TOWARD A MORE SCIENTIFIC JURISPRUDENCE OF INSANITY

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For centuries, the insanity defense has been one of the most hotly debated issues in criminal law. Nonetheless, scientific research shows the insanity defense is rarely used and rarely successful. Furthermore, few defendants who plead insanity have been charged with murder, and defendants found insane pose less of a danger to society than defendants found guilty. Legislatures and courts have created five modern tests of insanity, several variants of these tests, and enacted several other reforms to improve insanity verdicts. However, scientific research shows different insanity tests do not affect insanity verdicts, and the other insanity reforms are also ineffective. Instead of improving insanity law, legislative and judicial reforms have created an irrational, illogical, unjust, and immoral insanity law that is not in the best interest of society or defendants with psychological disorders. This Article uses scientific research to explain why the public, legislators, and judges generally have erroneous attitudes and beliefs about the insanity defense and people with psychological disorders. It also uses scientific research to explain why insanity law is irrational, illogical, unjust, and immoral. Lastly, the Article delineates what legislatures, courts, and mental health organizations need to do to improve insanity law.

TABLE OF CONTENTS
INTRODUCTION ..................................................................................................... 47
I. A BRIEF HISTORY OF THE INSANITY DEFENSE ................................................... 48
II. KAHLER V. KANSAS ......................................................................................... 54
III. SCIENTIFIC RESEARCH ABOUT THE INSANITY DEFENSE .................................. 60
    A. Scientific Research Relevant to Perlin’s Insanity Myths ................ 60
       1. Myth 1: The Insanity Defense is Overused and Frequently Successful .................. 61

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2. Myth 2: Use of the Insanity Defense is Limited to Murder Cases
3. Myth 3: There is No Risk for Defendants Who Plead Insanity
4. Myth 4: NGRI Acquittees Are Quickly Released from Custody
5. Myth 5: NGRI Acquittees Spend Much Less Time in Custody Than Defendants Convicted of the Same Offenses

B. Additional Important Scientific Research About the Insanity Defense
   1. Prosecutors’, Defense Attorneys’, and Judges’ Knowledge, Attitudes, and Beliefs About Mental Health Defenses and Psychological Disorders
   2. How Recidivism Rates Compare for Insanity Acquittees and Criminal Offenders

C. The Effectiveness of Insanity Reforms
   1. What Effect Does Changing the Insanity Test Have on the Rate of Acquittals?
   2. Effects of Different Insanity Tests on Jurors
   3. Effects of Different Insanity Tests on Expert Witnesses
   4. Prohibiting Experts in Federal Court from Giving Their Opinion on the Ultimate Issue in Insanity Cases
   5. Changing the Burden and Standard of Proof
   6. The Guilty but Mentally Ill Verdict
   7. Abolition of the Insanity Defense

IV. REASONS FOR THE CURRENT STATE OF INSANITY LAW
   A. Media’s Portrayal of People with Psychological Disorders
   B. Sanism
      1. Definition and Reasons for Sanism
      2. Individual and Structural Sanism
      3. Sanism in the Legal System
   C. Judges and Legislators Have an Inadequate Understanding of Major Psychological Disorders Like Schizophrenia
   D. Ignoring Scientific Research About the Insanity Defense
      1. Motivated Reasoning
      2. Type 1 Thinking
      3. Moral Foundation Theory
      4. Irrational Thinking and Irrelevant Factors Affect Insanity Law
      5. Not Understanding Scientific Research
      6. Weaknesses of Scientific Research
The insanity defense is one of the most controversial issues in criminal law. It has been a subject of intense interest for the public, legal scholars, legislatures, and judges for centuries. Because of great public concern about the insanity defense, legislatures and courts have created five modern tests of insanity to "improve" insanity verdicts, which often meant trying to decrease insanity verdicts. However, scientific research shows the different insanity tests do not affect jury verdicts, and juries are hostile to the insanity defense. Despite considerable public concern about the insanity defense, the reality is that it is rarely used and rarely successful. Moreover, contrary to public belief, only a small percentage of defendants who plead insanity have been charged with murder.

Research also shows that defendants who are found not guilty by reason of insanity (NGRI) will likely not spend significantly less time in a psychiatric hospital than they would have spent in prison if they had been convicted of a crime. In fact, they may spend significantly more time in a psychiatric hospital than they would have spent in prison had they been convicted of a crime. Additionally, NGRI defendants are significantly less likely to recidivate than defendants who are convicted of a crime, including NGRI defendants who committed murder.

Insanity is generally a defense of last resort. Some defendants, who were insane at the time of the crime, do not plead insanity because they do not want the stigma and consequences of being labeled mentally ill. They also fear they will spend more time in a psychiatric hospital than they would spend in prison if convicted of a crime. As Charles Ewing, a prominent forensic psychologist, attorney, and law professor tells his students, "you have to be crazy to plead insanity."

Under current insanity law in the United States, it is very difficult, and in some cases virtually impossible, for defendants to be found NGRI, even if they were not morally responsible for their crimes. For example, today, in several states, both Daniel

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2. See infra Section I.
3. Id.
4. See infra Part III.C.1.
5. See infra Part III.A.1.
7. See infra Part III.A.5.
8. Id.
11. Id.
12. Id.
14. See infra Section III.
McNaughton, who because of paranoid schizophrenia attempted to assassinate the British prime minister, and Andrea Yates, who drowned her five children to save them from the devil, would be found guilty of murder.\textsuperscript{15} As these examples illustrate, insanity law in the United States is illogical, irrational, unjust, and immoral.\textsuperscript{16} It is also not in the best interest of society or defendants with psychological disorders.\textsuperscript{17} Yet, legislatures and courts, including the United States Supreme Court, have failed to address the problems with insanity law.\textsuperscript{18}

This Article explains why the public, legislators, and judges have erroneous attitudes and beliefs about the insanity defense, and what legislatures, courts, and mental health organizations need to do to improve insanity law. Section I of this Article presents a brief history of the insanity defense. Section II discusses \textit{Kahler v. Kansas},\textsuperscript{19} the Supreme Court’s latest decision about the insanity defense. Section III presents scientific research about the insanity defense. Section IV of the Article explains the reasons for the current state of insanity law. Finally, the Article discusses how legislators, judges, and mental health organizations can improve insanity law.

