision-making (Costanzo & Costanzo, 1992) beyond just culpability and sentencing decisions. The findings suggest that heinousness is associated with an undue influence on clinical decisions regarding ID, such that higher perceptions of heinousness resulted in a decreased likelihood the claimant was found to have ID, as well as participants being less convinced of his diagnostic qualification. This held true even after participants were educated on the diagnostic criteria for ID and instructed to base their decisions on the evidence presented.
during the hearing. Given individual variability in perceptions of heinousness, this is especially problematic, as decisions regarding ID status in Atkins cases are vulnerable to high subjectivity. There are two interpretative frameworks for the current study’s results. One possible explanation is that participants thought a finding of ID could serve as an excuse for the individual’s behavior. If so, participants may have been less likely to identify the claimant as having ID when they perceived the crime to be especially heinous, given the perception that a diagnosis may reduce the claimant’s responsibility and thereby result in a lighter sentence. In fact, the existing literature suggests that mock jurors’ perceptions of heinousness lead to harsher scrutiny toward defendants and a less forgiving nature toward their misdoings. This is evidenced by higher conviction rates and longer, more punitive sentences, including impositions of the death penalty (Finkel & Duff, 1991; Hendrick & Shaffer, 1975; Hester & Smith, 1973; White, 1987).

Although the present study did not inform participants that a finding of ID would preclude a death sentence, it is additionally possible that some participants were aware of this constitutional right. If increased heinousness leads to a heightened desire to invoke harsher punishment, the admittance of ID was possibly viewed as a barrier to the death penalty. Another interpretation, which will be discussed in some depth shortly, is that perceptions of heinousness influenced decision-making as the result of the emotions elicited and their impact on how participants processed information. This interpretation will be considered in the context of several different theoretical foundations.

**Cognitive-Experiential Self Theory**

In a legal setting, jurors are asked to attend to and evaluate a significant amount of information. Although jurors are instructed to logically and thoroughly analyze all of the available evidence, their ability to do so is influenced by their cognitive processes, personal
attitudes, and biases (Bornstein & Greene, 2011). Using CEST (Epstein, 1973) as a conceptual framework, there are important considerations for why perceptions of heinousness and subsequent emotional reactions may have affected their cognitive processes and resultant decisions. From this point, the discussion is organized around three basic themes and the ways in which they could have influenced participants’ ID determinations: emotions and information processing, the use of heuristics, and interpretation and decision-making.

**Emotions and Information Processing**

According to CEST, the presentation of emotionally charged information and associated activation of emotions can lead to an individual’s use of the experiential mode to process information, which can be particularly problematic in the legal setting (Epstein, 1973). Researchers have demonstrated that once emotions are elicited and this mode is utilized, an individual’s feelings serve as a lens through which all subsequent information is viewed including what details they attend to and how such details are interpreted (Krauss et al., 2004). In the current study, it appears that some of the participants’ emotional reactions were driven by their perceptions of heinousness, as there was a relationship between those perceptions and feelings of moral outrage and empathy. As rated perceptions of heinousness increased, moral outrage (i.e., anger and disgust) and empathy on behalf of the victim also increased, whereas empathy toward the claimant decreased. Some of these emotional responses (i.e., anger, disgust, empathy toward the victim) were likely activated at the outset of the simulation when participants were exposed to the crime vignette.

From a CEST framework, participants who perceived the crime to be more heinous and experienced stronger emotional reactions likely processed the information during the Atkins hearing through the experiential system. In doing so, participants’ attention to, judgments about,
and integration of the evidence were likely affected, as all evidence was filtered and interpreted through the lens of these negative emotions. In fact, both anger and disgust have been shown to skew individuals’ interpretation of subsequent information (Haidt and Hersch, 2001; Lerner & Tiedens, 2006; Salerno & Peter-Hagene, 2013). As a result, a reasonable explanation is that participants’ visceral or “gut” reactions to the crime vignette biased their interpretation of the evidence presented afterward. For instance, if participants viewed the defense expert as excessively committed to the claimant’s side, this may have led to feelings of anger, causing participants to attend more strongly to evidence presented by the state’s expert suggesting the claimant did not have ID.

While some emotions may have been elicited by the presentation of the crime vignette, it is also possible that emotions were later activated by the information jurors learned during the Atkins hearing. After listening to evidence about the claimant’s impairments and challenges he has faced, some participants’ feelings of empathy toward the claimant increased, which could have similarly influenced their attention to and interpretation of evidence. For instance, a mock juror who felt empathy for the claimant may have focused more on the evidence about his intellectual and adaptive deficits, and his resultant difficulties throughout his life. Along with being more attentive to this evidence, they may have also disregarded information that did not fit with their empathic feelings (i.e., the state’s expert’s testimony). This interpretation is supported by previous research demonstrating that the experience of empathy can cause changes in other emotions, such as anger or fear (Oswald et al., 2009). In the present case, participants’ increase in empathy toward the claimant appeared to result in a decrease in their feelings of anger and disgust, and consequently, a change in the evidence they attended to most.
Individuals often judge evidence as more credible and are more easily able to remember evidence when it aligns with their feelings (Bright & Goodman-Delahunty, 2006; Carlson & Russo, 2001; Nabi, 2002). Given this tendency, it is likely that participants who experienced moral outrage viewed the state’s expert as more credible and later recalled testimony related to the opinion that the claimant did not qualify for a diagnosis of ID. On the other hand, when participants’ empathy toward the claimant influenced their processing, they likely considered the defense’s expert testimony to be more credible and remembered that evidence more easily. As a result, these participants would have been more likely to assign the claimant an ID diagnosis.

Although participants were told to disregard their emotional reactions and form their opinions based solely on the evidence presented during the hearing, this suggestion may have had the opposite intended effect. Researchers have shown that mock jurors pay more attention to emotionally salient evidence deemed inadmissible in comparison to both emotional evidence that was permitted and non-emotional evidence that was not (Edwards & Bryan, 1997). If this selective attention occurred, participants might have placed even more focus on the specific evidence that elicited their emotional reactions, resulting in their overreliance on biased interpretations as opposed to an even analysis of all information.

The Use of Heuristics

Assuming individuals’ perceptions of heinousness and subsequent emotional reactions led them to process information through the experiential mode, they did not critically evaluate all of the evidence presented during the hearing. As previously discussed, when individuals process information through the experiential mode, they are more likely to use heuristics and as a result, are less likely to diligently analyze all of the available information or integrate contradictory evidence. Instead, they are more likely to rely on their “gut” (Krauss et al., 2004; Lerner &
Tiedens, 2006; Schnall et al., 2008). Researchers have found this to be particularly true of individuals who endorse feelings of anger (Lerner & Keltner, 2001; Lerner & Tiedens, 2006; Salerno & Peter-Hagene, 2013). Given this pattern, in the current study, participants’ emotions may have negatively affected their ability to integrate conflicting pieces of evidence and to analyze all of the available information thoroughly. That is, due to the use of heuristics, their emotions heavily influenced what evidence they focused on (i.e., state or defense expert testimony) and how they interpreted it.

In the present study, participants may have employed the affect heuristic (Slovic et al., 2002), resulting in their reliance on their current emotion to help them process information quickly and form their initial opinions. When the exposure to the crime details and knowledge of the claimant’s conviction led participants to feel morally outraged, they likely viewed the claimant primarily as a convicted murderer who took away the life of another person. Consequently, they would have focused on the information presented during the hearing that fit their impressions and aligned more with their negative views of the claimant (i.e., the testimony of the state’s expert). Subsequently, they would have been less likely to then integrate the defense expert’s testimony, which suggested the claimant had significant deficits that caused him difficulties throughout his life and thus failed to thoroughly analyze all of the available information. Similarly, participants who endorsed empathy toward the claimant may have focused their attention on the defense’s testimony. By focusing on evidence of the claimant’s deficits and the negative impact they had on his life, participants’ empathy for the claimant’s circumstances likely overtook their initially harsh judgments of his actions.

Participants’ use of heuristics and reliance on emotions influenced their attributions of blame. Researchers have demonstrated that people are more likely to place blame on individuals
when they attribute their behavior to personal traits rather than situational factors (i.e., the fundamental attribution error; Greenberg & Cohen, 1982). Both anger and empathy are related to blame in unique ways. As previously noted, those who are angry tend to place more blame on an individual believed to be the source of their anger (Lerner et al., 1998), whereas feelings of empathy toward a defendant can contribute to mock jurors’ views of decreased culpability (Archer et al., 1979). When individuals empathically consider someone else’s circumstances and perspectives, they are less likely to make the fundamental attribution error and, consequently, less likely to blame the person for their behavior (Skorinko et al., 2014). In the current study, it is possible that participants’ emotional reactions influenced the degree to which they blamed the claimant, thus affecting their analysis of the evidence. Specifically, participants who experienced more anger toward the claimant may have placed more blame on him for his actions. However, after giving thought to the claimant’s circumstances, other participants may have attributed his behavior to situational factors (i.e., limitations in his functioning), leading to an increase in feelings of empathy and less blame placed on the claimant. While the impact of blame has been examined in broader legal decision-making research (Bright & Goodman-Delahunty, 2006; Lerner et al., 1998), little is known regarding its effect in more specific legal decisions, such as the one set forth in an Atkins hearing.

Support for the influence of emotions on participants’ reading of the data can also be found in appraisal theory. As previously reviewed, both anger and disgust evoke certainty appraisals, which could have further negatively impacted participants’ information processing and increased their use of the affect heuristic (Brinol et al., 2018; Humrichouse & Watson, 2010; Krauss et al., 2012). In line with previous research, it is possible their certainty and confidence made them more likely to perceive their thoughts as valid and reliable and less likely to process
new information (Brinol et al., 2018). Whether individuals’ positive or negative emotions take charge, there is significant evidence to suggest that emotions play a meaningful role in their decision-making by influencing which pieces of evidence most strongly garner their attention. In turn, their focus on particular evidence worsens their ability to integrate and balance conflicting information, resulting in only partial and biased analysis of the total information available. Although the current results do not explicitly confirm this interpretation, this may be a direction for future researchers to consider.

**Interpretation and Decision-Making**

In the current study, mock jurors were tasked with attending to and interpreting contradicting evidence to inform their decisions regarding whether a claimant qualified for a diagnosis of ID. Previous researchers have established that decision-making can be negatively affected when emotions cause individuals to process information through the experiential mode instead of the rational mode (Epstein & Pacini, 1999; Lieberman, 2002). In the current study, individuals’ emotional reactions to their perceptions of heinousness and the evidence presented during the hearing may have led them to utilize the experiential mode of processing. If so, these emotions could have influenced what information they attended to and deemed more credible. Further, they would have been more likely to use mental shortcuts and less likely to critically analyze the available data before drawing their conclusions. This reliance on emotion would likely have led to faster decisions with an increased likelihood of errors, as well as biased interpretations and judgments (Lieberman, 2002).

In the case that participants’ emotions had the abovementioned effects on their information processing, there are varying explanations as to why individuals’ ultimate decisions regarding the claimant’s ID status might have been impacted. First, it is possible that such
emotions influenced how participants interpreted various pieces of evidence. Specifically, participants’ emotions may have affected whether they perceived evidence regarding the claimant’s intellectual and adaptive deficits presented during the Atkins hearing as mitigating. Both anger and disgust have been linked with harsher judgments of individuals who commit moral transgressions (e.g., increased guilty verdicts, longer sentences, the imposition of the death penalty) (Bright & Goodman-Delahunty, 2006; Georges et al., 2016; Johnson et al., 2016; Jones & Fitness, 2008), which suggests these emotions contribute to more punitive decisions.

As such, if participants viewed an ID finding as a less punitive ruling, then their feelings of anger and disgust may have resulted in them being less convinced the claimant had ID. This is especially true considering previous research findings have shown jurors perceive mitigating evidence as weaker when they are angry, and disgust is relatively resistant to the presentation of such evidence (Georges et al., 2013; Russell & Giner-Sorolla, 2011). As researchers learn more about moral outrage, it has become apparent that the combination of anger and disgust can have a significant effect on one’s information processing due to their tendency to exacerbate one another. This effect was seen in the current study, as higher levels of moral outrage resulted in participants feeling less convinced the claimant had ID.

As previous researchers have demonstrated, feelings of blame can also influence individuals’ legal decision-making. For instance, increased blame can result in higher conviction rates and harsher sentencing verdicts (Bright & Goodman-Delahunty, 2006; Lerner et al., 1998). In light of the current findings, individuals’ emotions likely influenced their blame attributions, which in turn, also influenced their decisions regarding the claimant’s diagnostic status. That is, if individuals who experienced more anger toward the claimant placed more blame on him for his actions, then this blame may have been a contributing factor in their decreased likelihood of
finding the claimant to have ID. On the other hand, if individuals who experienced more empathy toward the claimant placed less blame on him, then their reduced blame may have contributed to the increased likelihood of assigning an ID diagnosis.

