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# Intellectual Disability, The Death Penalty, and Jurors

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# INTELLECTUAL DISABILITY, THE DEATH PENALTY, AND JURORS

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## ABSTRACT (ENGLISH)

In *Atkins v. Virginia* (2002), the United States Supreme Court held that intellectually disabled defendants cannot be sentenced to death; but since then, the Court has continued to grapple with how intellectual disability should be legally defined. Typically, however, it is jurors who determine whether a defendant is intellectually disabled and therefore categorically ineligible for the death penalty. Very little is known empirically about how jurors reason about and make these decisions. This Article presents the results of a novel experiment in which venire jurors participated in an intellectual disability hearing and a capital sentencing hearing. The diagnosis of a court-appointed expert was experimentally manipulated (defendant is or is not intellectually disabled), as was the provision of information about the crime (present or absent). Jurors were considerably more likely to find the defendant not disabled when the expert opined that the defendant was not disabled. They were also more likely to find the defendant not disabled when they learned about the details of the crime. Similarly, jurors were more likely to sentence the defendant to death after learning about the details of the crime, which increased perceptions of both the defendant's blameworthiness and his mental ability. These findings highlight the reality that jurors' assessments of intellectual disability are influenced by crime information, contrary to pronouncements made by the United States Supreme Court, and they support the use of bifurcated disability proceedings, as some states have recently adopted.

## FULL TEXT

### Headnote

ABSTRACT: In *Atkins v. Virginia* (2002), the United States Supreme Court held that intellectually disabled defendants cannot be sentenced to death; but since then, the Court has continued to grapple with how intellectual disability should be legally defined. Typically, however, it is jurors who determine whether a defendant is intellectually disabled and therefore categorically ineligible for the death penalty. Very little is known empirically about how jurors reason about and make these decisions. This Article presents the results of a novel experiment in which venire jurors participated in an intellectual disability hearing and a capital sentencing hearing. The diagnosis of a court-appointed expert was experimentally manipulated (defendant is or is not intellectually disabled), as was the provision of information about the crime (present or absent). Jurors were considerably more likely to find the defendant not disabled when the expert opined that the defendant was not disabled. They were also more likely to find the defendant not disabled when they learned about the details of the crime. Similarly, jurors were more likely to sentence the defendant to death after learning about the details of the crime, which increased perceptions of both the defendant's blameworthiness and his mental ability. These findings highlight the reality that jurors' assessments of intellectual disability are influenced by crime information, contrary to pronouncements made by the United States Supreme Court, and they support the use of bifurcated disability proceedings, as some states have recently adopted.

## I. BACKGROUND

Starting in 2002, the United States Supreme Court began to identify several new categories of defendants who were exempt from capital punishment under the Eighth Amendment's clause prohibiting "cruel and unusual punishment."<sup>1</sup> The Court in *Atkins v. Virginia* held that execution of a defendant with intellectual disability violated the Constitution.<sup>2</sup> In 2005, the Court extended the prohibition to minors in *Roper v. Simmons*, holding that a defendant who had committed the crime before the age of eighteen was exempt from the death penalty.<sup>3</sup> However, unlike the situation in *Roper*, in which the factual predicate triggering constitutional protection is both clear and categorical,<sup>4</sup> the issue of whether particular defendants qualify as "intellectually disabled" immediately became a source of considerable controversy.<sup>5</sup> Because a diagnosis of intellectual disability, in contrast to age, is often a disputed fact, the *Atkins* holding permitted state practices to vary.<sup>6</sup> This variability created the prospect that outcomes would differ in similarly situated cases. Moreover, as examined in this Article, the discretion inherent in assessments of intellectual disability creates the possibility that the circumstances of the crime, rather than the fact of the matter of intellectual disability, would affect the fact finder's determination of whether a particular defendant was intellectually disabled.

The *Atkins* Court held, among other bases for its decision, that intellectually disabled defendants are both less blameworthy and less deterrable than the depraved, calculating murderer who may be put to death.<sup>7</sup> The Court explained that "[i]f 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."<sup>8</sup>

Although the *Atkins* Court stressed the mitigating effects of intellectual disability, it left the all-important matter of defining that condition to the states.<sup>9</sup> Thus, despite being grounded in the single principle encompassed in the Eighth Amendment, the *Atkins* standard could, and did, vary from state to state. For instance, in Florida until 2014, *Atkins* applied only to defendants with an IQ of 70 or below,<sup>10</sup> whereas the cutoff in Arkansas was 65 and in other states 75.<sup>11</sup> Moreover, evidence of deficiencies in "adaptive functioning," the second prong of the disability assessment, was not admissible in Florida unless the defendant had already shown that he was below the cutoff score;<sup>12</sup> in contrast, other states permitted its introduction in attempts to exempt individuals who were above a designated cutoff score.<sup>13</sup>

The issue of defining "intellectual disability" returned to the Supreme Court in the case of *Hall v. Florida*.<sup>14</sup> The Hall Court strongly suggested that states that depart from the American Psychiatric Association's (APA) definition of intellectual disability in the death penalty context violate the Constitution.<sup>15</sup> The Hall Court specifically cited the clinical criteria for diagnosing intellectual disability outlined by the APA in the *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition (DSM-5).<sup>16</sup> Those clinical criteria consist of three prongs:

1. Deficits in intellectual functioning. The individual must have deficits in intellectual functioning that are confirmed by both clinical assessment and standardized intelligence testing. Practically, this requirement can be met if an individual has an IQ score of 70 or below ( $\pm 5$ ).
2. Deficits in adaptive functioning. The individual must have deficits in adaptive functioning that impair their attainment of sociocultural standards for personal independence. These deficits may occur in domains such as independent living, self-care, and communication, and in different environments, such as the individual's home, school, or place of employment.
3. Early signs of disability. The individual must have experienced intellectual and adaptive deficits during childhood.<sup>17</sup>

Although the Court cautioned that the "views of medical experts . . . do not dictate the Court's decision,"<sup>18</sup> the Court stressed that they do "inform[] our determination whether there is a consensus" about the definition.<sup>19</sup> The Court concluded that Florida did not take into account the  $\pm 2.5$  standard error of measurement in IQ test results and had therefore effectively raised the cutoff to 75 (because it is customary to consider 2 standard errors of measurement for test scores, which is roughly equivalent to a 95% confidence interval)-contrary to the practice endorsed by the APA.<sup>20</sup> Moreover, because Florida limited evidence of adaptive functioning to defendants with an