I. A BRIEF HISTORY OF THE INSANITY DEFENSE

There are two key facts to keep in mind about the history of the insanity defense. First, sensational cases, such as the Daniel McNaughton and John Hinckley cases, have frequently shaped the insanity defense.\textsuperscript{20} Second, the insanity defense has existed for thousands of years in western civilizations.\textsuperscript{21} For example, the Hebrew scriptures from the sixth century BCE stated that the insane would not be held responsible for their crimes.\textsuperscript{22} Similarly, the ancient Greeks excused defendants in some cases from criminal
responsibility if they were insane. And, in the sixth century, Rome’s Code of Justinian held the insane were not responsible for their crimes. In England, total and complete insanity became a defense to a crime during the reign of Edward III (1327–1377).

In the thirteenth century, Henry Bracton, in his treatise, On the Laws and Customs of England, stated that children, animals, and madmen lacked the capacity to form the intent necessary to commit a crime. Therefore, they should not be held responsible for their crimes. Bracton’s definition of insanity became the basis for the “wild beast” test of insanity, which Judge Tracy enunciated in 1723 in Rex v. Arnold. “It must be a man that is totally deprived of his understanding and memory, and does not know what he is doing, no more than an infant, than a brute or a wild beast, such a one is never the object of punishment.”

Another early English test of insanity was the “good and evil” test, which was used in Rex v. Ferrers in 1760. In that case, the jury was instructed to find the defendant insane if they lacked “competent use of [their reason], sufficient to have restrained those passions which produced the crime; [and] if there be [insufficient] thought and design; . . . to discern the difference between moral good and evil.”

Then in 1843, Daniel McNaughton, who was suffering from paranoid schizophrenia, attempted to assassinate the British Prime Minister Robert Peel because he believed Peel and his Tory Party were persecuting him. McNaughton mistakenly killed Peel’s secretary, Edmund Drummond, whom he shot in the back. The jury found McNaughton insane after nine medical witnesses testified that he was insane. The London newspapers, the public, the House of Lords, and Queen Victoria were outraged by the verdict. Legislation was proposed, and the House of Lords summoned fifteen

24. Fahey et al., supra note 21, at 812.
25. Id.
26. Alden, supra note 23, at 35; Fahey et al., supra note 21, at 812.
28. 16 How. St. Tr. 695 (1724); Fahey et al., supra note 21, at 812–13.
30. 19 How. St. Tr. 886 (1760).
31. Anthony Platt & Bernard L. Diamond, The Origins of the “Right and Wrong” Test of Criminal Responsibility and Its Subsequent Development in the United States: An Historical Survey, 54 Cal. L. Rev. 1227, 1236 (1966) (“In the eighteenth century, the ‘good and evil’ test was regularly [sic] used in both insanity and infancy cases. In Rex v. Arnold (1724), the jury was instructed that the defendant was not to be held insane if he ‘was able to distinguish whether he was doing good or evil . . . .’ The same test was used in Rex v. Ferrer (1760), Parker’s Case (1812), Bellingham’s Case (1812), Rex v. Bowler (1812), Martin’s Case (1829), Offord’s Case (1831), and Oxford’s Case (1840).” (omission in original) (footnotes omitted)).
33. Arval A. Morris, Criminal Insanity, 43 Wash. L. Rev. 583, 592 (1968); H.R. Rollin, Crime and Mental Disorder Daniel McNaughton, a Case in Point, 50 Medico-Legal Soc’y 102, 103 (1982).
34. Morris, supra note 33, at 592.
35. Id. at 593.
The McNaughton test, as do all modern insanity tests, evaluates if the defendant was insane at the time of the crime and requires that the defendant suffered from a mental disease or defect. Courts have struggled to come up with a workable definition of mental disease or defect. Another requirement of the McNaughton test is that the defendant did not “know the nature and quality of the act [they were] doing” or that they did not “know” what they were doing was “wrong.” The way the McNaughton test interprets “know” has been widely criticized because it requires only intellectual awareness of the defendant’s criminal behavior and not legal and moral awareness.

Even defendants with a major psychological disorder can have an intellectual awareness of their criminal behavior.

The first of the two prongs of the McNaughton test asks if the defendant knew the “nature and quality” of their actions at the time of the crime. The first prong is based on the “wild beast” test of insanity described earlier. “Nature of the act” means did the defendant know what they were doing at the time of the crime (e.g., did McNaughton know he was firing a gun when he attempted to assassinate the prime minister, or because of mental disease or defect, did he think, for example, he was squeezing a pickle?). “Quality of the act” means did the defendant know the physical consequences of their criminal act at the time of the crime (e.g., did McNaughton know that bullets can kill people?).