Although empathy toward the claimant significantly influenced participants’ ID decisions, their empathy toward the victim did not. One possible explanation for this finding may be that participants were given very little information about the victim and the details of the murder. Aside from the minimal demographic information noted in the vignette (i.e., 40-year-old male or 75-year-old male), they were not provided with any additional details about the victim’s personal life. Furthermore, to avoid introducing a variety of confounding variables, the description of the murder itself was limited to a brief description of the method of killing and the medical examiner’s conclusion of the cause of death (i.e., asphyxiation or blunt force trauma to the head).

In contrast, given the purpose of the hearing, a significant amount of evidence was presented about the claimant’s background and functioning. In considering this presentation of evidence, a reasonable interpretation is that the Atkins hearing did not elicit the same level of empathy toward the victim that might typically arise in other legal proceedings, such as the murder trial itself. In other proceedings, jurors would likely be exposed to considerably more details about the crime, the victim’s life, and the impact the crime had on the lives of their loved ones. As such, the impact of jurors’ empathy toward the victim may be more powerful when more victim information is provided. With this in mind, however, it is important to note that the majority of juries tasked with Atkins decisions render their judgments during the sentencing phase, after being exposed to a wide range of aggravating evidence (e.g., victim impact
statements). Consequently, this preliminary finding may not hold in such cases, as jury members will, in fact, have been exposed to significant victim details prior to providing their ruling.

The Impact of Jurors’ Attitudes

While CEST provides a useful framework for considering the study’s results and interpreting the main findings, other possible explanations warrant examination as to why participants’ perceptions of heinousness and emotional responses impacted their ID determinations. Although the current findings found that participants’ emotions overrode the influence of their attitudes, it is still important to consider the potential impact such attitudes can have on decision-making in Atkins cases. After all, previous researchers have demonstrated that jurors’ personal traits and attitudes can impact their legal decision-making (Devine & Caughlin, 2014). In the current study, jurors’ legal authoritarianism and negative attitudes toward ID were hypothesized to have an impact on jurors’ ID findings; however, only one variable was found to significantly influence their opinions.

Legal Authoritarianism

As hypothesized, individuals who endorsed higher levels of legal authoritarianism were less likely to find the claimant to have ID. Based on the current study’s findings, it appears that legal authoritarianism can influence Atkins decisions in ways similar to broader legal decisions, which has several important implications. First, when Atkins claims arise in capital cases, and when one or more aggravating factors have been identified (e.g., the murder was especially heinous, atrocious, or cruel), jurors high in this trait may be more influenced by aggravating factors related to the crime, as opposed to mitigating evidence presented in the Atkins hearing. In fact, previous researchers have shown those individuals higher in legal authoritarianism tend to endorse a greater number of aggravating factors and a fewer number of mitigating circumstances.
(Butler & Moran, 2007). In the current study, legal authoritarianism was found to be a factor impacting ID opinions, despite participants only being exposed to limited information related to the case itself. Thus, it is possible that had they been exposed to more details, this relationship would have been even more pronounced. This finding is particularly problematic, as states that use juries in *Atkins* decisions typically do so during the sentencing phase. Jurors’ resultant exposure to the presented aggravating evidence may lead to their legal authoritarian attitudes having an even greater impact on their ID decisions.

Reflecting a second implication of the link between legal authoritarianism and ID determinations, the current results are consistent with previous research findings, which suggest that participants who endorse stronger legal authoritarian attitudes are more likely to discount constitutional protections of the accused (Narby et al., 1993). As previously described, in *Atkins v. Virginia* (2002), the High Court ruled the execution of an individual with ID was a violation of the 8\(^{th}\) Amendment and banned the use of this sanction with this population. As a result, all individuals charged or found guilty of capital murder are permitted to raise the issue of intellectual disability. Note that in the present study, mock jurors higher in legal authoritarianism were less likely to conclude the claimant had ID, suggesting this trait may have acted as a barrier to the just application of expected constitutional protections. Researchers have also demonstrated that individuals higher in legal authoritarianism tend to find defendants as guilty more often and exact more punitive sentences, such as the death penalty (Cutler et al., 1992; Devine & Caughlin, 2014; Jones et al., 2015; Lierberman & Sales, 2007; Narby et al., 1993). Although the finding of ID is not technically a decision of one’s guilt or innocence, or even one of sentencing, individuals high in legal authoritarianism may not consider the differences across these types of
judgments. This cognitive lapse may be especially true when attempting to consider evidence of the claimant’s functioning in light of the fact that they were found guilty of capital murder.

**Negative Attitudes Toward ID**

Whereas legal authoritarianism was found to affect ID outcomes, participants’ negative attitudes toward individuals with ID were not predictive of their diagnostic conclusions. These results offer the possibility that jurors’ biases toward individuals with disabilities did not interfere with their ability to make a legal judgment. However, other potential explanations are important to consider. First, it may be that the CLAS-MR measure utilized in the current study was not sensitive to the specific stereotypes activated by the presented case. In this case, the claimant described in the *Atkins* hearing had both adaptive strengths and weaknesses. As found in the literature, people tend to conceptualize individuals’ ID impairments as more severe than what is typical (Siperstein & Bak, 1980), perceiving individuals with even mild ID as functioning at the level of someone with moderate to severe ID (Doane & Salekin, 2009). These research findings suggest that the general population may view the presence of adaptive strengths as inconsistent with an individual who meets the criteria for ID. Although the CLAS-MR tangentially assessed this stereotype by evaluating participants’ beliefs about the activities that individuals with ID should be capable of completing, it did not specifically measure participants’ degree of acknowledgment that individuals with ID possess both adaptive strengths and weaknesses. It, therefore, remains possible that participants’ ID determinations were, in fact, influenced by their stereotypes of individuals with ID, as the CLAS-MR was likely not an appropriate means of investigating this effect.

Another possible explanation for this finding is that researchers have indicated societal attitudes toward ID are changing (Goreczny, Bender, Caruso, & Feinstein, 2011). This may be,
in part, due to the increasing number of individuals who report knowledge of or experience with people with developmental disabilities, as evidenced in the current study. In their investigation (Goreczny, Bender, Caruso, & Feinstein, 2011), the researchers found generally positive attitudes toward individuals with ID, though they noted that people still tend to avoid reciprocal relationships with such individuals. They also pointed to attitudinal differences in gender and age. In their study, they found more negative views were held by males and older adults, which supported previous findings related to similar differences in attitudes based on gender (Chen et al., 2002), but not age (Ten Klooster, Dannenberg, Tall, Burger, & Rasker, 2009). In the current study, the demographic make-up of the sample may have contributed to the findings, as 69% of individuals who completed the study identified as female, and the mean reported age was 18.77 years old. Thus, the current study’s sample may have simply reflected a subset of the general population that feels more positively toward individuals with ID, leaving open the possibility that for those who endorse more negative attitudes toward individuals with ID, these attitudes could impact their ID determinations.

Conclusions

This investigation was the first study to look at how mock jurors’ perceptions of crime heinousness impacted their determinations of ID. The results of the study revealed mock jurors’ perceptions of heinousness, and subsequent emotional reactions, influenced their diagnostic decisions. The findings also demonstrated that perceptions of heinousness can cause an increase or decrease in feelings of empathy and moral outrage, which, in turn, can influence mock jurors’ legal judgments. This research extends the broader legal decision-making literature by providing an improved understanding of how such factors influence jurors in Atkins cases. Specifically, these findings can help legal professionals better recognize the various crime and juror
characteristics that impact ID determinations, as well as the procedural implications of tasking jurors with such complex and consequential decisions.

**Implications**

**Heinousness.** Findings from the current study revealed a range of implications. Assuming heinousness is a subjective judgment, methodological difficulties abound when investigating perceptions of heinousness. These challenges are further apparent when considering the discrepancies in previous researchers’ operationalizations of heinousness (Finkel & Duff, 1991; Hendrick & Shaffer, 1975; Hester & Smith, 1973; Reardon et al., 2007; White, 1987). First, given significant variability in views regarding what crime variables are perceived as heinous, it is difficult to provide an operational definition of heinousness on which participants would reliably agree. Second, given generally high ratings of perceived heinousness across differing crime variables, dichotomizing heinousness in order to represent perspectives of “low” and “high” is problematic. “Low” heinousness, in theory, may not exist when asking lay individuals to consider details of a murder.

In legal practice, the use of the “especially heinous, atrocious, or cruel” aggravating factor is, in fact, an all or nothing decision. That is, jurors do not have the opportunity to consider degrees of heinousness, and rather, must simply determine whether a crime was or was not heinous when deciding whether to apply this aggravator. Lay individuals’ tendency to perceive all crime factors as very heinous raises concern regarding their ability to determine whether this aggravating factor is present in a fair and consistent manner as set out in *Godfrey v. Georgia* (1980). Given the purpose of an aggravating factor is to narrow and limit the defendants eligible for the death penalty, this particular factor likely puts individuals’ constitutional rights at risk, given its inconsistent and often arbitrary application.
**Emotions and CEST.** Individuals’ perspectives on crime factors are impacted by their personal experiences and biases. Results of the current study suggest that participants experienced strong emotions in response to presented evidence, and that the relationship between their emotional reactions and their perceptions of heinousness influenced their diagnostic opinions. CEST, through its distinction between the rational and experiential modes of information processing, offers a pathway for understanding this influence of emotions on juror decision-making. Current findings highlight experiential processing as an important continuing area of study with respect to jurors’ process of experiencing emotions and forming judgments. Similarly, individuals in the legal field (i.e., lawyers and judges) could benefit from increased awareness of the various ways in which jurors’ emotions are activated and subsequently affect how they process information and arrive at their conclusions.

**Moral outrage.** As previously discussed, when moral transgressions trigger both anger and disgust, the resultant emotion can be characterized as moral outrage (Salerno & Peter-Hagene, 2013). Previous researchers have posited several ways in which these two emotions independently, and even more so together, can influence decision-making. The current findings expand what is known regarding the effect of moral outrage and its influence on the interpretation of mental health evidence and diagnostic decisions in legal settings. As moral outrage acts as the link between jurors’ perceptions of heinousness and how convinced they feel of the claimant’s ID status, lawyers should consider that jurors who are more prone to feelings of anger and disgust may be less likely to find the claimant to have ID. More broadly, such individuals may be more likely to rely on their emotions to form judgments, especially in light of a crime they perceive as particularly heinous.
Empathy. Broadly, the present study findings suggest that empathy can affect mock jurors’ decision-making, though it appears this same emotion could produce different results depending on whether empathy is experienced toward the victim or the claimant. Although concern has been noted in Atkins cases that jurors could be unduly biased by their empathy toward the victim, especially when they perceive the crime to be heinous, concerns regarding the impact of empathy toward the claimant on ID opinions has received less attention. While it is possible such feelings could promote jurors’ consideration of relevant evidence with a general disregard for biasing extralegal factors (e.g., crime heinousness), the issue of biased judgments based on emotions remains cogent. That is, even though empathy toward the claimant may result in more positive ID findings, arguably offering the constitutional protections intended by the High Court, any failing by jurors to appropriately balance contradictory evidence and form unbiased conclusions calls for review.

To date, little is known regarding mock jurors’ feelings of empathy toward defendants with ID. Reardon and colleagues (2007) found mock jurors tend to express more sympathetic feelings toward defendants with ID compared to those with serious mental illness, but there are no known studies that examine participants’ feelings of empathy toward a defendant compared to such feelings toward a victim. In both conditions of the present study, participants endorsed more feelings of empathy toward the victim than toward the claimant. The current findings revealed participants’ feelings toward the victim did not carry the same weight found in broader legal research. It is possible their empathy for the victim lacked a similar effect in an Atkins scenario due to the mitigating evidence presented on behalf of the claimant. Certainly, legal professionals should consider individuals’ different empathic tendencies and their potential impact on diagnostic decision-making when strategizing and selecting jurors.
**Jurors’ involvement in Atkins.** These findings raise intriguing questions regarding the nature and extent of jurors’ involvement in Atkins claims. Given that jurors’ ID judgments would likely be affected by their perceptions of heinousness and subsequent emotions (i.e., moral outrage and empathy), as well as other juror characteristics (i.e., legal authoritarianism), states may want to consider their policies regarding the trier-of-fact in these cases. Although it is unknown to what extent judges may be influenced by such factors, their regular exposure to crimes, understanding of legal rules, and familiarity with expert witness testimony arguably improve their ability to consider the most relevant information and make ID determinations less affected by personal biases and emotions.

**Limitations**

Although this study has added to the literature on juror decision-making in Atkins cases, several limitations should be discussed.

**Sample characteristics.** First, the current study’s sample consisted solely of undergraduate students from a southern university. As a result, the sample is likely not representative of a national sample of actual jurors (Fox, Wingrove, & Pfeifer, 2011; Keller & Weiner, 2011). However, other researchers have noted that there is no theoretical reason to believe they would be qualitatively different and found no differences between undergraduate and juror samples (Bornstein, 1999). This study’s sample is also limited by the homogeneity of participants’ age, gender, race, and education. The majority of participants in the current study were young, female, White, and had one to two years of college education.