IQ below 71, its standard violated the Eighth Amendment.<sup>21</sup>

Hall, however, did not fully resolve the definitional question, and states have continued to use different standards. In other words, while Hall held that Florida's approach to defining intellectual disability was constitutionally inadequate, the Court did not expressly mandate that States follow the DSM-5 test. This question, however, returned to the Court in *Moore v. Texas*?<sup>22</sup>

In *Moore*, the Court considered whether Texas's reliance on a 1992 guideline contained in the Ninth Edition of the American Association of Mental Retardation manual, buttressed by a seven-factor test set forth in the case of *Ex parte Briseno*,<sup>23</sup> violated the Eighth Amendment's guarantee against cruel and unusual punishment.<sup>24</sup> The Court held that it did.<sup>25</sup> However, the Court stopped short of mandating that states employ a specific medical standard to identify intellectual disability. The Court explained that the Constitution "does not demand adherence to everything stated in the latest medical guide. But neither does our precedent license disregard of current medical standards."<sup>26</sup> It continued, noting that "States have some flexibility, but not 'unfettered discretion,' in enforcing *Atkins*' holding."<sup>27</sup>

Although the Court did not expressly mandate use of the latest APA definition of intellectual disability, it is not obvious how much flexibility remains for State discretion. The dissenters in *Moore* and *Hall* saw none.<sup>28</sup> They were particularly critical of the Court's affixing Eighth Amendment principles to clinical practices. In *Moore*, Chief Justice Roberts, joined by two justices, questioned the Court's "craft[ing] a constitutional holding based solely on what it deems to be medical consensus about intellectual disability."<sup>29</sup> He argued that "clinicians, not judges, should determine clinical standards; and judges, not clinicians, should determine the content of the Eighth Amendment."<sup>30</sup>

Similarly, Justice Alito's dissent in *Hall*-which three justices joined- strongly criticized the Court's close alignment of the APA's standard and the Eighth Amendment's guarantee against cruel and unusual punishment.<sup>31</sup> He pointed out that the "views of professional associations often change," which will require courts to follow along or "judge the validity of each new change."<sup>32</sup> He also criticized the Court for not providing guidance on how to choose "which organizations' views should govern" and concluded that a clinical diagnosis of intellectual disability has an uncertain fit with the principles of the Eighth Amendment.<sup>33</sup> This last concern is particularly troubling given that the majority did little to clarify the relationship between the APA's diagnosis of intellectual disability and the purposes of punishment recognized under the Eighth Amendment. Justice Alito stated:

[T]he Court binds Eighth Amendment law to definitions of intellectual disability that are promulgated for use in making a variety of decisions that are quite different from the decision whether the imposition of a death sentence in a particular case would serve a valid penological end. In a death-penalty case, intellectual functioning is important because of its correlation with the ability to understand the gravity of the crime and the purpose of the penalty, as well as the ability to resist a momentary impulse or the influence of others. By contrast, in determining eligibility for social services, adaptive functioning may be much more important.<sup>34</sup>

Although the Court has now closely aligned the Eighth Amendment's guarantee to the clinical test for intellectual disability, the prospect for variability in application remains. As noted above, short of relying on IQ test scores alone to provide a minimum threshold, the test for intellectual disability-and especially its "adaptive functioning" prong-leaves open the possibility of different outcomes in similar cases. This is particularly so because procedures for handling disability decisions vary by state.

Approximately one-third of all death penalty jurisdictions (i.e., twelve states) allow or require a jury to decide on intellectual disability status, rather than requiring the decision to be made by a judge in a pretrial hearing. Table 1 contains a breakdown of the process by which disability decisions are made in the 32 jurisdictions that currently have the death penalty.

In California, for example, defendants in capital cases can choose either a judge or jury to decide their claim of intellectual disability.<sup>35</sup> States are also free to decide when decisions about intellectual disability are made.<sup>36</sup> In jurisdictions that allow a jury to decide a defendant's disability status, the issue is almost always decided postconviction, in conjunction with the sentencing phase of the trial. A notable exception to this trend is

Oklahoma, which requires a jury to decide the question of intellectual disability prior to trial unless the right is waived by the defendant.<sup>37</sup>

The impact of these different procedures on legal outcomes for defendants has not yet been studied extensively, but there is some evidence to suggest that such differences do have an impact. For example, between 2002 and 2014, 96% of all jury determinations on this issue found that the defendant did not have intellectual disability, relative to 43% among judges.<sup>38</sup> This suggests that jurors may be less willing than judges to determine that a defendant is intellectually disabled.

There are a number of reasons why jurors could be more hesitant than judges to find that a defendant is intellectually disabled. One possibility is that they have different levels of exposure to heinous crime details than jurors, because judges typically evaluate intellectual disability in a pretrial hearing.<sup>39</sup> Many jurisdictions that permit juries to determine disability status have the jury do so between the guilt and sentencing phases of trial. In a pretrial hearing conducted by a judge, evidence of aggravating factors would likely be considered irrelevant for the question of intellectual ability; however, exposure to these aggravating factors is an integral part of the sentencing phase conducted by a jury.<sup>40</sup> Therefore, it is possible that jurors have more salient exposure to aggravating crime details than judges before making their decisions and are therefore more likely to seek retribution by finding that a defendant is not disabled. Another possibility is that jurors have less experience in general with evidence of heinous crimes relative to individual judges and are therefore more reactive to the crime details.<sup>41</sup>

In *Atkins*, the Supreme Court considered the possibility that jurors would struggle to assess intellectual disability in defendants reliably.<sup>42</sup> The Court suggested that the categorical nature of assessing intellectual disability may help protect disabled defendants from juror misunderstandings.<sup>43</sup> It observed that defendants with intellectual disability may have trouble communicating remorse effectively or testifying persuasively before a jury in their own defense.<sup>44</sup> The Court also noted that jurors may use evidence of intellectual disability as an aggravating factor for future dangerousness, rather than as a mitigating factor for culpability.<sup>45</sup> In its ruling, the Court asserted that a categorical bar on executing the intellectually disabled was necessary in part because it would prevent jurors from failing to give appropriate weight to mitigating evidence of intellectual disability and reduce the risk of improper executions.<sup>46</sup>

Although the conclusion that an individual defendant is intellectually disabled is categorical, its determination is imbued with considerable discretion and is highly subjective. For example, while "adaptive functioning" is guided by clinical criteria, it is ultimately a subjective and qualitative judgment about what constitutes a deficit.<sup>47</sup> In light of prior evidence that jurors may be generally unwilling to find capital defendants intellectually disabled, there is reason to doubt that case-by-case applications of clinical indicia of intellectual disability provide adequate constitutional protection.