37. Id. at 44–46; Morris, supra note 33, at 592–94.
38. ALDEN, supra note 23, at 46.
39. Fahey et al., supra note 21, at 815 (alteration in original) (quoting MICHAEL L. PERLIN & HEATHER ELLIS CUCOLO, MENTAL DISABILITY LAW: CIVIL AND CRIMINAL § 14-1.2.2 (3d ed. 2017)).
40. For example, McNaughton provides: “[T]o establish a defense on the ground of insanity, it must be proved that, at the time of the committing of the act . . . .” Id. (omission in original) (alteration in original) (emphasis added).
42. Fahey et al., supra note 21, at 815.
43. Ranade, supra note 41, at 1397.
45. Fahey et al., supra note 21, at 815.
A defendant’s insanity defense is almost always based on the second prong of the McNaughton test. The second prong asks if the defendant knew their actions were “wrong” at the time of the crime. Some scholars believe the second prong derives from the “good and evil” test of insanity mentioned previously. The judges who created the McNaughton test did not clearly define wrongfulness. Courts have interpreted wrongfulness in three ways: (1) the defendant did not know their criminal behavior was illegal (i.e., the illegality standard); (2) the defendant did not know their criminal behavior violated public standard of morality even if they knew that their criminal behavior was illegal (i.e., the objective morality standard); and (3) the defendant subjectively believed their criminal behavior was moral even if they knew that their criminal behavior violated the law and public standards of morality (i.e., the subjective moral standard). If a defendant satisfies either of the two prongs of the McNaughton test of insanity, the defendant is NGRI.

The McNaughton test is the first of five modern tests of insanity and is currently the most common insanity test in the United States. The other four modern insanity tests are: (1) the irresistible impulse test; (2) the product test; (3) the American Law Institute (ALI) test; and (4) the Insanity Defense Reform Act of 1984 (IDRA). The McNaughton test is a cognitive test of insanity. It asks if there was something wrong with the defendant’s thinking at the time of the crime.

In contrast, the second modern test of insanity, the irresistible impulse test, is a volitional test of insanity. It provides that a defendant is NGRI if the defendant could not control their behavior at the time of the crime because of mental disease or defect. For example, in Smith v. United States, the court defined the irresistible impulse as follows: “This impulse must be such as to override the reason and judgment and obliterate the sense of right and wrong to the extent that the accused is deprived of the power to choose between right and wrong.” Under the irresistible impulse test, a
defendant will be found NGRI even if the defendant knew at the time of the crime the nature and quality of their actions and knew that their actions were wrong.66

The irresistible impulse test proved problematic because juries had trouble distinguishing between whether the defendant’s impulse to commit the crime was irresistible or whether the defendant just failed to resist the impulse to commit the crime.67 Accordingly, some jurisdictions modified the irresistible impulse test with “the policeman at the elbow test.”68 This test asks if the defendant would have committed the crime even if a police officer were standing right next to them during the crime.69

The product test is the third modern test of insanity.70 It provides “that an accused is not criminally responsible if his unlawful act was the product of mental disease or . . . defect.”71 In 1954, the D.C. Circuit Court of Appeals adopted the product test in Durham v. United States.72 The court believed the product test would give mental health professionals greater latitude to discuss the causes of a defendant’s behavior.73 Consequently, it would improve insanity verdicts.74 The product test, however, has been criticized for being too broad and for not including important legal criteria for evaluating insanity, such as impairment of reason and control.75 Therefore, its critics assert, the test leaves jurors completely dependent on expert opinion.76 There are also concerns the test significantly increases the number of insanity verdicts.77

After eighteen unhappy years of using the product test, the D.C. Circuit Court of Appeals, in United States v. Brawner,78 adopted the insanity test of the American Law Institute, the fourth modern test of insanity.79 The ALI test states, “[a] person is not responsible for criminal conduct if at the time of such conduct as a result of mental disease or defect he lacks substantial capacity either to appreciate the criminality [wrongfulness] of his conduct or to conform his conduct to the requirements of law.”80 The ALI test also contains a caveat paragraph that prohibits a defendant with “an abnormality manifested only by repeated criminal or otherwise antisocial conduct” from being used as the underlying “mental disease or defect.”81

66. ALDEN, supra note 23, at 55.
67. Id.; see also Hamilton, supra note 46, at 14.
69. Id.
70. See Ranade, supra note 41, at 1380.
72. 214 F.2d 862 (D.C. Cir. 1954); see also Fahey et al., supra note 21, at 817.
73. ALDEN, supra note 23, at 74.
74. See id.
76. ALDEN, supra note 23, at 74.
77. ALDEN, supra note 23, at 75; see also Margolis, supra note 75, at 397.
79. Id. at 973.
81. Id. at § 4.01(2).
The ALI test, like the McNaughton test, contains two insanity prongs. The first prong is a modified version of McNaughton’s wrongfulness test of insanity. Its second prong is a modified version of the irresistible impulse test. The ALI test also differs from the McNaughton test in several other important ways. First, the ALI test uses “appreciate” rather than “know.” Unlike “know,” “appreciate” acknowledges the role emotions play in cognitions. Second, the ALI test is not an all-or-nothing test like McNaughton (i.e., McNaughton requires a total lack of capacity). Instead, the ALI test only requires that the defendant lacks “substantial capacity” to reason or control their behavior at the time of the crime to be found NGRI. Lastly, because the ALI test uses a variant of the irresistible impulse test rather than the wild beast test, unlike McNaughton, it is both a cognitive and a volitional test of insanity.

However, the popularity of the ALI test was substantially diminished when, in 1982, John Hinckley was found NGRI for attempting to assassinate President Reagan. The Hinckley NGRI verdict produced bipartisan criticism and public outrage. Because of public outrage over the Hinckley verdict, Congress enacted the Insanity Defense Reform Act of 1984, the fifth and final modern test of insanity. The test provides:

(a) Affirmative Defense. It is an affirmative defense to a prosecution under any Federal statute that, at the time of the commission of the acts constituting the offense, the defendant, as a result of a severe mental disease or defect, was unable to appreciate the nature and quality or the wrongfulness of his acts. Mental disease or defect does not otherwise constitute a defense.