**Juror vs. jury decision-making.** In this study, mock jurors’ individual decisions were investigated; however, in reality, jurors would ultimately discuss their thoughts and opinions as a group to make a single determination. Although previous researchers have noted the importance
of still investigating individual juror decision-making (Levett & Devine, 2017; Winter & Greene, 2007), it is possible that by having mock jurors discuss their opinions as a group, some individuals’ ultimate decisions would change to form a unanimous group decision. Previous researchers have demonstrated that after deliberating, jurors were more likely to show leniency toward a defendant and change their verdicts from guilty to not guilty (Ruva, McEvoy, & Bryant, 2007; Miller, Maskaly, Green, & Peoples, 2011), though other studies have shown this leniency effect does not always occur (Lynch & Haney, 2009). Researchers have also shown that the likelihood of someone changing their opinion during deliberation is negatively correlated with how confident they feel in their position (Tanford & Penrod, 1986). Thus, while there is value in examining legal decision-making at the individual level, there are clearly nuanced group factors the current study design cannot capture.

**Heinousness manipulation.** Participants in this study did not perceive the two presented crime vignettes as demonstrating significantly different degrees of heinousness. As a result, supplemental analyses using scores on a continuous heinousness variable were included to account for the lack of difference between the conditions. While this prevented a comparison between two manipulated group, the use of participants’ ratings may have resulted in more meaningful supplemental analyses that better captured the effect of individuals’ perceptions.

**Transcript.** Due to the need to structure brief crime vignettes for the purpose of a research investigation, mock jurors were exposed to less information and evidence than would typically be presented in an Atkins hearing. It is ultimately unclear to what degree this may have affected study findings. On one hand, the transcript included the essential testimony provided by the expert witnesses, offering participants the necessary information to make ID determinations. However, the impact of emotions may not have been fully explored, as additional aspects of
Atkins hearings (e.g., victim characteristics, additional information about the crime) that are often emotionally charged were not included.

**Future Directions**

Based on the results of this study, there are a number of proposed future directions for other researchers to consider. First, given that judges make Atkins determinations in the majority of states, it would be valuable for future researchers to replicate the current study with a sample of judges. In doing so, researchers would have the opportunity to examine the relationship between judges’ perceptions of heinousness and ID determinations. More, they would be able to compare how differences in the trier-of-fact affect the finding of ID. Second, given aforementioned challenges in operationalizing heinousness, future studies that aim to understand the impact of crime heinousness on legally relevant variables should consider using a rating scale for participants’ perceptions of heinousness as opposed to attempting to predetermine bifurcated levels of heinousness (e.g., low and high). By approaching the measurement of heinousness in this way, researchers may better capture the actual impact of participants’ perceptions of heinousness on their decisions about a claimant’s ID status.

Given the current study’s findings related to the mediating role that both moral outrage and empathy play regarding the impact of heinousness on ID determinations, future studies may seek to explore additional potential mediators of this relationship. To the extent that future researchers choose to further examine such components of CEST as information processing and emotions, they may want to consider continued use of the Rational Experiential Inventory (REI; Epstein, Pacini, Denes-Raj, & Heier, 1996). In doing so, researchers would be able to measure participants’ mode of information processing directly, investigate the potential differences between the use of the rational versus the experiential mode, and examine the relations between
various emotions and modes of processing. Finally, future studies should aim to obtain a broader sample more representative of the general population, comprising diverse ages, genders, races, and educational levels in an effort to make study findings more generalizable.
REFERENCES

Adger, J. L. Quantifying the ‘worst of the worst’: Victim, offender and crime characteristics contributing to ‘heinous, atrocious, or cruel’ findings in alabama (July 15, 2010). Retrieved from: http://ssrn.com/abstract=1640924AA


*Clark v. State*, 443 So. 2d 973, 977 (Fla. 1983).


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18 U.S. Code § 3592
APPENDICES

Appendix A

Demographic Form

Please fill out the following questions to the best of your ability. Questions will require you to either circle a response, provide a written response, or both circle and provide a written response. Please answer every question you feel comfortable answering. If you are uncomfortable answering a particular question, you may leave it blank.

Age (in years): _________

Gender (circle one): Male Female

Race: ________________________

Place of Birth (City, State): __________________________
*If you were not born in the United States, have you obtained U.S. citizenship? YES NO

Place Where Raised* (City, State): __________________________
*In other words, where would you say you spent most of your childhood?

Political Orientation:

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Political Affiliation:
Democrat Republican None Other (specify): ________________

Number of Semesters of College Completed: ____________

Academic Major (or anticipated major if not declared): ____________

College GPA (if this is your first semester please put N/A): ____________

High School GPA: ____________

Have you ever served on a jury? Yes No
If yes, please provide details about that experience including the type of trial (i.e., civil vs. criminal), the type of crime, the location, the verdict, etc. Please do not include any identifying information (including names) in your response.

____________________________________________________________________________________________
____________________________________________________________________________________________
____________________________________________________________________________________________

Do any members of your immediate family work as judges? YES NO

Do any members of your immediate family work as defense attorneys? YES NO

Do any members of your immediate family work as prosecuting attorneys? YES NO

Do any members of your immediate family work as other professionals in the legal field? YES NO
If YES: What do they do in the legal field?

_____________________________________________________________________________________________

Have you ever been the victim of a violent crime? Yes No
If you feel comfortable doing so, please provide details about the experience(s) noted above including the type of violent crime, whether you knew the perpetrator, the outcome (i.e., were charges filed? Was the perpetrator convicted?), etc. Please do not include any identifying information (including names) in your response.

_____________________________________________________________________________________________

Has anyone close to you ever been the victim of a violent crime? Yes No
If you feel comfortable doing so, please provide details about the experience(s) noted above including your relationship to the victim, the type of violent crime, the outcome (i.e., were charges filed? Was the perpetrator convicted?), etc. Please do not include any identifying information (including names) in your response.

_____________________________________________________________________________________________

Have you ever been employed in a mental health setting? YES NO
Do you have knowledge or experience with people with developmental disabilities such as intellectual disability, autism, Down Syndrome, and the like? YES NO

IF YES: Check all that apply and briefly describe your experience:

_____ School/College
_____ Employment setting
_____ Volunteer experience
_____ I have a family member who lives or has lived with me who has a developmental disability
_____ I have a friend/acquaintance with a developmental disability
_____ Other experience not listed – please describe:

Please check all that apply:

_____ I took a course that specifically covered ID and other developmental disabilities (e.g., developmental psychology).
_____ I have read/watched non-fictional information about the ID population (e.g., textbooks, scholarly articles, documentaries, etc.).
_____ I have read/watched fictional accounts of the ID population (e.g., Forrest Gump, Of Mice and Men, etc.).
_____ I have no personal experience with people who have ID.
_____ Other experience not listed – please describe:

Based on what you know, can individuals who are found to have Intellectual Disability be sentenced to death and executed in America? YES NO

In your own opinion, do you think individuals with ID should be able to be sentenced to death if they are found guilty of capital murder? YES NO
Appendix B

Statement of Seriousness of the Research

In this study, you will be asked to play the role of a juror in a hearing to determine whether the claimant qualifies for a diagnosis of Intellectual Disability. It is important that you take this role seriously as the results of this study could be used to inform the legal system regarding juror-decision making. The materials used in this project have been adapted from a real capital case. The results of this study will provide us with information about factors that might influence jurors’ decisions in capital cases. It is possible that the results of this study could lead us to improve this type of decision-making in the future.

Therefore, it is important that you take your role as a juror seriously.
Appendix C

**Jury Instructions 1**

Ladies and gentlemen of the jury:

You have been selected and sworn as the jury to hear the case of *Moreland v. State*.

In a separate proceeding the defendant has been found guilty of the capital offense of murder during the commission of robbery in the first degree. In this proceeding, you will not concern yourself with questions of guilt, but with Mr. Moreland’s qualification for a diagnosis of Intellectual Disability.

In this hearing, Mr. Moreland is claiming that he has intellectual disability. The meaning of this diagnosis will be explained to you later.

It is your solemn responsibility to determine if the claimant has proved his claim. Your verdict must be based solely on the evidence, or lack of evidence, and the law. Before proceeding further, it will be helpful for you to understand how a hearing is conducted.

At the beginning of the hearing, the attorneys will have an opportunity, if they wish, to make an opening statement. The opening statement gives the attorneys a chance to tell you what evidence they believe will be presented during the hearing. What the lawyers say is not evidence, and you are not to consider it as such.

Following the opening statements, witnesses will be called to testify under oath. They will be examined and cross-examined by the attorneys. Documents and other exhibits also may be produced as evidence.

After the evidence has been presented, the attorneys will have the opportunity to make their final argument. Following the arguments by the attorneys, the court will instruct you on the law applicable to the case.

You should not form any definite or fixed opinion on the merits of the case until you have heard all the evidence, the argument of the lawyers, and the instructions on the law by the judge. Until that time, you should not discuss the case among yourselves.

If you would like to take notes during the hearing, you may do so. On the other hand, of course, you are not required to take notes if you do not want to. That will be left up to you individually.

The attorneys are trained in the rules of evidence and trial procedure, and it is their duty to make all objections they feel are proper. When an objection is made you should not speculate on the reason why it is made; likewise, when an objection is sustained, or upheld, you must not speculate on what might have occurred had the objection not been sustained, nor what a witness might have said had [he] [she] been permitted to answer.
Appendix D

Crime Vignettes

**Low Heinousness Condition:**
Mr. Andrew Moreland has been found guilty for the murder of Mr. Matthew Becker during the course of a robbery. On the night of March 1st, the claimant, Mr. Moreland, broke into a hotel room where he encountered Mr. Becker, a 40-year-old man. Mr. Becker had been asleep, but he awoke when he heard someone enter the room and a struggle ensued. During the struggle, Mr. Moreland held a pillow over Mr. Becker’s face until he was no longer breathing. The medical examiner determined Mr. Becker died as the result of asphyxiation, or in other words, a loss of oxygen to his brain.

**High Heinousness Condition:**
Mr. Andrew Moreland has been found guilty for the murder of Mr. Matthew Becker during the course of a robbery. On the night of March 1st, the claimant, Mr. Moreland broke into a hotel room where he encountered Mr. Becker, a 75-year-old man. Mr. Becker had been asleep, but he awoke when he heard someone enter the room and a struggle ensued. During the struggle, Mr. Moreland beat Mr. Becker with his closed fists until he died. The medical examiner determined Mr. Becker died as the result of blunt force trauma to the head.
Appendix E

Intellectual Disability Information Sheet

Please read and study the following definitions of intellectual disability and adaptive behavior.

*The American Association for Intellectual and Developmental Disabilities [AAIDD]’s current definition of Intellectual Disability and Adaptive Behavior:*

**Intellectual disability** is characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. This disability originates before age 18.

The following five assumptions are essential to the application of this definition:

1. Limitations in present functioning must be considered within the context of community environments typical of the individual’s age peers and culture.
2. Valid assessment considers cultural and linguistic diversity as well as differences in communication, sensory, motor, and behavioral factors.
3. Within an individual, limitations often coexist with strengths.
4. An important purpose of describing limitations is to develop a profile of needed supports.
5. With appropriate personalized supports over a sustained period, the life functioning of the person with intellectual disability generally will improve.

**Adaptive behavior** is the collection of conceptual, social, and practical skills that have been learned and are performed by people in their everyday lives.

- A. **Conceptual skills** – language and literacy; money, time, and number concepts; and self-direction

- B. **Social skills** – interpersonal skills, social responsibility, self-esteem, gullibility, naïveté (i.e., wariness), social problem solving, and the ability to follow rules/obey laws and to avoid being victimized

- C. **Practical skills** – activities of daily living (personal care), occupational skills, healthcare, travel/transportation, schedules/routines, safety, use of money, use of telephone
The American Psychiatric Association [APA]’s current definition of Intellectual Disability and Adaptive Behavior:

**Intellectual Disability**: This is a disorder characterized by an onset during the developmental period that includes both intellectual and adaptive functioning deficits in conceptual, social, and practical domains.

**Diagnostic Criteria for Intellectual Disability**

A. Deficits in intellectual functions, such as reasoning, problem solving, planning, abstract thinking, judgment, academic learning, and learning from experience, confirmed by both clinical assessment and individualized, standardized intelligence testing.
   - IQ scores falling two standard deviations below the mean.

B. Deficits in adaptive functioning that result in failure to meet developmental and sociocultural standards for personal independence and social responsibility. Without ongoing support, the adaptive deficits limit functioning in one or more activities of daily life, such as communication, social participation, and independent living, across multiple environments, such as home, school, work, and community.