#### A. Capital Cases Are Unique

In *Atkins* and *Hall*, the Court discusses issues of identifying intellectual disability in defendants in capital cases specifically. Evidence of a defendant's intellectual disability can be considered a mitigating factor for sentencing in a variety of noncapital crimes but does not categorically bar any other kind of punishment besides execution. Capital cases differ from noncapital cases in a variety of ways. One difference is the degree of attention the Supreme Court historically provides to such cases. As compared to noncapital cases, there have been more attempts by the courts to make capital punishment consistent and less arbitrary across states.<sup>48</sup> Courts have also expressed greater concern about the potential for prejudice induced by some types of evidence, such as victim impact statements, in capital cases compared to noncapital ones.<sup>49</sup>

Another difference between capital and noncapital criminal cases is the sentencing process: defendants in noncapital cases typically receive their sentence from a judge, while those in capital cases are sentenced by a jury. Jurors must decide not only whether a defendant is guilty, but also whether the defendant should be sentenced to death or life in prison without the possibility of parole.<sup>50</sup> Judges who make sentencing decisions for noncapital cases are more familiar with sentencing guidelines than jurors and have more experience making such decisions.

Capital cases are also different from noncapital cases in their degree of heinousness. To be sentenced to death in state court, a defendant must be found guilty of first degree murder with additional circumstances known as "aggravating factors" that raise the severity of the offense beyond what is typical for other first-degree murders.<sup>51</sup> Potential aggravating factors could be the sexual assault, degradation or torture of a victim, as well as the selection of a particularly vulnerable victim such as a child or elderly person.<sup>52</sup> These aggravating circumstances might bias fact-finders' determinations of intellectual disability, with them being more likely to find defendants culpable-and thereby not disabled- the more heinous the crime.<sup>53</sup>

The requirement that death sentences be made by jurors also introduces a unique issue into judgments of capital cases. Jurors who are ultimately selected to serve on juries for capital cases must satisfy the court that they are "death qualified," meaning that they are willing to consider applying the death penalty.<sup>54</sup> However, there is evidence to suggest that death-qualified jurors are different from non-death-qualified jurors. For example, past studies have found that people who are low income, female, or liberal are more likely to be excluded than other groups.<sup>55</sup> It can also result in juries that have fewer people of color.<sup>56</sup> Such changes in the racial composition of a jury can influence interpretation of case facts.<sup>57</sup> Studies show that larger and larger segments of the population are being excluded as non-death qualified, which may further skew the representativeness of capital juries.<sup>58</sup> Aside from being demographically different from the average juror, deathqualified jurors appear to have different attitudes and behaviors. Importantly, death-qualified jurors have been shown to be more conviction prone.<sup>59</sup> There is some evidence to suggest that death-qualified jurors are more likely to interpret conflicting evidence in favor of the prosecution, and they are less likely to find reasonable doubt.<sup>60</sup> Death-qualified jurors appear to give more weight to aggravating factors and less weight to mitigating factors.<sup>61</sup> They are also significantly more likely to reject insanity defenses in reaching a conviction than non-deathqualified jurors.<sup>62</sup> A meta-analysis conducted by Mike Allen and his colleagues found that favorable attitudes toward the death penalty predicted individual likelihoods of convicting in a capital case.<sup>63</sup> Taken as a whole, this body of work suggests that death-qualified jurors think and behave differently from other jurors. Thus, scientific research on capital cases must take these differences into account.

#### B. The Relevance of Crime Information in Assessing Adaptive Functioning

For an individual to be considered intellectually disabled under the clinical standards of the DSM-5, he must have deficits in adaptive functioning.<sup>64</sup> The DSM-5 describes these deficits as follows: "how well a person meets community standards of personal independence and social responsibility, in comparison to others of similar age and sociocultural background."<sup>65</sup> The DSM-5 also states that adaptive functioning should be assessed "using both clinical evaluation and individualized, culturally appropriate, psychometrically sound measures."<sup>66</sup> There are a variety of psychological measures used by clinicians to assess these deficits, such as the Vineland<sup>67</sup> and the Independent Living Scale.<sup>68</sup> However, some courts have explicitly rejected evidence of deficits in adaptive functioning produced by these tools as well as expert clinical evaluations, and instead relied on other behavioral evidence to assess adaptive functioning-such as the behavior of the defendant during the commission of the capital offense.<sup>69</sup>

Courts have grappled with the question of whether it is appropriate to consider factual details about the defendant's crime when assessing a defendant's intellectual disability status. To date, state courts are divided on the relevance of crime information in disability hearings.<sup>70</sup> Some state courts, such as Texas<sup>71</sup> and Tennessee,<sup>72</sup> have asserted that crime information may be relevant in considering a defendant's disability status specifically in regard to adaptive functioning. In the case of *Van Tran v. State*, for example, the Tennessee Court of Criminal Appeals explicitly relied on details of the defendant's crime when concluding that the defendant did not show deficits in adaptive functioning, citing the defendant's "active participation and planning in the offense" as evidence that he was not intellectually disabled.<sup>73</sup>

Other state courts have disagreed, holding that such uses of crime information as irrelevant and detached from specific areas of adaptive behavior. For example, in *Lambert v. State*, the Oklahoma Court of Criminal Appeals ruled that crime information is relevant only in so far as it relates to an area of behavior where the defendant has

asserted having a deficit.<sup>74</sup> The court reasoned that evidence showing a defendant is able to acquire a weapon or drive a car is not relevant if the defense is not asserting limitations tied to those functioning domains.<sup>75</sup> Among the courts that have explicitly linked crime information to disability judgements as relevant, some have cited *Ex parte Briseno*, the response of the Texas Court of Criminal Appeals to a writ of habeas corpus application.<sup>76</sup> In its ruling in *Briseno*, the Texas court outlined several "other evidentiary factors" which factfinders in criminal trials could use to evaluate a defendant's intellectual disability.<sup>77</sup> These factors include a defendant's ability to formulate plans, respond appropriately to stimuli, hide facts or lie effectively-and include consideration of the defendant's crime.<sup>78</sup> Specifically, the court suggests considering whether "the commission of [the defendant's] offense require[d] forethought, planning, and complex execution of purpose."<sup>79</sup> However, over a decade after *Briseno*, the Supreme Court vacated the Texas court's ruling in the case of *Moore v. Texas* and held that the court had erred when it followed the *Briseno* standard and its nonclinical factors.<sup>80</sup> The Supreme Court concluded that "because *Briseno* pervasively infected the CCA's analysis, the decision of that court cannot stand."<sup>81</sup>

### C. The Current Study

Based on the standards for judging intellectual disability set by the Supreme Court,<sup>82</sup> features of a defendant's crime should be irrelevant in making assessments of the defendant's intellectual abilities. A defendant can successfully carry out a heinous capital crime while still meeting the clinical criteria for intellectual disability under the DSM-5.