(b) Burden of Proof. The defendant has the burden of proving the defense of insanity by clear and convincing evidence.

The IDRA test is a variant of the McNaughton test of insanity. The test made several other major changes to federal insanity law, including: (1) eliminating the volitional test of insanity; (2) shifting the burden of proof to the defendant to prove, by clear and convincing evidence, that he was insane at the time of the crime; (3)
prohibiting experts from offering an opinion on the ultimate issue (i.e., whether the defendant was insane at the time of the crime); and (4) requiring a “severe” mental disease or defect to assert the insanity defense.

After the Hinckley verdict, thirty-six states modified their insanity laws. Several states abolished the insanity defense as an affirmative defense. Other states shifted the burden of proof of insanity to the defendant, modified their insanity standard, or adopted the verdict of guilty but mentally ill (GBMI). These variations in insanity laws among states are consistent with what the United States Supreme Court has long held: states have broad discretion to determine their insanity laws, including the insanity test they use. The Court recently reaffirmed this position in Kahler v. Kansas when it held that Kansas’s insanity law did not violate due process even though it permits defendants who are not morally responsible for their crimes to be found guilty. The next Section discusses that decision.

II. KAHLER V. KANSAS

The United States Supreme Court’s most recent decision on the insanity defense, Kahler v. Kansas, raises two important questions. First, was the case correctly decided? Second, is the Kahler decision in the best interest of society and congruent with scientific research about the insanity defense? Unfortunately, the answer to both these questions is no. As the discussion below demonstrates, the Court in Kahler not only failed to address the existing problems with the insanity defense but it also unwittingly gave states the right to abolish the insanity defense altogether.

The case arose out of a “terror crime.” Karen Kahler, James Kahler’s wife, filed for divorce in early 2009 and moved out of their home with their two daughters and son. Over the following months, Karen Kahler filed a battery claim against James Kahler that resulted in his arrest and conviction. He also lost his job. As time passed,

99. 18 U.S.C. § 17(a); Carroll, supra note 87, at 189.
100. Fahey et al., supra note 21, at 824.
101. Id.
102. Id.
104. Kahler, 140 S.Ct., at 1037.
106. Id.
107. Id. at 425 (“The Kahler opinion could have been worse. That is the best that I can say for it. We now must wait to see whether legislatures that retain a true insanity defense will use this case as an opportunity to repeal it, and whether they will push the envelope further to see how far they may constitutionally go to bar mental health testimony.”); see also Eric Roytman, Kahler v. Kansas: The End of the Insanity Defense?, 15 DUKE J. CONST. L. & PUB. POL’Y SIDE BAR 43, 43–44 (2020) (“A decision to uphold Kansas’s statute could be interpreted as a green light for other states to abolish a right that was firmly entrenched in common law long before the Court even existed.”).
108. Kahler, 140 S. Ct. at 1026.
109. Id.
111. Id.
James Kahler became more and more angry and depressed. Then, on Thanksgiving weekend in 2009, he drove to his ex-wife’s grandmother’s house, where his family was staying. He shot his ex-wife twice, but he allowed his son to escape. He then killed his ex-wife’s grandmother and both his daughters. The next day, he surrendered to the police and was charged with capital murder.

Before trial, James Kahler filed a motion, asserting Kansas “unconstitutionally abolished the insanity defense by allowing the conviction of a mentally ill person who cannot tell the difference between right and wrong.” Therefore, he argued, Kansas’s insanity law violated the Due Process Clause of the Fourteenth Amendment. The trial court denied his motion but stated that Kahler could present evidence at trial showing he could not form the intent to kill because of a psychological disorder.

In preparation for trial, two forensic psychiatrists evaluated Kahler. Both the defense and prosecution experts agreed that, at the time of the crimes, he suffered from “obsessive-compulsive personality disorder, major depressive disorder, and borderline, paranoid, and narcissistic personality tendencies.” The defense expert also concluded that, at the time of the crimes, Kahler’s depression was so severe that he “did not make a genuine choice to kill his family members.” Instead, he “felt compelled and . . . basically for . . . at least that short period of time completely lost control of his faculties.”

At trial, the court instructed the jury that it could consider Kahler’s psychological disorder “only to determine whether he had the intent to kill.” The jury found him guilty and imposed the death penalty. Kahler appealed. On appeal, he again challenged Kansas’s insanity law, asserting it violated due process. The Kansas Supreme Court affirmed his conviction, concluding due process does not require states to adopt a specific insanity test. Kahler appealed the decision of the Kansas Supreme Court to the United States Supreme Court.

Kansas law provides that it is “a defense to a prosecution under any statute that the defendant, as a result of mental disease or defect, lacked the culpable mental state

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113. Id.
114. Id.
115. Id. at 1027.
116. Id.
117. Id. (internal quotations marks omitted).
118. Id.; U.S. CONST. amend. XIV § 1.
119. Id.
121. Id. at 10–11.
122. Id. at 11.
123. Id. (omissions in original) (internal quotation marks omitted).
124. Id.
125. Id.
126. Id.
128. Id.
129. Id.
required as an element of the offense charged.” 130 A defendant may thus not use evidence of a psychological disorder to show that their capacity to appreciate the wrongfulness of their conduct or to conform their conduct to the requirement of the law was substantially impaired. 131 However, Kansas law does give a defendant wide latitude to introduce psychological evidence during the sentencing phase in an attempt to lessen their punishment. 132 At sentencing, a defendant may thus present evidence that, as a result of a psychological disorder, the defendant could not comprehend either the moral wrongfulness or the criminality of their conduct. 133 Kansas law also permits a judge to commit a defendant to a mental health facility rather than to prison. 134