C. Onset of intellectual and adaptive deficits during the developmental period.

**Adaptive functioning** refers to how well a person meets community standards of personal independence and social responsibility. Adaptive functioning involves adaptive reasoning in three domains:

A. **Conceptual (academic) domain**: involves competence in memory, language, reading, writing, math reasoning, acquisition of practical knowledge, problem solving, and judgment in novel situations, among others.

B. **Social domain**: involves awareness of others’ thoughts, feelings, and experiences; empathy; interpersonal communication skills; friendship abilities; and social judgment, among others.

C. **Practical domain**: involves learning and self-management across life settings, including personal care, job responsibilities, money management, recreation, self-management of behavior, and school and work task organization, among others.

According to the APA, individuals diagnosed with ID are subdivided into different levels of severity ranging from mild to profound based on the level of impairment.
Appendix F

Atkins Hearing Transcript

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF NORTH CAROLINA
MIDDLE DIVISION

ANDREW MORELAND, Petitioner,

VS

MARK THOMAS, Commissioner
North Carolina Department Corrections,

Respondent.

Case No. CV05-Pr-5782-M
Raleigh, North Carolina
December 5, 2017
10:00 a.m.

******************************************************************************

TRANSCRIPT OF HEARING
HELD BEFORE THE HONORABLE CHRISTOPHER MARSHALL
UNITED STATES MAGISTRATE JUDGE

APPEARANCES:

FOR THE PETITIONER:    ATTORNEY SMITH
                         SMITH & SONS Law Firm
                         805 48th Street
                         Raleigh, NC 27602

FOR THE RESPONDENT:    ATTORNEY EVANS
                         Office of the Attorney General
                         North Carolina State House
                         11 South Union Street
                         Raleigh, NC 27602

Christina Johnson, RPR, RMR Federal Official Reporter
JUDGE: Good morning, folks. For the record, I'm Christopher Marshall. I'm a U. S. Magistrate Judge here in the Northern District of North Carolina. And the matter here today is Andrew Moreland versus Mark Thomas, and the issue regards whether or not the Petitioner qualifies for a diagnosis of intellectual disability or “ID.” First off, I want to have each of the attorneys identify themselves for the record. We'll start over here.

ATTY SMITH: I'm Attorney Smith. I'm with the Smith & Sons law firm. I will be representing Mr. Andrew Moreland and arguing the side that he does in fact have intellectual disability.

ATTY EVANS: My name is Attorney Evans. I work in the North Carolina Attorney General's Office.

JUDGE: The issue of intellectual disability has been raised by the petitioner in this matter. And so, I would presume that the petitioner will bear the burden of proof since they've raised the issue alleging that he is intellectually disabled. As a result, I am going to require that the petitioner goes first in terms of presenting a case.

ATTY SMITH: Yes, sir. Petitioner calls Dr. Carson, a clinical psychologist.

PETITIONER'S WITNESS, DR. CARSON, SWORN

JUDGE: State your name for the record.

THE WITNESS: Dr. Carson.

JUDGE: Attorney Smith, you may proceed with the direct examination of your witness.

DIRECT EXAMINATION BY ATTY SMITH

Q Dr. Carson, let’s talk about all of the IQ tests that Mr. Moreland’s been given through the years. There were multiple tests, correct?

A Yes.

Q Can you please briefly mention all of the tests he has received and also the IQ scores of the average population?

A Generally speaking, the average IQ score of the general population is 100. Specifically speaking about Mr. Moreland, between the ages of 9 and 14, he was administered 3 abbreviated IQ tests, which gave IQ scores of 59, 66, and 64. At that time, these scores all fell in the range known as “mental defective,” which would now be called intellectual disability. Then, between the ages of 19 and 41, Mr. Moreland was administered 6 more IQ tests, and those IQ scores were 66, 69, 70, 72, 71, and 65. At the time of administration, the 66, 69, and 65 all fell in the Mild
Mental Retardation range, and the 70, 71, and 72, all fell in the Borderline Mental Retardation range. We no longer use the label of mental retardation, and instead use the term intellectual disability.

Q  You administered an IQ test? How did he do?

A  He had a full scale IQ of 70. This would certainly meet the IQ criteria for intellectual disability. His verbal (or vocabulary) score was 71, his processing speed score (or how quickly he can process information) was 68, his perceptual reasoning IQ (or processing of spatial information) was 70, and his working memory score (or his ability to temporarily hold information in his mind) was 74. He understood math best and in terms of his weaknesses, he had problems with solving problems, and the ability to manipulate information quickly.

Q  Dr. Carson, in preparing for your testimony here today, would you please tell the Court what activities you engaged in?

A  I reviewed records. I contacted family members, correctional officers, and I attempted to contact Mr. Moreland’s ex-wives. I was not able to successfully contact his ex-wives. I also met with Mr. Moreland for interviewing and assessment.

Q  What tests did you administer to Mr. Moreland?

A  I administered the WAIS-IV, which is a well-established and commonly used IQ test in the field of psychology. I also gave the Woodcock-Johnson, which is a measure of broad cognitive abilities.

Q  And you administered a Mini-Mental Status Exam?

A  Yes. I was using it as a general orientation instrument. I would ask him if he knew the day of the week, what time it was, where he was. He couldn't do some of the attention questions because it required spelling. He didn't know the seasons of the year. In general, he showed good concentration and attention.

Q  Did you administer any other formal tests?

A  I administered the Scales of Independent Behavior Revised to Mr. Moreland’s brothers. It’s a measure of adaptive behavior. The reason that I did not give it to Mr. Moreland was that the point of measuring adaptive functioning is to get somebody else’s perspective of the person and their ability to function independently and adapt to changes in the environment. Typically, you want to get a broad-based home, school, community, and employment settings evaluation. They are all covered in that instrument. You ask questions about how well somebody did something. And the reason you give it to assess intellectual disability is that, for one, it gives good information. But for another, the American Association for Intellectual and Developmental Disabilities has stipulated that you have to in order to give a diagnosis of intellectual disability. However, the way I administered it is quite unorthodox. The problem is that Mr. Moreland is being evaluated for intellectual disability prior to 18 and he's 55 now. And the only way to do that is to do a
retrospective evaluation. I had to ask his brothers to remember him from almost 40 years ago.

Q If you would, kind of quickly go over Mr. Moreland’s childhood and tell us what possible meaning this could have in your opinion that he has intellectual disability?

A First I considered risk factors. Risk factors mean they put somebody at risk for something. His mother had a longstanding alcohol problem therefore putting him at risk for not having the proper home support. He was also reportedly born breech, which means he was born bottom first instead of head first. When babies are born this way, it can actually cause anoxia and impede getting oxygen to the brain during delivery.

Another risk factor is limited resources, meaning that the family itself may have not had enough food, clothing, or supervision. The Department of Pensions and Securities (DPS) record is full of information about corporal punishment and those kinds of things in the home. There could have been injuries. Spousal abuse is another risk factor. He witnessed spousal abuse. Also, he wasn’t learning appropriate coping, coping behaviors, frustration tolerance, any of those things that other people would, in different situations, like knowing how to handle their anger appropriately.

Also, Mr. Moreland was left unsupervised. The lack of supervision in his home apparently resulted in him doing some very dangerous things. Mr. Moreland and his brother stated that they did play on the railroad tracks, and he was actually arrested for putting things on the railroad tracks. And from his brother’s report, Mr. Moreland used to crawl underneath the trains when they were slow moving and kind of scoot to the other side doing fairly dangerous behaviors. So, he was at risk for hurting himself severely.

Q Does that have anything to say about his judgment?

A Sure. It shows poor judgment on his part. In his case, it suggests that he's had poor judgment and impulse problems.

Q And you read the DPS records?

A Yes, and they indicated that the defendant moved to an aunt and uncle’s home because of the alcoholism, neglect, and spousal abuse in the home. It was a police officer who identified the children being at risk and then came in and removed them.

Q Let me ask you: is it possible that head injuries would have anything to do with a person being intellectually disabled? I understand that Mr. Moreland fell off the house at age 5 and was knocked unconscious?

A Yes. Possible causes include biological, behavioral, social, and…and the interaction among those things.

Q Dr. Carson, Mr. Moreland has had a number of jobs, including pumping gas, loading boxes onto trucks, stacking lumber and tires, and picking up cans and other junk. Are those
the types of jobs that somebody with mild intellectual disability could engage in?

A Absolutely. Mr. Moreland did not hold these jobs for very long. These positions did not require a great deal of training or skill, the kinds of positions someone with mild intellectual disability could do.

Q Dr. Carson, does Mr. Moreland have the ability to make purchases?

A His brothers told me that it was no problem for him to purchase small things at retail stores. His concept of money is pretty limited. He knows what dollars are. He can go to the store and say how much is this and they'll say three or four dollars, and he'll hand them three or four dollars. He's got that basic level of knowledge. He's less capable with change, but he can handle the very basics. He can go buy a hamburger or whatever it might be. Someone with mild intellectual disability can do these things. The common view of people with intellectual disability is that they can’t do anything and that they need constant supports and protections. That’s not the case. Mr. Moreland, as well as other people with mild intellectual disability, can do these things. They can have families, they can parent, hold full-time jobs; they just need a little help.

Q That brings up the issue of the trips that he made to Nashville, Chicago, Kansas, and Tennessee. Did you receive any information about how that occurred?

A From what I understand, um, he drives, picks up hitchhikers, and asks them things he wants to know like where to get a burger or a hotel and gets the information from them. He's able to negotiate well. In speaking with him, he understands landmarks, which makes sense because he's illiterate. People who can't read begin to compensate and learn different skills. And if you're talking about interstate driving and picking up hitchhikers, it makes good sense for him to be able to function in that capacity.

Q How about financially? How is he able to move across the country like that financially?

A Well, when I spoke with Mr. Moreland he said he had some money that was given to him. I'm not really clear where that came from. But through our discussions, he said that he was getting money from various individuals. I don’t know about his engaging in stealing. Throughout his life, he will readily admit that that’s how he got his money. So, I am not entirely sure except for being provided with assistance by others.

Q If you would, kind of quickly go over Mr. Moreland’s interpersonal relationships and tell us what possible meaning this could have that he has intellectual disability?

A According to multiple sources, Mr. Moreland has been married three times with all marriages ending in divorce. Available information suggests that his wives did the cooking (he could make simple things like scrambled eggs) and that his wives basically took care of his financial needs (such as paying bills and going to the bank). Mr. Moreland’ jobs were all obtained for him (he never got a job on his own). All of this information suggests that Mr. Moreland never lived independently.
Q Did you determine with any accuracy how far he went in school?

A Between the Sixth and Seventh Grade, at the age of 15 or 16; that was when he stopped. He did two years of First Grade, two years of Second Grade, and in the Fifth Grade, he got put into some sort of special education class. But, essentially, all of the records suggest that, with the exception of the C-minus in math, he earned F’s in all academic subjects. There is a statement from the principal of his elementary school, which stated that the defendant was definitely “mentally retarded,” and requested that he be moved to a special school for students with “mental retardation,” which we now refer to as intellectual disability.

Q What did his teachers’ comments say?

A One of the teachers said that he did not have the ability to learn on the level of an average child. The next teacher, (I think…a Special Ed teacher), said that his limitations were environmentally based, not due to intellectual limitations. Her basis for this was some successes in math and the ability to verbally repeat phrases said to him. I have a concern about this is that these abilities provide no indication of being intellectually disabled or not.

Q You also spoke to Sergeant Martin in the prison. What did he have to say?

A He said that Mr. Moreland is a simple-minded fellow that has some street smarts. Because of his lack of mental skills, he would be “easy prey”. And those street smarts refer to the fact that Mr. Moreland has been in the criminal system for a really long time.

Q And then we have the comments by Officers Peters and Russell?

A Yes. They didn't know him as well. Both had referred to him as being slow and simple, functions fine, no problems. That was across the board. Mr. Moreland is noted to function very well within the system. Officer Peters said one thing that he noticed about Mr. Moreland is that he saves his food and brings it out to feed the animals outside.

Q How would you evaluate his adaptive behaviors in a prison setting?

A Someone like Mr. Moreland, with mild intellectual disability, should function extremely well in this kind of environment. He has no need to do anything. He doesn't have to go and buy anything, he doesn't have to make his bed. He doesn't have to do any of the typical things that we would have to do. So, for him, he's functioning very well there, with small deficits in adaptive functioning, such as not being able to use the phone and perhaps getting taken advantage of.

Q Did you talk to Mr. Moreland about his reliance on others?

A Yes, I did. Mr. Moreland talks freely about needing other people for assistance, for writing letters, reading letters, requesting medical assistance. Also, Sergeant Martin indicated that Mr. Moreland once self-administered an enema. He stated that when the nurses found Mr. Moreland,
there was stool all over the room and the stench was unbearable. This is indicative of someone who was trying to help himself but used poor decision making in his attempts.

Q  What is your impression of his functioning during his criminal trial?

A  By reading the transcripts, I don't think he functioned well at all during his trial. In terms of poor judgment in answering questions, there was one point when his attorney instructed Mr. Moreland not to answer the question. But then he went ahead and answered it anyway. So, he's showing a lot of poor judgments and confusion.