In the current study, we test the possibility that, contrary to this pronouncement, crime information does impact jurors' judgments of intellectual disability. We hypothesized that information pertaining to the crime would influence jurors' judgments of whether a defendant is intellectually disabled, and that this would have an effect over and above an expert's clinical assessment of intellectual disability. More specifically, we predicted that the provision of crime information would increase the degree to which jurors find a defendant not intellectually disabled (and therefore eligible for the death penalty) regardless of whether the expert opined that the defendant is or is not intellectually disabled. To test this hypothesis, some participants were presented with crime information and some were not (randomly determined), and all participants heard the results of a clinical assessment that determined the defendant was or was not intellectually disabled (again, randomly determined). Although the law assumes crime information should not impact judgments of disability, we hypothesized that participants who were presented with such information would be more likely to find the defendant not intellectually disabled.

## II. METHOD

### A. Participants

Three hundred one jury-eligible U.S. citizens participated as mock jurors in this experiment. Participants were drawn from a pool of venire jurors who reported for jury duty in Orange County, California during July 2016. Before releasing those potential jurors who were not called to a specific courtroom for voir dire, a court employee announced that researchers were conducting a study that would take approximately 20 minutes to complete and that participants would be compensated \$10.00 for their time. Data were collected on five different days. Of the 301 participants in the study, 15 individuals failed an attention check question embedded in the materials and were removed from the analyses reported.<sup>83</sup> The resulting sample consisted of 286 jury-eligible adults. The demographics of the sample are described in Table 2, which reports the overall demographic characteristics of the sample as well as the demographics decomposed by participants who were and were not death qualified according to the Witherspoon death-qualification question (i.e., "Is your attitude toward the death penalty such that as a juror, you would never be willing to impose it in any case, no matter what the evidence was, or would you consider voting to impose it in at least some cases?").<sup>84</sup> The overall sample had a median age of 39 and was 52% female. The racial composition of the sample was representative of the local area (i.e., 39% white, 25% Hispanic, 22% Asian, etc.).<sup>85</sup>

### B. Procedure and Design

Participants completed a survey that included a summary of an intellectual disability hearing in California. The

experiment employed a 2 (Expert Diagnosis: defendant is disabled or defendant is not disabled) x 2 (Crime information: present or not) between subjects, fully crossed factorial design.<sup>86</sup> Participants were randomly assigned to one cell. In all conditions, participants were told that the defendant had already been convicted of a capital offense and that their task was to determine whether the defendant was intellectually disabled, which could preclude the death penalty. Participants were told that if they determined that the defendant was not intellectually disabled, then they would consider whether the death penalty or life in prison without the possibility of parole was the appropriate imposition. Participants were provided with jury instructions that are used in intellectual disability hearings in California.<sup>87</sup> These instructions explained the role of a juror, the appropriate use of evidence provided by expert witnesses, the elements of the intellectual disability statute, and the standard of proof (preponderance of the evidence).<sup>88</sup>

All participants read a synopsis of a clinical assessment of the defendant conducted by a court-appointed forensic psychologist. The details of this assessment were adapted from materials used in a prior study on intellectual disability hearings and were consistent with the diagnostic criteria for intellectual disability outlined in the DSM-5.<sup>89</sup> Participants read that the defendant had an IQ score of 69 two years prior to his arrest and had an IQ of 74 when retested by the court-appointed expert. In addition, participants learned of the following facts that were discovered during the clinical interview: (1) the defendant was never gainfully employed for a long-term period; (2) he did not complete high school; (3) he avoids eye contact and can be aggressive without provocation; but (4) he can also speak with other people without difficulty. When tested at the age of 12, the defendant had an IQ score of 67 and displayed behavioral problems in class. The factual evidence in the clinical assessment was identical across conditions. At the end of the clinical assessment, participants read the opinion of the court-appointed expert, who concluded that the defendant's symptoms were either consistent or inconsistent with the presence of intellectual disability.

In addition to the clinical assessment, participants in crime-information present condition were provided with details of the defendant's crime. This crime synopsis was adapted from the details of an actual capital case in which intellectual disability was a central issue (i.e., *Atkins v. Virginia* 2002).<sup>90</sup> In brief, the defendant confirmed that no witnesses were present before abducting a woman at gunpoint from the parking lot of a local mall. After forcing her into his vehicle and driving her to an alley, the defendant obtained money from the victim before beating her, shooting her six times, and leaving her body behind a dumpster. The details of the crime provided in the synopsis (i.e., abduction with a vehicle, robbery at gunpoint, murder) are also details present in other federal capital crimes in which the intellectual functioning of the defendant has been at issue.<sup>91</sup>

After reading the provided case materials, participants were asked to indicate whether they found the defendant intellectually disabled under California law and whether they would sentence the defendant to death. Participants also responded to several opinion questions about the defendant and the clinical expert, as well as measures of death penalty attitudes and demographic information.

### III. RESULTS

#### A. Intellectual Disability Decisions

Note that the results reported hereinafter include the entire sample of participants, not just death-qualified participants. The results do not materially change whether the sample includes participants that are death-qualified jurors only or whether all participants are included in the analyses.<sup>92</sup> Including all participants increases statistical power.

We first examined participants' binary intellectual disability decisions. Fifty-two percent ( $n = 146$ ) of participants decided that the defendant was not intellectually disabled. We chose to highlight participants who said the defendant is "not disabled" because such a verdict allows the defendant to be eligible for the death penalty. Asserting the defendant is "not disabled" is a necessary step toward sentencing a defendant to death. Table 3 contains the percentage of participants deciding that the defendant was not disabled in each experimental condition.