In his appeal to the United States Supreme Court, Kahler challenged the constitutionality of Kansas’s insanity law, arguing due process required Kansas to “provide an insanity defense that acquits a defendant who could not ‘distinguish right from wrong’ when committing his crime.” 135 In a 6-3 decision, the Court upheld the constitutionality of Kansas’s insanity law, concluding due process does not require states to use a moral incapacity test of insanity. 136

Justice Kagan, writing for the majority, explained that for Kahler to prevail on his claim, he had to prove that Kansas’s insanity law offended “some principle of justice so rooted in the traditions and conscience of our people as to be ranked as fundamental.” 137 To make this determination, the Court relied primarily on “historical practice.” 138 The Court noted the historical record of the insanity defense was “complex—even messy,” showing a variety of insanity tests, with some constituting moral incapacity tests of insanity and others using a mens rea approach. 139 Furthermore, the Court explained, some states have transformed the wrongfulness test of McNaughton from a moral test of insanity to an illegality test of insanity. 140 Therefore, the Court concluded, the historical record did not unambiguously show the moral test of insanity is fundamental. 141

In reaching its conclusion, the Court also relied on the paramount principle that states have broad discretion in determining their criminal laws and setting “standards of criminal responsibility.” 142 The majority pointed out that “[n]owhere has the Court hewed more closely to that view than in addressing the contours of the insanity defense.” 143 Moreover, because knowledge of psychological disorders is ever evolving,

130. Id. at 1025. Kansas adopted the mens rea approach to mental illness to replace its McNaughton test of insanity in 1995. Dressler, supra note 15, at 409. It did so in response to “public concerns generated by a few highly visible cases involving the insanity defense.” Spring, supra note 20, at 44.

131. Kahler, 140 S. Ct. at 1025.

132. Id. at 1026.

133. Id.

134. Id.; see also Dressler, supra note 15, at 410.

135. Kahler, 140 S. Ct. at 1027.

136. Id.

137. Id. (quoting Leland v. Oregon, 343 U.S. 790, 798 (1952)).

138. Id. at 1029.

139. Id. at 1032.

140. Id. at 1035–36.

141. Id. at 1036 (citing Clark v. Arizona, 548 U.S. 735, 779 (2006)).

142. Id. at 1028, 1037 (quoting Powell v. Texas, 392 U.S. 514, 533 (1968)).

143. Id. at 1028.
the Court did not want to "reduce 'experimentation, and freeze [the] dialogue between law and psychiatry into a rigid constitutional mold.'"\textsuperscript{144} The choice of an insanity test, the Court explained, is not just a question of science; it is also a question of policy.\textsuperscript{145} Consequently, the choice of an insanity standard is best left to the states.\textsuperscript{146}

The Court noted its conclusion was consistent with its prior decisions, which have held that due process does not require states to adopt a particular insanity test.\textsuperscript{147} In the majority’s opinion, Kansas’s approach to insanity claims satisfied due process.\textsuperscript{148} First, the Court pointed out, Kansas has an insanity defense that can negate criminal liability.\textsuperscript{149} Second, Kansas permits a defendant to offer mental health evidence during sentencing, including evidence that shows the defendant did not know their actions were morally wrong at the time of the crime.\textsuperscript{150} That evidence can persuade the trial judge that the defendant should be sent to a psychiatric hospital rather than to prison.\textsuperscript{151} Therefore, Kansas’s insanity law can result in a defendant receiving the same treatment as they otherwise would have received in a state that uses a moral insanity test.\textsuperscript{152} Because Kansas allows mental health evidence at both trial and sentencing, and because due process does not require states to adopt a particular insanity test, the Court concluded Kahler could not prevail on his claim.\textsuperscript{153}

Justice Breyer, along with Justices Ginsburg and Sotomayor, dissented.\textsuperscript{154} In his dissent, Justice Breyer asserted that Kansas’s insanity law produces arbitrary and unjust results.\textsuperscript{155} To illustrate his point, Justice Breyer provided the following example: a defendant with a major psychological disorder kills a man.\textsuperscript{156} If the defendant believed, because of his psychological disorder, that the man was a dog, then he would be found not guilty under Kansas law.\textsuperscript{157} However, if, because of his psychological disorder, the defendant believed that a dog ordered him to kill the man, he would be found guilty under Kansas law.\textsuperscript{158}

By eliminating moral capacity from its insanity law, the dissent argued, Kansas violated due process\textsuperscript{159} because, for a defendant to be guilty of a crime, due process requires more than the mere intent to commit a crime and the ability to carry out the intent.\textsuperscript{160} It also requires a defendant to have “sufficient mental capacity to be held

\begin{itemize}
  \item \textsuperscript{144} Id. (citing Powell, 392 U.S. at 536–37 (alteration in original)).
  \item \textsuperscript{145} Id. at 1028–29.
  \item \textsuperscript{146} Id. at 1028.
  \item \textsuperscript{147} Id. at 1028.
  \item \textsuperscript{148} Id. at 1030.
  \item \textsuperscript{149} Id.
  \item \textsuperscript{150} Id. at 1031.
  \item \textsuperscript{151} Id.
  \item \textsuperscript{152} Id.
  \item \textsuperscript{153} Id. at 1037.
  \item \textsuperscript{154} Id. at 1038 (Breyer, J., dissenting).
  \item \textsuperscript{155} Id. at 1039.
  \item \textsuperscript{156} Id. at 1038.
  \item \textsuperscript{157} Id.
  \item \textsuperscript{158} Id.
  \item \textsuperscript{159} Id. at 1039.
  \item \textsuperscript{160} Id. at 1044.
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morally responsible for his actions.” The dissent further explained that, though some states have experimented with different versions of the McNaughton standard, their purpose in doing so was to expand, rather than contract, the scope of insanity law. These states, the dissent noted, did not seek to alter the historical requirement that a defendant must be morally responsible for a crime to be punished.