Q  Did his attorney recommend that he not testify?

A  Yes, twice.

Q  Did the judge intercede and tell him that he did not have to testify?

A  Yes.

Q  And how about the district attorney?

A  Yes, they all told him not to and discussed it with him, and still he wanted to go on.

Q  Can you please tell us about your direct observations from your time with Mr. Moreland?

A  He has trouble staying on topic. It’s very difficult to get him to stay on track. It’s not all the time, sometimes he can answer questions just fine and he will stop. Sometimes during our conversations, he would get confused. At one point, he actually said, “I'm really sorry, I'm confused now and sometimes I lose track of where I am or what I'm talking about.”

Q  Your second impression is he's able to talk about his life’s history?

A  Yes. What Mr. Moreland told me is very consistent with his brothers’ statements to me. And I never shared any information between the parties. I also found him to be polite and courteous. But, he couldn’t see other people’s views.

Q  All right. You administered the Woodcock-Johnson as a test of academic subject matter. How did he do on that?

A  He did poorly on everything. Because he can’t read, I couldn't give all of the tests. His oral language and math scores fell around those of 1st and 2nd-graders. And his academic skills and academic knowledge scores fall around kindergarten levels. He was doing quite poorly actually.

Q  All right. A couple of things. Does this make sense given his IQ?

A  Yes, they make sense together.
Q Then we get into the adaptive behavior scales. What did you find? Tell me what these scores represent.

A What they represent is Mr. Moreland's level of adaptive functioning, or his ability to live independently and adapt to changes in his environment. In this case, according to Mr. Moreland’s brother’s answers to this test, what you've got there is a broad independent score of 58, which falls into the Limited range. All of his cluster scores, including his motor skills score, social/communication score, personal living score, and community living score, fell within the Limited or Limited to Very Limited range. In terms of specific subtest scores, he's doing just fine in terms of personal living and this is eating and meal preparation, toileting, dressing, self-care. This test also indicates he is able to sweep his floor, clean his house, take out the trash, those kinds of things.

Q According to the DSM-5, and based upon the results of your formal testing that you conducted with Andrew, and your interviews and your view of the records, do you have an opinion as to whether or not Mr. Andrew Moreland has a diagnosis of intellectual disability?

A Yes, I do. I believe he falls in the mild intellectually disabled range and shows deficits in two or more areas of adaptive behavior. First, functional academic skills is obviously one area of adaptive behavior. Work is another. He was never able to maintain a job for an extended period of time. He held only menial labor jobs, which is consistent with someone with mild intellectual disability. Some health and safety issues come up with his risk-taking behavior as a third. I mean, part of it even comes up in his criminal history with being shot a number of times. He puts himself in risky situations such as crawling under a train. Self-direction is a fourth. He has never shown any kind of self-direction, never planned to get a job, sort of fell into jobs. Social and interpersonal skills is a fifth and are also important for Mr. Moreland in terms of the findings. With communication and self-care, he's fine.

Q Do you believe that the onset of his problems was before the age of 18?

A Yes. You know, having the principal and the teacher going to great lengths at trying to get him into a school for individuals with “mental retardation.” The fact that he was held back for two years, First Grade and Second Grade. He was functioning very poorly and never learned to read or write. So, from what I can gather, from all of the information, you know, taken together, I'm confident in my diagnosis of mild intellectual disability.

Q Based on the AAIDD definition of intellectual disability, do you have an opinion as to whether or not a diagnosis of intellectual disability is appropriate for Andrew Moreland?

A Yes, I do.

Q Thank you, Dr. Carson, that’s all.

JUDGE: Attorney Evans, would you like to cross-examine the witness?
ATTY EVANS: Yes, your Honor.

JUDGE: Proceed.

CROSS-EXAMINATION BY ATTY EVANS

Q Dr. Carson, my name is Attorney Evans and I represent the State of North Carolina. I have some questions for you. Is there any way to assess whether someone is faking intellectual disability?

A There’s no instrument for it. Somebody would have to fake intellectual disability from the time that they were a child. I’m not finding any kind of information that supports the idea that he faked intellectual disability since he was little.

Q Thank you, Dr. Carson, that’s all.

JUDGE: I have a question. And you believe that the IQ scores are all indicative of a diagnosis of intellectual disability?

THE WITNESS: Yes.

JUDGE: And Mr. Moreland was able to get out and work as a runner in the prison, right? And there are other tasks that he was allowed to do during the course of the time he's been in prison. Did you inquire as to what that involved?

THE WITNESS: Yes, I actually spoke with Sergeant Martin about that and he did tell me that what a runner does is walk up and down and...um...see to people’s needs. But in the same conversation, he told me that Mr. Moreland did not do that very well, and that he was not, in his opinion, capable of doing much.

JUDGE: O.K. That’s all. You can leave the stand now. We can call the State’s witness now.

RESPONDENT'S WITNESS, DR. KASDEN, SWORN

JUDGE: State your name for the record.

THE WITNESS: Dr. Kasden. I am a clinical psychologist.

DIRECT EXAMINATION BY ATTY EVANS

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Q Let's talk first about his intellectual functioning. Did you perform an IQ test on Mr. Moreland?

A Yes. He had a full scale IQ of 70. This would certainly meet the IQ criteria for intellectual disability. His verbal (or vocabulary) score was 70, his processing speed score (or how quickly he can process information) was 69, his perceptual reasoning IQ (or processing of spatial information) was 70, and his working memory score was 74. I also administered a Woodcock-Johnson and he scored in the low range. I completed the SIB-R with an ex-wife and he scored in the Limited, the Limited range.

After I met with Mr. Moreland, I came back to my office and reviewed the records. Mr. Moreland, at that point, had been evaluated several times with intellectual assessments and I agree with the scores reported by Dr. Carson. However, I determined that those scores were not appropriate or consistent with a diagnosis of intellectual disability. I further discerned that there were other explanations for the low scores that we were seeing. To address the reason for the scores being low, would be the fact that he came from a very chaotic home life which didn’t encourage good educational academics or school attendance. There was no encouragement to do homework. There were records that the other brothers also had failed grades and also were skipping school. It appears that he did have behavior problems in school. He told me, specifically, that one teacher would let him go wash her car because of problem behavior. She didn't want him in the classroom. Well, if he's not in the classroom, he's not being given the opportunity to learn. When he's in the classroom, he’s acting up. The record shows that he had some behavior problems. These factors certainly will provide information, alternative reasons, for low IQ scores.

Q What did you see significant about the first IQ score he received?

A The initial test was given in 1958. My concern on that is looking at one section where he got a 43. That’s the lowest score you can obtain on that section. The first thing you have to consider is poor motivation. The record includes a notation about Andrew not putting forth a best effort. That, again, would be consistent with a 43, which notably he gets on the second administration, too.

Q And the second test, you had some concerns about it, also?

A Yeah. It's inappropriate to administer the same test with only 20 days between it and the previous one. And the reason that I included it in was again to note that he obtained the exact same score which is a 43, which lends some support to the notation that he did not appear to be putting forth a good effort, at least on that part. So, what that says, in my mind, is that you have to be extremely cautious in interpreting the full scale IQ score.

Q And what is your assessment of his adult IQ scores?

A The assessment is, overall, that the full scale IQ scores are ranging within the mild intellectually disabled range to borderline range. However, in my opinion, what is not consistent with intellectual disability is the fact that the scores flip-flop, so these scores increase at certain times and then decrease at other times.
Q So one of the explanations for Mr. Moreland's low IQ scores is his ineffective academic experience, is that correct?

A Yes. It has been shown that the IQ scores can depend heavily on school experience. He wasn’t in school much, so he wouldn’t score high on IQ tests.

Q What about his mental capabilities? How did that factor in on your assessment of his intellectual functioning?

A Intellectual disability requires global…uhhh…global deficits. That's deficits in all areas of intellectual functioning. One area, in particular, you were going to look at is memory. People with intellectual disability often have difficulty with memory. It may not be in all areas of memory, but you're going to see poor memory overall. What Mr. Moreland does, in my opinion, during the trial, during interaction with me, during interaction with at least five staff members at Rivers Secure Medical Facility, shows that he has a much stronger memory capacity, overall, than you would expect with intellectual disability. People with ID do not remember names and addresses of places where they work. They do not recall dates from 20 or 30 years ago with such accuracy as Mr. Moreland did, not only once, but on a consistent basis. And that's what I want to point out is that this has been consistent. This wasn't just with me that he did this. He did this across different situations and across different time periods.

Q In your opinion, is it possible that he suffers from a learning disability that affected his IQ scores?

A Yes. And again, with his illiteracy, there are strong indications here for a reading disorder, where Mr. Moreland has a specific deficit with the area of reading. And with such deficit, this is the type of individual who is going to show difficulty in a lot of different areas because so much of what we do involves reading.

Q Was there any support for the fact that he had a learning disability in any of the records that you reviewed?

A Well, there was at least one mental health professional indicated that his results could be reflective of a learning disability.

Q And what is your assessment of his intellectual functioning?

A In my opinion, given all of the information I've looked at, including the IQ results and his functioning overall, I do not believe he qualifies for a diagnosis of ID. I believe a diagnosis of borderline intellectual functioning is more appropriate here.

Q Dr. Kasden, what kind of evaluation were you asked to perform on Mr. Moreland?

A I was asked to determine whether Mr. Moreland meets the diagnosis of intellectual disability.
Q  In conducting your evaluation of him, did you go to the prison and interview him?
A  I did.

Q  Did you explain to Mr. Moreland the purpose of your interview?
A  I did, and he understood what I said to him.

Q  Can you describe Mr. Moreland's behavior during the interview?
A  He was pleasant, very talkative, very cooperative, attentive, focused. In the course of the interview, he would occasionally make comments that were funny. He answered all of my questions, and even at times, provided additional information all of which was relevant and appropriate. He engaged in social behaviors and they were appropriate. He shook my hand appropriately. He maintained appropriate distance in our seating. There was one incident when we were going up to use the coke machine, and he stepped aside and let me use it first.

Q  You had no problems communicating with him, did you?
A  I did not. He always stayed on topic.

Q  How was his vocabulary?
A  His vocabulary was good, and it was appropriate and relevant to the discussion. He answered the questions, for the most part, thoroughly enough.

Q  Did you look at his vocabulary and consider his vocabulary in the depositions?
A  I did look at that later, yes.

Q  And what did you think about his vocabulary skills as far as his deposition testimony?
A  There are words that Mr. Moreland uses in his answers in that deposition that are not consistent with somebody who is intellectually disabled. They are much more advanced than somebody who is ID, and certainly much more advanced than some of the test results that Dr. Carson presented.

Q  Did he ever appear confused to you?
A  No.

Q  What about his memory?
A  His recall of information was very good, especially for…ummm…remote events. What struck me as especially prominent here was that, not only was he able to recall events, but he was able to recall specifics, such as names, dates, and these were consistent with the collateral data.
Q Did you review all of the records that were submitted to you?

A Yes.

Q What did you learn from your interview of Sheriff Hall about Mr. Moreland?

A During his discussion to me, Sheriff Hall, as did all of the officers, indicated that they never encountered difficulty communicating with Mr. Moreland during the course of their interviews.

Q What about Captain Jeff Luce, what did he say?

A He noted to me that he had had at least five opportunities to speak with Mr. Moreland. He felt that Mr. Moreland was very deliberate and purposeful in the conversation. And, in particular, he indicated that Mr. Moreland always avoided discussing any of the specific criminal matters that he was being brought in on, meaning he was avoiding talking about his crimes. That shows deliberation on his part, directiveness, purposefulness, that I do not believe is consistent with mild intellectual disability.

Q Who else did you talk to?

A Joseph Harris, who was Mr. Moreland’s stepson. Joseph indicated that Mr. Moreland was able to drive a car. That sometimes he did, recklessly, knowing, laughing about it while he did it. What I gathered is that when Mr. Moreland wanted to do something, he could do it. For example, he always knew what he wanted to eat at a restaurant and could order it. He could take the initiative and do things.

Q Would you define intellectual disability for the Court?

A Intellectual disability is a disability characterized by significant limitations in both intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. And those deficits, these limitations, have to start before age 18.

Q Would you define adaptive functioning, please?

A In a general sense, adaptive functioning is the ability to like adapt to one particular environment. I believe that Mr. Moreland has adaptive skills. He's able to survive and I believe he has adaptive skills that extend beyond that of intellectually disabled people.

Q And how did you go about assessing Mr. Moreland’s adaptive functioning?

A I looked at the collateral data that provided information about Mr. Moreland functioning at various times.

Q Did you review the results of the Woodcock-Johnson test of achievement performed by Dr. Carson?
A Yes. I would not have expected really good scores and some of the scores I feel are much higher than they should have been.

Q So you were surprised by the test scores from the Woodcock-Johnson?

A On some of them, yes.