We used a binary logistic regression analysis, with intellectual disability decision as the dependent variable and

expert diagnosis and exposure to crime information as the independent variables, to analyze the data.<sup>93</sup> We found a significant main effect for expert diagnosis, with participants being over four times more likely to decide the defendant was not disabled when the expert said the defendant was not disabled compared to when the expert said the defendant was disabled.<sup>94</sup> In other words, participants' decisions about whether the defendant is intellectually disabled tended to align with the expert's diagnosis. Regarding the impact of crime information, participants were over twice as likely to find the defendant was not intellectually disabled (and hence potentially eligible for the death penalty) when they were given information about the crime compared to when they were not given information about the crime.<sup>95</sup> No significant interaction between crime information and expert diagnosis was detected.<sup>96</sup>

#### B. Death Sentencing

We examined participants' binary death sentencing decisions. Forty-one percent (n = 115) of participants said they would sentence the defendant to death. Table 4 displays the percentage of participants in each experimental condition who sentenced the defendant to death.

As with our analysis of intellectual disability decisions, we used a binary logistic regression analysis to examine the impact of expert diagnosis and crime exposure on participants' willingness to sentence the defendant to death.<sup>97</sup> The model revealed that the expert's diagnosis significantly influenced jurors' willingness to sentence the defendant to death; participants were four times more likely to sentence the defendant to death when the expert said the defendant was not disabled compared to when the expert said the defendant was disabled.<sup>98</sup> Exposure to crime information also increased participants' willingness to sentence the defendant to death; participants were nearly six times more likely to sentence the defendant to death when exposed to information about the crime compared to when no information about the crime was provided.<sup>99</sup> Again, there was no significant interaction between crime information and expert diagnosis.<sup>100</sup> These findings suggest that expert diagnosis and crime information additively contribute to decisions to impose a death sentence.

#### C. Factors Driving Death Sentences

We next sought to examine the possible reasons that undergirded participants' decisions to impose the death penalty. We hypothesized that perceptions of blameworthiness or culpability would be related to death sentences. We also tested the possibility that participants were inferring from the nature of the crime that the defendant was not intellectually disabled and thus deserving of the death penalty. After reading the case summary and offering opinions on the defendant's intellectual disability and death sentencing, participants evaluated the defendant's culpability and mental abilities by responding to six different items. For each item, participants read a statement and rated their agreement with that statement on a 7-point Likert scale that ranges from 1 = strongly disagree to 7 = strongly agree, with 4 indicating a neutral position. Three items conceptually measured culpability, and the other three items conceptually measured the mental ability of the defendant. A factor analysis confirmed that the items empirically measured two distinct constructs.<sup>101</sup>

We first tested whether perceptions of the defendant's culpability and mental ability differed as a function of whether crime information was provided or not and whether the expert opined that the defendant was intellectually disabled or not. The findings (depicted in Figure 1 below) revealed that participants perceived the defendant as more culpable<sup>102</sup> and as having greater mental ability<sup>103</sup> when the expert opined that the defendant was "not disabled" compared to the expert opined that the defendant was "disabled." Exposure to crime information increased the ratings of both culpability<sup>104</sup> and mental ability.<sup>105</sup> There were no significant interactions between expert diagnosis and crime information conditions on participants' perceptions of the defendant's culpability<sup>106</sup> or mental ability.<sup>107</sup>

We next examined whether perceptions of culpability and mental ability were related to death sentences. This was accomplished by conducting a binary logistic regression with expert diagnosis (disabled or not) and crime information (presented or not) as the independent variables, a death sentence (yes/no) as the dependent variable, and the ratings of the defendant's culpability and mental ability as covariates.<sup>108</sup> The ratings of the defendant's culpability and mental ability were both significantly associated with whether participants imposed a death

sentence; for each unit increase in the ratings, participants were about two times more likely to impose the death sentence for both culpability<sup>109</sup> and for mental ability.<sup>110</sup> The main effects for presence of crime information<sup>111</sup> and expert diagnosis<sup>112</sup> were not significantly related to death sentences, nor was the interaction between crime information and expert diagnosis significant.<sup>113</sup>

In sum, the results suggest that the facts (i.e., the expert's diagnosis or crime information) presented to participants influenced their perceptions of the defendant's culpability and mental ability, and it was these perceptions-rather than the facts themselves-that drove death sentences. These findings provide a more nuanced understanding of how the expert's diagnosis and crime information influenced participants' decision to impose a death sentence.

#### IV.DISCUSSION

This study is the first to systematically test how jurors' perceptions of intellectual disability are influenced by expert testimony and case-specific information. Some important findings emerged. First, participants tended to defer to the expert diagnosis, which is consistent with other research finding that expert witnesses exert a powerful influence on jurors' decisions, especially when the expert is a non-adversarial, court-appointed expert.<sup>114</sup> Second, the provision of crime information influenced whether participants believed the defendant was intellectually disabled over and above the expert's diagnosis. Participants apparently used the nature of the crime to infer that the defendant was not intellectually disabled. Indeed, in response to an open-ended question, numerous participants noted that an "[intellectually] disabled person wouldn't check to make sure all the witnesses are gone before committing a crime." Although courts are not bound by official nosology for intellectual disability at this time, it is unclear that this sort of reasoning is appropriate since it effectively renders the definition of intellectual disability a subjective lay judgment.

The study also examined how the expert's diagnosis of intellectual disability and the provision of crime information affected the decision to impose the death penalty. Recall that 41% of the sample would impose the death penalty in this case. Participants were considerably more likely to impose the death penalty when the expert opined that the defendant was not intellectually disabled and when information about the crime was provided. Both of these findings are expected. Surprisingly, some participants were willing to occasion the death penalty even though the defendant was deemed intellectually disabled. Indeed, 10% of participants who were given no information about the crime and were told that the expert believes the defendant is intellectually disabled voted to impose the death sentence. These participants either disagreed with the expert for some unknown reason or simply did not follow the law which clearly stated that intellectually disabled individuals cannot be sentenced to death. To the extent the latter explanation is correct, it supports separating the decision regarding intellectual disability from the guilt and (if needed) sentencing phases, with intellectual disability decided first, uncontaminated by the circumstances of the crime.