The dissent also stated there is no “meaningful difference in practice” between legal and moral wrongs. Past cases have suggested that if an act is illegal, it is usually reasonable to infer that morality also forbids the act. Therefore, because some states interpret wrongfulness to mean illegality, this interpretation does not alter the conclusion that due process requires moral responsibility for a defendant to be guilty of a crime.

The dissent viewed its analysis as consistent with the Court’s prior rulings, which have held that due process did not require states to adopt a particular insanity test. The difference between these prior decisions and the current case is that, by eliminating the moral incapacity standard from its insanity law, Kansas effectively abrogated the very essence of the insanity defense. Therefore, while states have broad discretion to determine their insanity law, Kansas’s approach to insanity violates due process according to the dissent.

Our analysis of the Court’s decision in Kahler produces two important conclusions. First, as the dissent pointed out, the majority erred in concluding Kansas’s insanity law did not violate due process. Second, the Court’s decision is contrary to both public policy and scientific research. The dissent correctly stated that mens rea, at common law, meant the defendant was morally blameworthy for the crime. In contrast, in modern times, mens rea merely means the defendant has the requisite mental state for the crime. The majority thus erred in stating that, historically, a variety of insanity tests existed, some of which did not require moral culpability.

Furthermore, as the historical record indicates and the majority admitted, for centuries, insanity law has held that insane defendants are not responsible for their

161. Id. at 1039.
162. Id. at 1045.
163. Id.
164. Id. at 1046.
165. Id.; see also Morris, supra note 33, at 604 (“Because the insanity defense is usually pleaded only when fundamental crimes are involved and because fundamental crimes are both legally and morally wrong (according to society’s morals), the ‘legal’ test and the ‘moral’ test are almost identical in actual operation.”); Anthony J. Saunders, Defense of Insanity: The Questionable Wisdom of Substantive Reform, 42 U. Toronto Fac. L. Rev. 129, 138 (1984); Model Penal Code § 4.01, Explanatory Note 164 (Am. L. Inst. 1985).
166. Kahler, 140 S. Ct. at 1046 (Breyer, J., dissenting).
167. Id. at 1049.
168. Id. at 1049–50.
169. Id.
170. Dressler, supra note 15, at 416 (“This historical analysis is wrong or, at least, overstated. The Court is attaching a modern understanding of ‘mens rea’ to the term rather than the one used centuries ago by the scholars it quotes. In early years, the term ‘mens rea’ simply meant that an actor committed the offense with a ‘morally blameworthy state of mind.’ Mens rea, in this sense, meant that the defendant was morally culpable in committing the crime.” (citations omitted)); see also Roytman, supra note 107, at 55.
171. Kahler, 140 S. Ct. at 1042 (Breyer, J., dissenting).
172. Id.
2022] TOWARD A MORE SCIENTIFIC JURISPRUDENCE OF INSANITY 59

crimes. But that is not what Kansas’s law provides. Kansas’s law is a “failure-of-proof defense,” not an insanity defense because it does not excuse a crime. By allowing insane defendants to be punished for crimes, even when they lack the capacity to know what they were doing was wrong, Kansas’s law violates principles of justice and morality that have been incorporated into the law for centuries.

In addition, ever since the famous United States v. Carolene Products Co., the Court has recognized its duty to protect “discrete and insular minorities” from overbroad criminal statutes that increase discrimination against them because the political process has malfunctioned. Because state legislatures are acutely sensitive to the public’s irrational fear of the insanity defense and people with psychological disorders, the Court should have exercised its duty in Kahler to correct the malfunctioning political process that created the Kansas law.

Moreover, the Kansas Supreme Court itself repeatedly acknowledged the purpose of the Kansas law was to abolish the insanity defense. However, the insanity defense has existed in western civilizations for thousands of years because of the long-standing and core belief that it is immoral to punish people who are not responsible for their crimes. Consequently, the insanity defense is a “principle of justice so rooted in the

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173. Id. at 1030.
174. Dressler, supra note 15, at 418–19 (“The majority conceded that for centuries ‘jurists and judges’ have recognized insanity, ‘however defined,’ as ‘relieving responsibility for a crime.’ This is the critical point. This is the question the Court should have asked and answered. It does violate due process to deny a defendant, such as James Kahler, an opportunity to prove that, as a result of mental illness, he should be relieved of responsibility for his actions. The key word here is ‘responsibility.’ Where the majority goes wrong is by equating a statute that allows Kahler to show that, as a result of a mental disorder, he did not intend to kill his victims, with a claim of non-responsibility for his actions due to insanity. The former is not an excuse-by-insanity but a failure-of-proof defense, conceptually similar to, for example, a claim of mistake of fact by a perfectly sane hunter who shoots a human being believing it is a deer. That hunter is not claiming he is not responsible for his actions; he is asserting that his mistake negates a charge of intent-to-kill a human being . . . .” (emphasis in original)).
175. See supra Section II.
176. 304 U.S. 144, 152 n.4 (1938).
177. Fourteenth Amendment — Due Process Clause — Insanity Defense — Kahler v. Kansas, supra note 20, at 535 (“Since the famous 1938 Carolene Products footnote four, the Court has recognized this duty to reinforce the legislative process, a duty that it has upheld in cases such as those voiding overbroad criminal statutes that can amplify discrimination against minority groups. Criminal defendants who plead the insanity defense are one such ‘discrete and insular minorit[y]’ requiring judicial protection, especially given the long history of state legislatures’ sensitivity to public opinion — and public ignorance — about mentally ill defendants.” (alteration in original)).
178. Id.
179. Roytman, supra note 107, at 55 (“Second, the Kansas legislature quite literally passed the statute in question for the purpose of eliminating the insanity defense. Third, the Kansas Supreme Court has repeatedly identified this statutory scheme for what it is—an abolition of the insanity defense.”).
180. See supra Section I.
traditions and conscience of our people as to be ranked as fundamental.”