Q Why?

A Well, for somebody who is illiterate and has not had good schooling, somewhere along the line, Mr. Moreland has gained some skills, gained some knowledge, and has developed particular areas in which he is able to succeed. What strikes me as important about that is that he just didn't learn some, he learned enough. And to me, that shows an ability to learn. It shows an ability to gain, take information, use it, process it, recall it, remember it, what have you, apply it; and he's able to obtain a good score. In my opinion, that is not consistent with intellectual disability.

Q Okay. From your review of the records in this case, would you say that Mr. Moreland suffers from substantial deficits in adaptive functioning as a child?

A No, I wouldn't.

Q What indicated to you that he did not suffer substantial deficits in his adaptive behavior as a child?

A I recall the DPS records. In those particular records, there was no discussion, description of impaired to care for self. At times he did fine, at times he had difficulty. Within kind of the specific discussion of his home life, his home life was clearly chaotic, disorganized. And yet, he is able to cope, to some degree. No one has recognized him as needing particular assistance in any particular area. So again, there was nothing to support that he was having problems with his adaptive functioning during childhood.

Q Has Mr. Moreland demonstrated some limitations in his adaptive behavior as an adult?

A Yes, he has.

Q What are those limitations?

A A lot of the limitations will focus on particular areas that would have a connection to academics, such as perhaps learning to use money appropriately, being able to compute time, not just read time, but able to compute time and so forth. It would also have to do with issues of reading.

Q Was his lack of employment history indicative to you of the limitations of his adaptive functioning?
A No, I don’t believe that poor adaptive functioning explains that…. his employment history. Because there were obviously times when Mr. Moreland was able to work. He also, on at least one occasion, left a job to get a better job.

Q What about the fact that he was supported by other people?

A If somebody was supporting him, he may have chosen not to work because of that. That he didn't need to get the money because he knew the money would come from other sources.

Q Mr. Moreland goes to see a lot of movies. What is significant to you about his habit of going to see movies?

A He admitted that his regular visits to the movie theatre interfered with his employment, that he would often be late for work because he would be seeing a movie. From both his report and the records, that he was selecting movies to see. That he was actually selecting movies that he wanted to see. There is, to some degree, planning here and purposefulness here. He's following a plan to succeed and fulfill a need and desire that he has. He's not doing this once. He's doing it consistently over time. And I think that that again shows an ability to follow through on plans, follow through on desires, follow through on needs that he had, and does it in a way that's successful. It may not be appropriate, but it's successful for him.

Q In your opinion, is it true that he chose not to work?

A Yeah, exactly.

Q Is that indicative of somebody that's intellectually disabled?

A Well, somebody who is intellectually disabled could choose not to work, too.

Q Did you receive any information about whether Mr. Moreland could take care of his personal needs as an adult?

A Yes. The records indicate that he could care for himself. There are some medical records that reflect that he has had an interest in his personal health. And the interest and the information in those records indicate what I would guess to be a more sophisticated level of functioning. What I mean by this is he, in one instance, asked about a chest X-ray that had been performed. In at least two or three instances, he notes or requests specific medication for particular ailments. Pain medication for pain. All of these things were appropriate and he's naming specific medication, requesting them appropriately. What that suggests to me is a pretty good insight about his health and his functioning. And he's able to communicate successfully when he has a problem with these particular areas. And even going above and beyond that, and offer some suggestion of what might work to help him feel better.

Q What about the visitor sheets? His ability to use a visitor sheet, to fill them out, or to give somebody the information to have visitors, what is your assessment of his ability to do that?
A Well, the first thing I noted with the visitation log is that those are quite…uhh…extensive. You have to put the names, the addresses, the relationships, and these have to be filled out on the form appropriately. Mr. Moreland did that on numerous occasions. He indeed may have copied the information, but that is a lot of information to copy. He persisted in this task, completed it successfully. And, in my opinion, this shows a much higher level of functioning again than intellectually disabled people show.

Q What about the canteen/food stand use? Did you see anything about him, his ability to get things out of the food stand?

A Andrew was using a system, some type of symbol system, so that even though he couldn't actually read the item, he could figure out what he wanted and how to express it to someone. The importance to me, is that Andrew can go above and beyond any limitations that he has. He is able to adapt. Mr. Moreland has been able to adapt in what I would view as stressful, hostile environment, despite his intellectual limitations. And he has not only been able to adapt, but been able to succeed in meeting particular desires and goals he wants.

Q Did you review the transcript from his criminal hearing where he invoked his Fifth Amendment rights in there?

A At least one time he did, yes.

Q You don't see any problems with his motor skills?

A Not that I saw, no.

Q Did you see in the DPS records that he had been active in the Boy Scouts?

A There was some notation that he was in the Boy Scouts. And I believe it was just a brief statement on that.

Q After considering all of the circumstances concerning his adaptive functioning, what is your assessment of his adaptive functioning?

A My assessment of the adaptive functioning is that he functioned adaptively at a level higher than intellectual disability. He is able to…uh…engage in sophisticated behaviors that require steps. And yet, he is able to not only engage in behaviors during non-stressful times, he's also able to successfully perform behaviors under stressful instances.

Q And in your opinion, under the DSM-5 definition, or under the AAIDD definition, is Mr. Moreland intellectually disabled?

A I don't believe he meets the criteria for intellectual disability, no.

Q Can you explain the reasons for your conclusion?
In my opinion, after reviewing behavioral examples of Mr. Moreland, it was clear that his adaptive functioning was higher than would be expected with somebody with intellectual disability. Additionally, throughout the records, there are numerous factors that provide alternative explanation for the results that were obtained. The results that have been obtained are not consistent with what you would expect from somebody with intellectual disability. A diagnosis of Specific Learning Disorder with impairment in Reading, instead, is more appropriate.

JUDGE: All right. There was some testing done by Dr. Carson. Does a low IQ score, standing alone, indicate that someone is intellectually disabled?

THE WITNESS: The score, standing alone, does not. You have to have the co-existing impaired adaptive functioning. I stress that the adaptive functioning level is what excludes him from an intellectual disability diagnosis.

JUDGE: Attorney Smith, would you like to cross-examine the witness?

ATTY SMITH: Yes, I would, your Honor.

JUDGE: Proceed.

CROSS-EXAMINATION BY ATTY SMITH

Q People with mild intellectual disability drive all the time, don't they?
A Some do, yes.

Q Being able to drive doesn’t mean that he’s not intellectually disabled, right?
A Right.

Q And there was a lot of conversation about his trips around the Southeast. If he had the help of somebody who was hitchhiking, in terms of direction, that would not be unreasonable or exclude him from a diagnosis of intellectual disability, either, would it?
A That in and of itself, no.

Q A lot of people with intellectual disability know how to use the phone, don't they?
A Yeah.

Q And, as a matter of fact, we've talked intellectual disability as if there's only one type of intellectual disability. There’re grades of intellectual disability, are there not?
A Correct.

Q We know that the wide range is mild, moderate, severe, and profound; correct?
A Correct.

Q But within the mild range, everyone has their own strengths and weaknesses, as well, correct?

A Correct.

Q So there are gradients and there are a lot of things that a person with intellectual disability, who's functioning in the mild range, can do?

A Sure. There's a lot of things they can do, yes.

Q And one of those things would be that you have an expectation that they could go out and get a job and hold a job; correct?

A They could. Some of them possibly could, yes.

Q And the types of jobs that they would hold are the types of jobs that have been listed in Dr. Carson's report, packing chickens, or moving boxes at the chicken house, or pumping gas, or those types of lower level skills; correct?

A Menial labor jobs, yes. Absolutely.

Q None of those skills or none of the jobs that he has would be considered a skilled type of job; correct?

A Yeah.

Q Now, there was also some conversation related to his filling out a visitor log. And you said there were three things that he had to put down there. He had to put the name down, he had to put the address of the person and he had to put the relationship?

A At least that much information, yes.

Q So, if somebody wrote that out for him, he could copy it down letter by letter, correct?

A Yes.

Q So, if he's sitting in his cell for 23 hours a day, he would have plenty of time to complete visitor logs, would he not?

A Of course.

Q Well, you've been in here and you've heard people talk about them sending him letters, engaging in correspondence back and forth, that they had to have somebody read the letter to him, correct?
A Correct.

Q So is it unreasonable to assume that a person could look at the return address on the envelope and say, I would like this person to come and visit me, I want to put them on my visitor's log, would you tell me what I need to write. Is it unreasonable that someone with intellectual disability could do that, right?

A No, that's not unreasonable.

Q What is the definition of a learning disability?

A It's deficits in a particular academic area of functioning such as reading, arithmetic, writing. A reading disorder is one of the most common.

Q All right. And you said that's a reasonable explanation for his problems?

A It's a possible explanation…like…. reasonable in the sense he's been functionally illiterate all along.

Q So in order to diagnose a learning disability, by definition, and by requirement, you would have to administer an individualized intelligence and achievement tests, would you not?

A Yes.

Q And you're offering that as an alternative to the intellectual disability?

A Correct.

JUDGE: Why didn't you attempt to interview family members, like the brothers or anybody else?

THE WITNESS: I had, of course, some information from the trial transcript of the father, who is now deceased. Then there was also some testimony from the brother. Again, you have the issue of reliability in the sense of can these people remember reliably and so forth. The information about his childhood was in the records. I didn't feel that there was much more that the family could offer.

Q Thank you, Dr. Kasden. I have no more questions.

JUDGE: Attorney Smith, would you like to call any other witnesses?

ATTY SMITH: I'd like to call our witness, Dr. Carson, back to the stand for a follow-up question.

JUDGE: Proceed.
Q    Dr. Carson, just one other area I need to touch on. If a person has intellectual
disability, will his limitations coexist with his strengths?

A  Yes, absolutely. Individuals with intellectual disability at all levels will have strengths and
weaknesses that help them to survive. That's the whole idea behind the support system that they
have in place, is to recognize where people have pretty good skills.

Q    That’s all. Thank you.

JUDGE: This concludes the hearing. Jurors, in just a moment, you will be given instructions on
how you are to proceed.
Appendix G

Jury Instructions 2

The claimant has claimed that he has intellectual disability. Intellectual disability is a developmental disorder that is characterized by three diagnostic criteria. These criteria are detailed in the following Information Sheet. Briefly, to find the claimant to have intellectual disability, he must prove each of the following elements:

1. he has significant intellectual deficits;
2. he has significant deficits in adaptive behavior; and
3. he demonstrated these symptoms before the age of 18 years.

If you find from the evidence that the claimant has proved that each of these elements was present, then you shall find the claimant to have intellectual disability. If you find from the evidence that the claimant has not proved that each of these elements was present, then you shall find the claimant to not have intellectual disability. The claimant has to convince you by preponderance of the evidence that he has intellectual disability. Preponderance of evidence has been described as just enough evidence to make it more likely than not that what the defendant seeks to prove is true.
Appendix H

Legal Determination Questionnaire

You have just heard the evidence presented by both the state and the defense with regard to Mr. Moreland’s qualification for a diagnosis of ID in his Atkins hearing. As instructed by the judge, you are now to determine whether or not Mr. Moreland has Intellectual Disability.

1. **Do you think Mr. Moreland has Intellectual Disability?** *(Circle one)*

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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2. **How convinced are you that Mr. Moreland has Intellectual Disability?** *(Circle one)*

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<td>Not at all convinced</td>
<td>Strongly convinced</td>
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3. **Based on your own understanding of ID, if Mr. Moreland were to qualify for a diagnosis of ID, what severity level do you think would represent his level of functioning?**

   Mild Impairment    Moderate Impairment    Severe Impairment    Profound Impairment

4. **What were the specific parts of the testimony most important to you in deciding whether or not Mr. Moreland has intellectual disability?** *(Please write your answer in the space provided)*

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**Directions:** For the following questions, please circle one response option on the scale of 1 to 7.