To better understand how crime information and expert diagnosis influenced jurors' willingness to sentence the defendant to death, we conducted a logistic regression analysis in which we included participants' perceptions of the defendant's culpability and his mental ability. This analysis allowed us to assess what effect, if any, crime information had on perceptions of the defendant-specifically, whether the nature of the crime increased their perception of the defendant's blameworthiness/culpability or whether it increased their beliefs regarding his mental ability, and how these beliefs impacted their decisions. The data revealed that the nature of the crime influenced both the perception of the defendant's culpability as well as his mental ability. Importantly, the data also revealed that it was these perceptions of the defendant-his increased blameworthiness and his mental ability-that affected death sentences, not the nature of the crime nor the expert's diagnosis, per se.

#### V.LIMITATIONS AND FUTURE DIRECTIONS

This is a first experimental attempt to investigate a very complex issue. Naturally, the endeavor has its limitations. Participants read a short, written synopsis of a criminal case and clinical assessment, and were asked to render a legal decision about a hypothetical individual without deliberation. It is unclear how verisimilitude would affect the results, but it seems safe to assume that the principal effect would either increase or decrease but likely not

change direction.<sup>115</sup> Hence, the findings should not be dismissed outright because of concerns about ecological validity. Moreover, the participants used in this study—venire jurors—are more externally valid than samples typically used in juror research (e.g., online samples or college students) and are considered some of the best possible participants for conducting mock juror research.<sup>116</sup>

However, because the findings are based on only one experiment with a single set of case facts, replication ought to occur before strong policy pronouncements are made. Replications could address and expand upon a variety of issues related to our case study design and case facts. For example, participants in the present study heard the testimony of a single court-appointed clinician; however, in actual disability hearings, jurors would likely be presented with opposing experts from the prosecution and the defense who would present conflicting evidence of disability, and the experts would be subject to cross-examination.<sup>117</sup> Also, the court-appointed clinician in our study did not explicitly comment on details of the crime in relation to disability (i.e., explaining why a defendant's ability to check for witnesses does not prove the absence of disability). Additional research could explore how exposure to conflicting expert opinions could shape juror perceptions of intellectual disability, and how expert commentary on specific aspects of a crime could influence how crime evidence is used by jurors. Of course, replications with different fact patterns and different circumstances would also be valuable. It remains to be seen whether the use of crime information had to do with the specifics of the crime used in the present study (e.g., the defendant drove a car and acquired a gun) or reflects a more general phenomenon. The conditions under which participants use crime information in assessing intellectual disability cannot be determined without further experimentation.

Finally, future research might usefully consider an issue largely implicit in the present research but which is an explicit point of disagreement among the justices of the Supreme Court. Specifically, how do clinical definitions of intellectual disability relate to the Eighth Amendment's guarantee against cruel and unusual punishment? The majority opinion in *Moore* emphasized that States retain some flexibility, though they cannot ignore "current medical standards."<sup>118</sup> The majority opinion, then, raises the question of what level of flexibility States retain and how it might be defined—if not by strict adherence to current medical standards?<sup>119</sup> Although the lay public cannot answer a (normative) constitutional question, "cruel and unusual punishment" is an inherently subjective idea that has been defined historically with reference to public opinion.<sup>120</sup> To what extent the lay public believes intellectual disability ought to be defined by professional nosology as opposed to a more subjective determination for the purposes of capital litigation could be the object of future research.

These data suggest that information about the crime figures into whether jurors believe a defendant is intellectually disabled and hence eligible for the death penalty. As mentioned, some states currently have a separate hearing to determine whether the defendant is intellectually disabled and a separate hearing for determining whether the defendant should receive the death penalty. Our findings support this bifurcated approach. Indeed, an argument could be made that the intellectual disability hearing should precede the guilt phase of the trial, rather than simply the penalty phase, because the guilt phase inherently involves details of the crime and such details influence jurors' perceptions of intellectual disability. Policy makers and the judiciary should be aware that information about the crime and intellectual disability are intertwined in the minds of jurors.

### **Sidebar**

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### **Footnote**

1. U.S. CONST. amend. VIII; *Moore v. Texas*, 137 S. Ct. 1039 (2017); *Hall v. Florida*, 134 S. Ct. 1986 (2014); *Roper v. Simmons*, 543 U.S. 551 (2005); *Atkins v. Virginia*, 536 U.S. 304 (2002).

2. 536 U.S. at 321.
3. 543 U.S. at 578-79.
4. See *id.* at 572.
5. See, e.g., Anna M. Hagstrom, *Atkins v. Virginia: An Empty Holding Devoid of Justice for the Mentally Retarded*, 27 *LAW & INEQ.* 241, 242 (2009).
6. See *Atkins*, 536 U.S. at 317.
7. *Id.* at 319-20.
8. *Id.* at 319.
9. *Id.* at 317.
10. *Hall v. Florida*, 134 S. Ct. 1986, 2001 (2014).
11. David DeMatteo et al., *A National Survey of State Legislation Defining Mental Retardation: Implications for Policy and Practice After Atkins*, 25 *BEHAV. SCI. & L.* 781, 787 (2007).
12. *Hall*, 134 S. Ct. at 1994, 1996.
13. DeMatteo et al., *supra* note 11, at 787-88.
14. 134 S. Ct. at 1989.
15. *Id.* at 2001.
16. *Id.* at 1994 (citing AM. PSYCHIATRIC ASS'N, *DIAGNOSTIC AND STATISTICAL MANUAL OF Mental Disorders* 33 (5th ed. 2013)).
17. Am. Psychiatric Ass'n, *supra* note 16.
18. *Hall*, 134 S. Ct. at 2000.
19. *Id.* at 1993.
20. *Id.* at 2000.
21. *Id.* at 2001.
22. 137 S. Ct. 1039 (2017).
23. 135 S.W.3d 1, 8 (Tex. Crim. App. 2004).
24. *Moore*, 137 S. Ct. at 1048.
25. *Id.* at 1053.
26. *Id.* at 1049.
27. *Id.* at 1052-53.
28. See *Moore*, 137 S. Ct. at 1058 (Roberts, C.J., dissenting); *Hall*, 134 S. Ct. at 2002 (Alito, J. dissenting).
29. *Moore*, 137 S. Ct. at 1054 (Roberts, C.J., dissenting).
30. *Id.*
31. *Hall*, 134 S. Ct. at 2002-12 (Alito, J., dissenting).
32. *Id.* at 2006.
33. *Id.*
34. *Id.* (internal citations omitted).
35. See, e.g., John Parry, *Criminal Mental Health and Disability Law, Evidence, and Testimony: A Comprehensive Reference Manual for Lawyers, Judges, and Criminal Justice Professionals* 110 (2009).
36. *Id.*
37. *Blonner v. State*, 127 P.3d 1135, 1142 (Okla. Crim. App. 2006).
38. See John H. Blume et al., *A Tale of Two (and Possibly Three) Atkins: Intellectual Disability and Capital Punishment Twelve Years After the Supreme Court's Creation of a Categorical Bar*, 23 *Wm. & Mary BILL Rts. J.* 393, 410 (2014).
39. *Id.* at 411-12.
40. *Id.*
41. *Id.*
42. See *Atkins v. Virginia*, 536 U.S. 304, 320-21 (2002).