Therefore, the insanity defense cannot be abolished.182

Second, the Court’s decision in Kahler is poor public policy and contrary to scientific research. Finding defendants NGRI, rather than guilty, when they commit a crime because of a psychological disorder is in the best interest of society and defendants with psychological disorders.183 Kahler also violates the basic principle that the criminal law does not punish defendants who are not morally responsible for their crimes.184 Punishing defendants who are not blameworthy is not only morally repugnant, but it also does not serve three of the primary purposes of criminal law: retribution, rehabilitation, and deterrence.185 And, as the next Section delineates, a law that punishes defendants who lack the capacity to know what they were doing is wrong is contrary to scientific research about the insanity defense.186

III. SCIENTIFIC RESEARCH ABOUT THE INSANITY DEFENSE

This Section discusses scientific research about the insanity defense. Part III.A discusses the scientific research relevant to Michael Perlin’s myths about the insanity defense. Part III.B reviews the scientific research about two other topics that are essential to understanding insanity law and the risk insanity acquitted pose to society: judges’ and attorneys’ knowledge, attitudes, and beliefs about mental health defenses and psychological disorders, and the recidivism rates for insanity acquitted and criminal offenders. Lastly, Part III.C examines the effectiveness of legislative and judicial reforms of the insanity defense, which include: (1) changing the insanity test; (2) not permitting experts to give ultimate issue testimony (i.e., experts cannot state whether the defendant was insane at the time of the crime); (3) changing the burden and standard of proof; (4) adding the GBMI verdict; and (5) abolishing the insanity defense.

A. Scientific Research Relevant to Perlin’s Insanity Myths

According to Michael Perlin, myths about the insanity defense have substantially contributed to the problems with insanity law.187 Six of these myths are discussed below.

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183. See infra Section III.
184. See infra Part IV.C.
185. See infra Part IV.C.
186. Fahey et al., supra note 21, at 806–07.
1. Myth 1: The Insanity Defense is Overused and Frequently Successful

Research shows the public believes the insanity defense is overused, frequently successful, and a loophole that permits guilty defendants to go free. In fact, the opposite is true. For example, respondents to a survey estimated that defendants use the insanity defense in 37% of criminal cases and that the defense is successful 44% of the time. But a study of almost one million felony indictments from forty-nine counties in eight states, revealed that defendants actually used the insanity plea in only 0.9% of the cases and the defense was successful, on average, in 26% of those cases. This means the survey respondents estimated that, for every 1,000 felony cases, there are 370 insanity pleas, resulting in 163 NGRI verdicts. In fact, the study showed that, for every 1,000 felony cases, defendants raised the insanity defense in only nine cases, and the defense was successful in only about two of those cases. In short, the public overestimated the number of insanity acquittals by eighty-one times the actual number.

More recent research on the use of the insanity defense in New York State shows that, between 2013 and 2017, only 241 (.0002%) defendants entered an insanity plea out of 1,375,096 felony convictions. During the same timeframe, only eleven (.0006%) defendants were found NGRI out of 19,041 felony and misdemeanor trials. Similarly, between 2007 and 2016, in just six (.001%) of approximately 5,000 murder trials was the defendant found NGRI. Lastly, nationally, when insanity is disputed at trial, “only an estimated one-twelfth of [one] percent of contested felony cases” result in an NGRI verdict.

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189. Silver et al., supra note 188, at 67.
190. The success rate of NGRI pleas varied among the eight states in this study from 7–87%. Id. at 67; George Blau, Hugh McGinley & Richard Pasewark, Understanding the Use of the Insanity Defense, 49 J. CLINICAL PSYCHI 435 (1993).
191. Silver et al., supra note 188, at 67.
192. Id. at 67–68.
193. Id.
195. Fahey et al., supra note 21, at 807; see also Stuart M. Kirschner & Gary J. Galperin, Psychiatric Defenses in New York County: Pleas and Results, 29 J. AM. ACAD. PSYCHIATRY L. 194, 195 (2001).
196. Fahey et al., supra note 21, at 807.
2. Myth 2: Use of the Insanity Defense is Limited to Murder Cases

The public also believes the insanity defense is used almost exclusively in murder cases. However, a study of almost one million felony indictments from forty-nine counties in eight states revealed that, of the 8,953 defendants who plead insanity, only 14.3% were accused of murder. Similarly, in a study of NGRI defendants in Missouri conducted between 1979 and 2007, only 13.3% of the defendants who plead insanity were charged with murder. And a study in Oregon of NGRI defendants revealed only 8% of the defendants had been charged with murder or attempted murder. In sum, most insanity cases do not involve murder. In addition, about 35% of all insanity pleas involve nonviolent and mostly trivial crimes, such as uttering threats, breach of probation, mischief, and possession of stolen property.

3. Myth 3: There is No Risk for Defendants Who Plead Insanity

Research indicates defendants who unsuccessfully plead insanity may spend a longer time in prison than convicted felons who do not plead insanity. Research further shows defendants who unsuccessfully plead insanity face a greater chance of being incarcerated than defendants who do not plead insanity. For instance, one study revealed the median time male felons in Erie County, New York, spent in prison was 775 days while the median time spent in prison for male felons who unsuccessfully plead insanity was 949 days. This is a 22% increase in days spent in prison (174 days) for defendants who unsuccessfully plead insanity compared to convicted felons who did not plead insanity. The same study also found that 11% of felony arrests resulted in prison time while 67% of defendants who unsuccessfully plead insanity were either hospitalized or incarcerated.