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<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Strongly</th>
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<tbody>
<tr>
<td>5a. How convinced are you that Mr. Moreland has significant intellectual deficits?</td>
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<tr>
<td>5b. How much did intellectual deficits affect your opinion?</td>
<td>1 2 3 4 5 6 7</td>
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<td>6a. How convinced are you that Mr. Moreland has significant deficits in adaptive behavior?</td>
<td>1 2 3 4 5 6 7</td>
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<td>6b. How much did the deficits in adaptive behavior affect your opinion?</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>7a. How convinced are you that Mr. Moreland demonstrated deficits before the age of 18 years?</td>
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<td>Question</td>
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<td>7b. How much did the presence of deficits before the age of 18 affect your opinion?</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>8a. How convinced are you that Mr. Moreland has significant deficits in understanding risk in social situations?</td>
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<td>8b. How much did deficits in understanding risk in social situations affect your opinion?</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>9a. How convinced are you that Mr. Moreland is at risk of being manipulated by others (gullibility)?</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>9b. How much did risk of being manipulated affect your opinion?</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>10a. How convinced are you that Mr. Moreland has significant deficits in judgment?</td>
<td>1 2 3 4 5 6 7</td>
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<td>10b. How much did deficits in judgment affect your opinion?</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>11a. How convinced are you that Mr. Moreland has significant deficits in the ability to make legal decisions?</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>11b. How much did deficits in the ability to make legal decisions affect your opinion?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

**Directions:** Based on what you learned about Mr. Moreland during the hearing, please circle the answer choice that best represents your beliefs on his abilities and functioning. Place an X in the 4th column if the subject of the question affected your determination of ID.
4. Is his conduct in response to external stimuli rational and appropriate, regardless of whether it is socially acceptable? | Yes | No |
---|---|---
5. Does Mr. Moreland respond coherently, rationally, and on point to oral or written questions or do his responses wander from subject to subject? | Coherently | Off-topic |
6. Can he hide facts or lie effectively in his own or others’ interests? | Yes | No |
7. Did the commission of the offense require forethought, planning, and complex execution of purpose? | Yes | No |
Appendix I

Case Evaluation Form

You just listened to a hearing from *Moreland v. State*. Prior to this hearing, Mr. Moreland was found guilty of Capital Murder for the murder of Mr. Becker during the course of a robbery.

**Directions:** Please answer the following questions by circling one of the option choices.

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Based on the evidence, how much do you think Mr. Moreland, the defendant, is to blame for the crime?</td>
<td><strong>Not at all</strong></td>
<td><strong>Completely</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>Based on the evidence, how much blame do you place on Mr. Becker?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>Do you think Mr. Moreland would benefit from any form of mental health treatment?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>4.</td>
<td>Mr. Moreland knew the difference between right and wrong.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>Mr. Moreland premeditated and planned the murder of Mr. Becker.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>Mr. Moreland should be held criminally responsible.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7.</td>
<td>Mr. Moreland should be punished to the highest extent for the murder of Mr. Becker. That is, he should be given the most significant punishment available for this crime.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8.</td>
<td>Mr. Moreland poses a threat of future dangerousness.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not at all</td>
</tr>
<tr>
<td>9.</td>
<td>How morally responsible do you believe Mr. Moreland is for this crime?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10.</td>
<td>Considering the evidence, what is the likelihood that Mr. Moreland would commit another violent act in the future if he returned to the community?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11.</td>
<td>How typical is Mr. Moreland compared to the average criminal?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

12. Consider the details of Mr. Becker’s murder. Write in the numerical response you have selected to represent the crime’s level of heinousness. On a scale of **0 (not at all heinous)** to **100 (extremely heinous)**, how heinous was this crime? **Heinousness Rating:** __________
Directions: The following four questions should be completed regardless of whether you determined Mr. Moreland has ID or not.

1. Let’s say the jury decided Mr. Moreland qualified for a diagnosis of ID, which of the following sentences would you vote for in the case of Moreland v. State?

Circle one:

Life Imprisonment without the Possibility of Parole

I’d choose to select a set number of years

If so, how many years would you recommend? ______

Note: The minimum possible sentence is 10 years in prison while the maximum is 99 years in prison. Therefore, your number of years should be no less than 10, but no more than 99.

Above, you had to choose between two options (LWOP or a set number of years).

Regardless of your answer noted above:

If you were given more options, which sentence would you choose for Mr. Moreland (ID) for the murder of Mr. Becker?

Check one:

_____ Life with Parole

_____ Life without Parole

_____ Death Penalty

_____ Set number of years: ________ (write in the number of years)
2. Let’s say the jury decided Mr. Moreland did not qualify for a diagnosis of ID, which of the following sentences would you vote for in the case of Moreland v. State?

Circle one:

- Life Imprisonment without the Possibility of Parole
- Death Penalty

Above, you had to choose between two options (LWOP or the Death Penalty).

Regardless of your answer noted above:

If you were given more options, which sentence would you choose for Mr. Moreland (Not ID) for the murder of Mr. Becker?

Check one:

- Life with Parole
- Life without Parole
- Death Penalty
- Set number of years: ________ (write in the number of years)
Appendix J

Community Living Attitude Scale-Mental Retardation
(CLAS-MR)

**Instructions:** For each of the statements below, please indicate to what extent you agree with each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. People with intellectual disability are happier when they live and work with others like them.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>2. People with intellectual disability trying to help each other is like “the blind leading the blind.”</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>3. People with intellectual disability should not be allowed to marry and have children.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>4. A person would be foolish to marry a person with intellectual disability.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>5. People with intellectual disability should be guaranteed the same rights in society as other persons.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>6. People with intellectual disability do not want to work.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>7. People with intellectual disability need someone to plan their activities for them.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>8. People with intellectual disability should not hold public office.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>9. People with intellectual disability should not be given any responsibility.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>10. People with intellectual disability can organize and speak for themselves.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>11. People with intellectual disability do not care about advancement in their jobs.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>12. People with intellectual disability do not need to make choices about the things they will do each day.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>13. People with intellectual disability should not be allowed to drive.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>People with intellectual disability can be productive members of society.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>15</td>
<td>People with intellectual disability have goals for their lives like other people.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>16</td>
<td>I would trust a person with intellectual disability to be a baby sitter for one of my children.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>17</td>
<td>People with intellectual disability cannot exercise control over their lives like other people.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>18</td>
<td>People with intellectual disability can have close personal relationships just like everyone else.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>19</td>
<td>I would not want to live next door to people with intellectual disability.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>20</td>
<td>People with intellectual disability are usually too limited to be sensitive to the needs and feelings of others.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>21</td>
<td>People with intellectual disability should live in sheltered facilities because of the dangers of life in the community.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>22</td>
<td>People with intellectual disability should be encouraged to lobby legislators on their own.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>23</td>
<td>People with intellectual disability are the best people to give advice and counsel to others who wish to move into community living.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>24</td>
<td>The opinion of a person with intellectual disability should carry more weight than those of family members and professionals in decisions affecting that person.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>25</td>
<td>People with intellectual disability can plan meetings and conferences without assistance from others.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>26</td>
<td>People with intellectual disability can be trusted to handle money responsibly.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>27</td>
<td>Residents have nothing to fear from people with intellectual disability living and working in their neighborhoods.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>28</td>
<td>People with intellectual disability usually should be in group homes or other facilities where they can have the help and support of staff.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>29</td>
<td>Sheltered workshops for people with intellectual disability are essential.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>30. The best care for people with intellectual disability is to be part of normal life in the community.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>31. Most people with intellectual disability prefer to work in a sheltered setting that is more sensitive to their needs.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>32. Without some control and supervision, people with intellectual disability could get in real trouble out in the community.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>33. The rights of people with intellectual disability are more important than professional concerns about their problems.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>34. Agencies that serve people with intellectual disability should have them on their boards.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>35. The best way to handle people with intellectual disability is to keep them in institutions.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>36. Homes and services for people with intellectual disability should be kept out of residential neighborhoods.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>37. Increased spending on programs for people with intellectual disability is a waste of tax dollars.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>38. Home and services for people with intellectual disability downgrade the neighborhoods they are in.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>39. Professionals should not make decisions for people with intellectual disability unless absolutely necessary.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>40. People with intellectual disability are a burden on society.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>41. People with ID are easily recognizable by their physical features.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>42. People with ID are able to work full-time and maintain consistent employment.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>43. People with ID can make decisions independently.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>44. People with ID can tell time.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>45. People with ID can wash their clothes.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>46. People with ID cannot care for their hygienic needs.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>47. People with ID can live alone.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>48. People with ID can handle emergencies.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>49. People with ID can understand news events</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>50. People with ID are dangerous.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>51. People with ID are aggressive.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>52. People with ID depend on others to meet their basic needs.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>53. People with ID can function in accordance with social norms.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>54. People with ID cannot engage in lasting, romantic relationships.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>55. People with ID can parent children without help from other caretakers.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>56. People with ID cannot manage money independently.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
</tbody>
</table>
Appendix K

Empathy Questionnaire

Please read the instructions for each set of questions carefully and circle your answer choice.

Rate how you feel toward the victim in this crime by circling a number between 1 and 7. Ratings range from 1 (not at all “bolded feeling”) to 7 (extremely “bolded feeling”).

<table>
<thead>
<tr>
<th>Feelings toward the victim:</th>
<th>Not at all</th>
<th>Neutral</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How sympathetic do you feel toward the victim?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. How moved do you feel toward the victim?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. How compassionate do you feel toward the victim?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. How tender do you feel toward the victim?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. How warm do you feel toward the victim?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. How softhearted do you feel toward the victim?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Rate how you feel toward the defendant in this crime by circling a number between 1 and 7. Ratings range from 1 (not at all “bolded feeling”) to 7 (extremely “bolded feeling”).

<table>
<thead>
<tr>
<th>Feelings toward the victim:</th>
<th>Not at all</th>
<th>Neutral</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. How <strong>sympathetic</strong> do you feel toward the defendant?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. How <strong>moved</strong> do you feel toward the defendant?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. How <strong>compassionate</strong> do you feel toward the defendant?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. How <strong>tender</strong> do you feel toward the defendant?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11. How <strong>warm</strong> do you feel toward the defendant?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12. How <strong>sothearted</strong> do you feel toward the defendant?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Appendix L

Revised Legal Authoritarianism Questionnaire-23
(RLAQ-23)

Please read each statement carefully and circle the answer that best describes how much you agree or disagree with that statement.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unfair treatment of underprivileged groups and classes is the chief cause of crime.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>2. Too many obviously guilty escape punishment because of legal technicalities.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>3. Evidence illegally obtained should clearly be admissible in court if such evidence is the only way of obtaining a conviction.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>4. Search warrants should clearly specify the person or things to be seized.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>5. No one should be convicted of a crime on the basis of circumstantial evidence, no matter how strong such evidence is.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>6. There is no need in a criminal case for the accused to prove his innocence beyond a reasonable doubt.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>7. Any person who resists arrest commits a crime.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>8. When determining a person’s guilt or innocence, the existence of a prior arrest record should not be considered.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>9. Wiretapping by anyone and for any reason should be completely illegal.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>10. Defendants in a criminal case should be required to take the witness stand.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>11. All too often, minority group members do not get fair trials.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>12. Because of the oppression and persecution minority group members suffer, they deserve leniency and special treatment in courts.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>13. Citizens need to be protected against excess police power as well as against criminals.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>14. It is better for society that several guilty men be freed than on innocent one wrongfully imprisoned.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>15. Accused persons should be required to take lie-detector tests.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>16. When there is a “hung” jury in a criminal case, the defendant should always be freed and the indictment dismissed.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>17. A society with true freedom and equality for all would have very little crime.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>18. It is moral and ethical for a lawyer to represent a defendant in a criminal case even when he believes his client is guilty.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>19. Police should be allowed to arrest and question suspicious looking persons to determine whether they have been up to something illegal.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20. The law coddles criminals to the detriment of society.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21. The freedom of society is endangered as much by overzealous law enforcement as by the acts of individual criminals.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>22. In the long run, liberty is more important than order.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>23. Upstanding citizens have nothing to fear from the police.</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Appendix M

**Punitive Orientation Scale (PUN)**

Please circle the number which best reflects your level of agreement with each statement.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>it’s unreasonable to give people stiff prison sentences simply for possessing small quantities of drugs for personal use.</td>
<td>-4 -3 -2 -1 0 1 2 3 4</td>
</tr>
<tr>
<td>2.</td>
<td>In most cases probation is simply an unjustified way of putting criminals back on the street.</td>
<td>-4 -3 -2 -1 0 1 2 3 4</td>
</tr>
<tr>
<td>3.</td>
<td>The death penalty is never an appropriate punishment even for murder.</td>
<td>-4 -3 -2 -1 0 1 2 3 4</td>
</tr>
<tr>
<td>4.</td>
<td>Three-time losers deserve to be sentenced to life without the possibility of parole.</td>
<td>-4 -3 -2 -1 0 1 2 3 4</td>
</tr>
<tr>
<td>5.</td>
<td>Spanking is often the most effective way to teach children not to hit others.</td>
<td>-4 -3 -2 -1 0 1 2 3 4</td>
</tr>
<tr>
<td>6.</td>
<td>Punishment simply for the purpose of getting revenge is unacceptable.</td>
<td>-4 -3 -2 -1 0 1 2 3 4</td>
</tr>
<tr>
<td>7.</td>
<td>The courts should do everything they can to prevent law enforcement officers from physically harming or intimidating crime suspects.</td>
<td>-4 -3 -2 -1 0 1 2 3 4</td>
</tr>
<tr>
<td>8.</td>
<td>Physically punishing misbehaving children may hurt them in the short run, but it will help them in the long run.</td>
<td>-4 -3 -2 -1 0 1 2 3 4</td>
</tr>
<tr>
<td>9.</td>
<td>Teachers should be forbidden to physically punish children who misbehave.</td>
<td>-4 -3 -2 -1 0 1 2 3 4</td>
</tr>
<tr>
<td>10.</td>
<td>I would never personally throw the switch to execute a condemned prisoner, no matter what his crime might have been.</td>
<td>-4 -3 -2 -1 0 1 2 3 4</td>
</tr>
<tr>
<td>11.</td>
<td>I think private citizens should take matters into their own hands if the courts are unwilling to punish criminals properly.</td>
<td>-4 -3 -2 -1 0 1 2 3 4</td>
</tr>
<tr>
<td>12.</td>
<td>People should never kick or hit their pets.</td>
<td>-4 -3 -2 -1 0 1 2 3 4</td>
</tr>
<tr>
<td>13. If children refuse to eat what their parents serve them, they should be required to stay at the table until they change their minds.</td>
<td>-4  -3  -2  -1  0  1  2  3  4</td>
<td></td>
</tr>
<tr>
<td>14. If your teenagers use drugs, you should turn them in to the police.</td>
<td>-4  -3  -2  -1  0  1  2  3  4</td>
<td></td>
</tr>
<tr>
<td>15. If I were a juror, I wouldn’t hesitate to cast the decisive vote to send a murderer to death row.</td>
<td>-4  -3  -2  -1  0  1  2  3  4</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix N

**Moral Outrage Scale – Modified (MOS)**

**Directions:** Circle the answer that best describes how strongly you agree with each statement.

<table>
<thead>
<tr>
<th></th>
<th><strong>Strongly Disagree</strong></th>
<th><strong>Strongly Agree</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel a compelling need to punish the defendant.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>2. I feel morally outraged by what the defendant did to the victim. I believe the defendant is evil to the core.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>3. I believe the defendant is evil to the core.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>4. I feel a desire to hurt the defendant.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
</tbody>
</table>
Appendix O

Juror Negative Affect Scale (JUNAS)

Circle the response that best describes how you are feeling right now.