43. See *id.* at 321.
44. *Id.*
45. *Id.*
46. *Id.* at 320-21.
47. See Blume et al., *supra* note 38, at 414.
48. See Nancy J. King, How Different is Death? Jury Sentencing in Capital and Non-Capital Cases Compared, 2 OHIO ST. J. CRIM. L. 195, 196-200 (2004).
49. See, e.g., *Booth v. Maryland*, 482 U.S. 496, 505-06 (1987); *Fryer v. State*, 68 S.W.3d 628, 630 (Tex. Crim. App. 2002).
50. See *Ring v. Arizona*, 536 U.S. 584, 609 (2002).
51. See *Godfrey v. Georgia*, 446 U.S. 420, 427-28 (1980); see also Richard A. Rosen, The "Especially Heinous " Aggravating Circumstance in Capital Cases-The Standardless Standard, 64 N.C. L. REV. 941, 941-42 (1986).
52. See Rosen, *supra* note 51, at 942-43 &nn. 4-6.
53. See generally Blume et al., *supra* note 38, at 411-12 (noting that hearing evidence of aggravating factors could give rise to "emotional, retributive triggers" that may affect the jury's determination of intellectual disability).
54. See *Wainwright v. Witt*, 469 U.S. 412, 424 (1985).
55. Alicia Summers et al., Death Qualification as Systematic Exclusion of Jurors with Certain Religious and Other Characteristics, 40 J. APPLIED SOC. PSYCHOL. 3218, 3228-29 (2010).
56. Robert Fitzgerald & Phoebe C. Ellsworth, Due Process vs. Crime Control: Death Qualification and Jury Attitudes, 8 LAW & HUM. BEHAV. 31, 46 (1984); Alec T. Swafford, Qualified Support: Death Qualification, Equal Protection, and Race, 39 AM. J. CRIM. L. 147, 154 (2011).
57. See Mona Lynch & Craig Haney, Mapping the Racial Bias of the White Male Capital Juror: Jury Composition and the "Empathic Divide," 45 LAW & SOC'Y Rev. 69, 76 (2011).
58. Brandon Garrett et al., Capital Jurors in an Era of Death Penalty Decline, 126 YALE L.J.F. 417, 420 (2017) (finding that 35% of potential jurors would be excluded under the Witherspoon criteria).
59. Claudia L. Cowan et al., The Effects of Death Qualification on Jurors' Predisposition to Convict and on the Quality of Deliberation, 8 LAW & HUM. BEHAV. 53, 55-59 (1984).
60. See Victoria Springer & Camille B. Lalasz, Death-Qualified Jurors and the Assumption of Innocence: A Cognitive Dissonance Perspective on Conviction-Prone Verdicts, 51 SOC. SCI. J. 287, 288 (2014); William C. Thompson et al., Death Penalty Attitudes and Conviction Proneness: The Translation of Attitudes into Verdicts, 8 LAW & HUM. BEHAV. 95, 98 (1984). For a review discussing the biasing effects of death qualification, see generally Logan A. Yelder et al., Capitalizing Jurors: How Death Qualification Relates to Jury Composition, Jurors' Perceptions, and Trial Outcomes, ADVANCES PSYCHOL. & L. 27 (2016).
61. See Brooke M. Butler & Gary Moran, The Role of Death Qualification in Venirepersons' Evaluations of Aggravating and Mitigating Circumstances in Capital Trials, 26 LAW & HUM. BEHAV. 175, 182-83 (2002); Craig Haney et al., Deciding to Take a Life: Capital Juries, Sentencing Instructions, and the Jurisprudence of Death, 50 J. SOC. ISSUES 149, 162-64 (1994).
62. Brooke Butler & Adina W. Wasserman, The Role of Death Qualification in Venirepersons' Attitudes Toward the Insanity Defense, 36 J. APPLIED SOC. PSYCHOL. 1744, 1748 (2006).
63. Mike Allen et al., Impact of Juror Attitudes About the Death Penalty on Juror Evaluations of Guilt and Punishment: A Meta-Analysis, 22 LAW & HUM. BEHAV. 715, 724 (1998).
64. Am. Psychiatric Ass'n, *supra* note 16.
65. *Id.* at 37.
66. *Id.*
67. Alice S. Carter et al., The Vineland Adaptive Behavior Scales: Supplementary Norms for Individuals with Autism, 28 J. AUTISM & Dev. DISORDERS 287, 289 (1998).
68. Mark J. Ashley et al., Validation of an Independent Living Scale for Post-acute Rehabilitation Applications, 15

BRAIN INJ. 435, 435 (2001).

69. Van Tran v. State, No. W2005-01334-CCA-R3-PD, 2006 WL 3327828, at ·13, ·20 (Tenn. Crim. App. Nov. 9, 2006).

70. See John H. Blume et al., Of Atkins and Men: Deviations from Clinical Definitions of Mental Retardation in Death Penalty Cases, 18 CORNELL J. L. & PUB. POL'Y 689, 724-25 (2009).

71. Neal v. State, 256 S.W.3d 264, 272-73 (Tex. Crim. App. 2008).

72. See Van Tran, 2006 WL 3327828, at ·23-24.

73. Id. at ·25.

74. Lambert v. State, 126 P.3d 646, 655 (Okla. Crim. App. 2005).

75. See id. at 655-56.

76. See Van Tran, 2006 WL 3327828, at ·24-25 (finding crime information relevant to the determination of mental disability and citing the analysis of the Texas Court of Criminal Appeals in Ex parte Briseno, 135 S.W.3d 1 (Tex. Crim. App. 2004)).

77. Ex parte Briseno, 135 S.W.3d 1, 8 (Tex. Crim. App. 2004).

78. Id.

79. Id. at 8-9.

80. Moore v. Texas, 137 S. Ct. 1039, 1053 (2017).

81. Id.

82. See generally Moore, 137 S. Ct. 1039; Hall v. Florida, 134 S. Ct. 1986 (2014); Roper v. Simmons, 543 U.S. 551 (2005); Atkins v. Virginia, 536 U.S. 304 (2002).

83. See Daniel M. Oppenheimer et al., Instructional Manipulation Checks: Detecting Satisficing to Increase Statistical Power, 45 J. EXPERIMENTAL SOC. PSYCHOL. 867, 868 (2009) (noting that a participant in a study who does not pay close attention to questions may "not be effectively exposed to the manipulation, and would thus serve as a source of noise").

84. Witherspoon v. Illinois, 391 U.S. 510, 522 n.21 (1968).

85. See Quick Facts: Orange County, California, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/orangecountycalifornia/PST045217#viewtop> [<https://perma.cc/2APN-ZFZT>].

86. We counterbalanced the order in which the crime information was presented (i.e., before or after the clinical testimony) to rule out any possible order effects confounding the results. Thus, we technically had a 2 (Expert Diagnosis: defendant is disabled or defendant is not disabled) x 3 (Crime Content: presented before expert diagnosis, presented after expert diagnosis, or not presented at all) between subjects, fully crossed factorial design. However, it did not matter whether participants read the crime information before or after the clinical information; the difference between the order conditions was nonsignificant ( $p = .512$ ). For the sake of clarity in presenting the results, we collapsed across the order manipulation, which is acceptable because the cells are orthogonal. None of the reported results change whether the data are analyzed as a 2 x 3 factorial design (described previously) or a 2 x 2 design, as described in text.

87. CAL. PENAL Code 1376 (West, Westlaw through ch. 3 of 2018 Regular Sess.).

88. Id.

89. See Krystal Anne Hedge, Judicial Decision Making in Atkins Cases: Examining the Influence of Psychological Reports and Judicial Attitudes 139-54 (2015) (unpublished Ph.D. dissertation, University of Alabama), PDQT 3726077.

90. See Atkins v. Virginia, 536 U.S. 305 (2002).

91. See, e.g., Hall v. Florida, 134 S. Ct. 1986 (2014).

92. This is because 59 non-death-qualified individuals were distributed across six cells (i.e., about 10 individuals per cell), which was insufficient to affect the results.

93. The model was significant,  $\chi^2(3, N = 282) = 38.81, p < .001$ .

94.  $\text{Exp}(B) = 4.37$  (95% confidence interval (CI)) [1.80, 10.65],  $B = 1.48$ ,  $\text{Wald} = 10.55, p = .001$ .

95.  $\text{Exp}(B) = 2.49$  (95% confidence interval (CI)) [1.13, 5.48],  $B = 0.91$ ,  $\text{Wald} = 5.16, p = .023$ .

96.  $p = .772$ .
97.  $/ (3, N = 278) = 39.67, p < .001$ .
98.  $\text{Exp}(B) = 4.30$  (95% CI[1.41, 13.11],  $B = 1.46$ , Wald = 6.58,  $p = .010$ ).
99.  $\text{Exp}(B) = 5.94$  (95% CI[2.16, 16.38],  $B = 1.78$ , Wald = 11.86,  $p = .001$ ).
100.  $p = .350$ .
101. Responses to the six items were entered into a principal components analysis with a varimax rotation, which yielded a two-factor solution with Eigenvalues of 2.60 for culpability and 1.09 for mental ability (all other values less than 1). This model explained 61% of the cumulative variance, indicating that the six items tap two distinct latent constructs. Cronbach's  $\alpha$ s were calculated to determine each scale's reliability; the findings reveal a modest level of reliability for both the culpability scale ( $\alpha = .65$ ) and the mental ability scale ( $\alpha = .65$ ). For an accessible discussion of Psychometric Theory, see ROBERT F. DEVELLIS, SCALE DEVELOPMENT: THEORY AND APPLICATIONS 28 (Margaret H. Seawell et al. eds., 2d ed. 2003).
102.  $F(1, 280) = 11.45, p < .001, f = .040$  (as assessed by a two-way analysis of variance (ANOVA)).
103.  $F(1, 282) = 8.38, p = .004, r^2 = .029$ .
104.  $F(2, 280) = 24.55, p < .001, r^2 = .151$ .
105.  $F(2, 282) = 11.69, p < .001, f = .078$ .
106.  $p = .471$ .
107.  $p = .424$ .
108.  $/ (5, N = 274) = 115.61, p < .001$ .
109. ( $\text{Exp}(B) = 2.66$  (95% CI[1.91, 3.70]),  $B = 0.98$ , Wald = 33.56,  $p < .001$ ).
110. ( $\text{Exp}(B) = 1.54$  (95% CI[1.19, 1.98]),  $B = 0.43$ , Wald = 10.94,  $p = .001$ ).
111.  $p = .690$ .
112.  $p = .298$ .
113.  $p = .265$ .
114. Nicholas Scurich et al., Venire Jurors' Perceptions of Adversarial Allegiance, 21 Psychol. Pub. Pol'y & L. 161, 163 (2015).
115. See Brian H. Bornstein & Sean G. McCabe, Jurors of the Absurd? The Role of Consequentiality in Jury Simulation Research, 32 FLA. St. U.L. Rev. 443, 457-60 (2005).
116. Jonathan J. Koehler & John B. Meixner, Jury Simulation Goals, in THE PSYCHOLOGY OF JURIES 161, 176 (Margaret Bull Kovera ed., 2017).
117. On the importance of ecological validity when examining expert testimony, see Nicholas Scurich, What Do Experimental Simulations Tell Us About the Effect of Neuro/genetic Evidence on Jurors?, 5 J. L. & Biosciences 204 (2018).
118. Moore v. Texas, 137 S. Ct. 1039, 1053 (2017).
119. Id. at 1052-53.
120. See Jason A. Cairns & Jonathan J. Koehler, Cruel and Unusual Punishments: A Comparison of Public and Judicial Opinion, 54 JURIMETRICS J. 109, 110 (2014).

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