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tense</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Angry</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Unhappy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Disgusted</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Shaky</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Annoyed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Sad</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Repulsed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. On edge</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Resentful</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Discouraged</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Disturbed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Panicky</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Bitter</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Miserable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Revolted</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Uneasy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. Furious</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. Gloomy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. Shocked</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. Restless</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. Bad Tempered</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. Helpless</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24. Nervous</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25. Hostile</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26. Anxious</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>27. Irritable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>28. Distressed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>29. Upset</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>30. Afraid</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
## Appendix P
**UA SONA System Recruitment Information**

<table>
<thead>
<tr>
<th><strong>Study Name</strong></th>
<th>The Case of Mr. Moreland: You be the Judge!</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Study Type</strong></td>
<td><strong>Standard (lab) study</strong>&lt;br&gt;This is a standard lab study. To participate, sign up, and go to the specified location at the chosen time.</td>
</tr>
<tr>
<td><strong>Duration</strong></td>
<td>180 minutes</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td>4.5 Credits</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Participants will be asked to take on the role of a juror in the case of Mr. Moreland. After listening to a hearing, participants will be asked to make multiple legal determinations and complete a variety of short psychological questionnaires. This study will take place in Gordon Palmer Hall.</td>
</tr>
<tr>
<td><strong>Eligibility</strong></td>
<td><strong>Requirements</strong>&lt;br&gt;To participate in this study you must be: 1) at least 18 years old; 2) a U.S. Citizen; 3) reasonably proficient in English; and 4) never been convicted of a felony.</td>
</tr>
</tbody>
</table>
Appendix Q

Participant Information Sheet

Study title: The Case of Mr. Moreland: You be the Judge!

Principal Investigator: Kathryn C. Applegate, M.S., Graduate Student

Faculty Supervisor: Karen L. Salekin, Ph.D.

What is this study about? You are being asked to take part in a research study. This study is called The Case of Mr. Moreland: You be the Judge! You will receive course credit for your participation as a part of the PY 101 course.

Why is this study important? The main purpose of this study is to learn more about jury decision-making in capital murder cases. The knowledge gained from this study will help psychologists, lawyers, and judges better understand various aspects of decision-making.

Why have I been asked to participate in this study? All students in the PY 101 had access to the description of the study. You have been asked to participate in this study because you met the requirements and signed up for the study.

How many other people will be asked to participate? Up to 500 other people will participate in this study.

What will I be asked to do in this study? You will be asked to complete a variety of questionnaires, listen to an audio-recording of a legal hearing, and compete additional surveys assessing your opinions. You will also be asked to provide basic information about yourself, for example, your age, gender, and political affiliation.

How long will this study last? Participation is expected to last approximately three hours. The only cost to you from this study is your time. You will be awarded partial course credit for your participation. Regardless of the time to complete the study, you will be awarded 4.5 credits if you complete the whole study.

What are the risks and benefits of participation? There are minimal risks involved in this study. In this study, you will be asked to read a brief vignette describing a murder, which may be a sensitive topic and some questions could be distressing to you. If you feel distressed by any question, you may skip questions or discontinue the study at any time. If you are feeling distressed or experience any other psychological symptom, please call the University Counseling Center (205) 348-3863 or Psychology Clinic (205) 348-5000. Due to the length of the study, you may also feel fatigued. If you need a break, you will be allowed to take one. Although there are no direct benefits to you, you may learn more about how jurors perceive crimes, and you will learn some general information about the research process. You may also feel good about knowing that this information could shape the legal system in the future. Individuals involved in the legal system may also benefit from the information learned in this study.
How will my privacy be protected? All of the surveys in this study will be completed on your own. The only people with access to these data will be the trained members of the research team. Because identifying information is not collected with your data (see below), there will be no way to match what you reported with your identifying information.

How will my confidentiality be protected? No identifying information will be paired with your data. You will provide your name at the end of the study for the purpose of awarding credit. This information will not be paired with your data in any way. Also, only trained individuals will have access to the data from this project.

What are the alternatives to being in this study? The alternative to being in this study is to participate in another assignment for course credit. Please contact your instructor for information about this option.

What are my rights as a participant in this study? Taking part in this study is voluntary. It is your free choice. You can refuse to be in it at all. If you start the study, you can stop at any time. There will be no effect on your relations with the University of Alabama.

The University of Alabama Institutional Review Board (“the IRB”) is the committee that protects the rights of people in research studies. The IRB may review study records from time to time to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

Who do I call if I have questions or problems? If you have questions, concerns, or complaints about the study right now, please ask them. If you have questions or concerns about the study later on, please email Kathryn Applegate at kapplegate@crimson.ua.edu or Karen L. Salekin at ksalekin@ua.edu.

If you have questions about your rights as a person in a research study, call Ms. Tanta Myles, the Research Compliance Officer of the University, at 205-348-8461 or toll-free at 1-877-820-3066.

You may also ask questions, make suggestions, or file complaints and concerns through the IRB Outreach website at http://osp.ua.edu/site/PRCO_Welcome.html or email the Research Compliance office at participantoutreach@bama.ua.edu.

After you participate, you are encouraged to complete the survey for research participants that is online at the outreach website or you may ask the investigator for a copy of it and mail it to the University Office for Research Compliance, Box 870127, 358 Rose Administration Building, Tuscaloosa, AL 35487-0127.

I have read this information sheet. I have had a chance to ask questions. I will receive a copy of this participant information sheet to keep.

I agree to take part in this study. Completion of study materials will be taken as evidence of your informed consent to participate.
### Appendix R

**Stimulus Material Presentation by Order - Numbered**

<table>
<thead>
<tr>
<th>Order A</th>
<th>Order B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Death Qualification Questionnaire</td>
<td>1. Death Qualification Questionnaire</td>
</tr>
<tr>
<td>2. Juror Negative Affect Scale–1</td>
<td>2. Juror Negative Affect Scale–1</td>
</tr>
<tr>
<td>4. <em>Revised Legal Authoritarianism Questionnaire–23</em></td>
<td>4. Crime Vignette (either low or high)</td>
</tr>
<tr>
<td>5. <em>Punitive Orientation Scale</em></td>
<td>6. ID Information Sheet and Hearing Transcript</td>
</tr>
<tr>
<td>7. Crime Vignette (either low or high)</td>
<td>8. Legal Determination Questionnaire</td>
</tr>
<tr>
<td>9. ID Information Sheet and Hearing Transcript</td>
<td>10. Juror Negative Affect Scale–2</td>
</tr>
<tr>
<td>10. Jury Instructions – 2</td>
<td>11. Empathy Questionnaire</td>
</tr>
<tr>
<td>11. Legal Determination Questionnaire</td>
<td>12. Moral Outrage Scale-Modified</td>
</tr>
<tr>
<td>14. Empathy Questionnaire</td>
<td>15. <em>Punitive Orientation Scale</em></td>
</tr>
<tr>
<td>15. Moral Outrage Scale-Modified</td>
<td></td>
</tr>
</tbody>
</table>
Appendix S

Credit Log

Please neatly print your name below. Your name will not be linked to your study materials in any way. In order to grant you credit for your participation today, the researcher needs to know your name. If you do not write your name on this form, there will no way for the researcher to grant you credit.

Data Session Day/Time: ____________________________

Names

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.
19.
20.
21.
22.
23.
24.
25.
Appendix T

Debriefing Form

Dear Participant,

Thank you for your participation in this study. The purpose of this study was to investigate how exposure to crime details, along with other personal characteristics, may impact legal determinations. In particular, we are interested in understanding the influence of these factors on the determination of whether or not someone qualifies for a diagnosis of Intellectual Disability. The results of this study may influence how the legal system presents information to juries tasked with this legal determination.

Please do not share with others about your participation in this study. It is important that our data is not influenced by bias in any way. Information shared among potential participants could potentially bias future responses from participants. If you have additional questions about this project or the purpose of the study, please contact the principal or secondary investigator directly. Their contact information is below.

Thank you,

Kathryn Applegate, M.S.
Graduate Student
Department of Psychology
The University of Alabama
Tuscaloosa, AL 35487
kapplegate@crimson.ua.edu

Karen Salekin, Ph.D.
Associate Professor
Department of Psychology
The University of Alabama
Tuscaloosa, AL 35487
ksalekin@ua.edu
Appendix U

IRB Approval Letters

THE UNIVERSITY OF ALABAMA
Office of the Vice President for Research & Economic Development
Office for Research Compliance

September 11, 2018

Kathryn Applegate
Psychology
College of Arts & Sciences
Box 870348

Re: IRB #: 18-OR-328 “You Decide: Mock Juror Perceptions and Sentencing Determinations”

Dear Kathryn Applegate:

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your application has been given expedited approval according to 45 CFR part 46. You have also been granted the requested waiver of written documentation of informed consent. Approval has been given under expedited review category 7 as outlined below:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies

Your application will expire on September 10, 2019. If your research will continue beyond this date, complete the relevant portions of the IRB Renewal Application. If you wish to modify the application, complete the Modification of an Approved Protocol Form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, complete the appropriate portions of the IRB Request for Study Closure Form.

Please use reproductions of the IRB approved stamped participant information sheet to provide to your participants.

Should you need to submit any further correspondence regarding this proposal, please include the above application number.

Good luck with your research.

Sincerely,

[Name]
Director of Research Compliance Officer

358 Rose Administration Building | Box 870127 | Tuscaloosa, AL 35487-0127
205-348-8461 | Fax 205-348-7185 | Toll Free 1-877-820-3064
September 20, 2018

Kathryn Applegate, MS  
Department of Psychology  
College of Arts & Sciences  
Box 870348  

Re: IRB # 18-OR-328-A “You Decide: Mock Juror Perceptions and Sentencing Determinations”  

Dear Ms. Applegate:  

The University of Alabama Institutional Review Board has reviewed the revision to your previously approved expedited protocol. The board has approved the change in your protocol.  

Please remember that your protocol will expire on September 10, 2019.  

Should you need to submit any further correspondence regarding this proposal, please include the assigned IRB application number. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants.  

Good luck with your research.  

Sincerely,  

[Signature]  

Carpanato T. Myles, MSM, CMNCIP  
Director & Research Compliance Officer  
Office for Research Compliance  

358 Rose Administration Building | Box 870127 | Tuscaloosa, AL 35487-0127  
205-348-8461 | Fax 205-348-7189 | Toll Free 1-877-820-3066
October 22, 2018

Kathryn Applegate, MS
Department of Psychology
College of Arts & Sciences
Box 870349

Re: IRB # 18-OR-328-B “You Decide: Mock Juror Perceptions and Sentencing Determinations”

Dear Ms. Applegate:

The University of Alabama Institutional Review Board has reviewed the revision to your previously approved expedited protocol. The board has approved the change in your protocol.

Please remember that your protocol will expire on September 10, 2019.

Should you need to submit any further correspondence regarding this proposal, please include the assigned IRB application number. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants.

Good luck with your research.

Sincerely,

[Name]
Director & Research Compliance Officer
Office for Research Compliance

358 Rose Administration Building | Box 870127 | Tuscaloosa, AL 35487-0127
205-348-8461 | fax 205-348-7189 | Toll Free 1-877-820-3066