Another study in New Jersey found that defendants who unsuccessfully plead insanity received significantly longer sentences than defendants charged with the same crimes who did not plead insanity. The defendants charged with serious offenses

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199. Silver et al., supra note 188, at 66.
202. Lymburner & Roesch, supra note 201, at 216.
203. Id.
204. Jeraldine Braff, Thomas Arvanites & Henry J. Steadman, Detention Patterns of Successful and Unsuccessful Insanity Defendants, 21 Criminology 439, 446 (1983).
205. Id. at 445.
206. Id.
207. Id. at 446.
208. Rodriguez et al., supra note 1, at 402.
against persons who unsuccessfully plead insanity were sentenced on average to 372 months in prison; the defendants charged with the same offense who did not plead insanity were sentenced on average to only 165.5 months in prison.\footnote{Id. at 401–02.} Perlin states one reason the insanity defense poses a risk to defendants who unsuccessfully assert it is because people believe that defendants who plead insanity but are found guilty must have been feigning insanity.\footnote{Id.} Therefore, they should be punished for their deception.\footnote{Id.}

4. Myth 4: NGRI Acquittees Are Quickly Released from Custody

The public believes NGRI acquittees are quickly released back into the community.\footnote{Silver et al., supra note 188, at 65.} When a study of almost one million felony indictments from forty-nine counties in eight states was compared to a study of public opinion about the insanity defense, the results indicated the public underestimated the percentage of NGRI acquittees who are sent to a psychiatric hospital by about 34% (50.6% vs. 84.7%).\footnote{Id. at 68.} The public also overestimated the percentage of NGRI acquittees who are released into the community after an NGRI verdict (25.6% vs. 15.3%).\footnote{Id.} Moreover, if NGRI acquittees who were conditionally released are excluded from the definition of NGRI acquittees who are released because they are still subject to judicial control, then the magnitude of the public’s error is even greater (25.6% vs. 1.1%).\footnote{Id.}

The same study also obtained release data on defendants in seven of the eight states who asserted the insanity defense and were either found NGRI or guilty.\footnote{Id. at 382–83.} In all five of the states where there was a significant difference, defendants who were convicted of a crime after asserting the insanity defense were significantly more likely to be released after the verdict than defendants who were found NGRI.\footnote{Id.}

A study of NGRI acquittees in California further found that only 1% of NGRI acquittees were released, 4% were conditionally released, and the remaining 95% were hospitalized.\footnote{Michael L. Perlin, Myths, Realities, and the Political World: The Anthropology of Insanity Defense Attitudes, 24 BULL. AM. ACAD. PSYCHIATRY L. 5, 12 (1996).} Lastly, a study of 138 NGRI acquittees in New Jersey, covering more than eight years, revealed that only 15% (22) were unconditionally released during this time, 35% (50) were still in custody, while 47% (66) were conditionally released and therefore still subject to court supervision.\footnote{Rodriguez et al., supra note 1, at 403.} In short, as one researcher concluded: “Clearly, persons found NGRI are not more likely to be released than those found guilty. In fact, the reverse is true.”\footnote{Silver, supra note 216, at 383.}
5. Myth 5: NGRI Acquittees Spend Much Less Time in Custody Than Defendants Convicted of the Same Offenses

A study compared the length of confinement for NGRI acquittees with defendants who raised the insanity defense but were convicted of a crime, after controlling for crime seriousness, in forty-two counties in seven states.221 In Georgia and Ohio, NGRI acquittees tended to spend less time in confinement than NGRI defendants convicted of a crime.222 However, in California and New York, NGRI acquittees tended to spend more time in confinement than NGRI defendants convicted of a crime.223 In New Jersey, Washington, and Wisconsin, there was no significant difference in the length of confinement for the two groups.224

A study of NGRI acquittees in New Jersey over eight years found that NGRI acquittees spent more time in custody than defendants convicted of crimes (40 months vs. 20.5 months).225 Moreover, because NGRI acquittees are not released unless they are no longer dangerous, they may be subjected to a lifetime of judicial oversight that can far exceed the judicial oversight imposed on defendants convicted of crimes.226 In California, the results were even worse for NGRI defendants convicted of nonviolent crimes.227 These defendants were held in custody over nine times as long as defendants convicted of nonviolent crimes.228

Other studies on how long NGRI acquittees are confined compared to defendants convicted of similar crimes have produced inconsistent results.229 Some studies found NGRI acquittees are confined for a longer time than defendants convicted of similar crimes.230 Other studies found no difference in the length of confinement for the two groups of defendants.231 Another group of studies showed NGRI acquittees spent less time in confinement than defendants convicted of similar crimes.232 In sum, research shows NGRI acquittees do not spend significantly less time in confinement than defendants convicted of similar crimes.


Research indicates that defendants who plead insanity, and even more so defendants who are found NGRI, frequently have a prior history of psychiatric hospitalizations and usually suffer from a major psychological disorder like schizophrenia.233 For instance, a study of 139 defendants who had received a clinical opinion supporting the insanity

221. Id. at 387.
222. Id. at 384.
223. Id.
224. Id.
225. Rodriguez et al., supra note 1, at 403–04.
226. Id.
228. Id.
229. Silver et al., supra note 188, at 65.
230. Id.
231. Id.
232. Id.
233. Greene & Heilbrun, supra note 20, at 237.
defense found that 82% had received treatment on one or more occasions in a psychiatric hospital, and 85% had been diagnosed with a major psychological disorder. In another study of almost one million felony indictments from forty-nine counties in eight states, 71.5% of defendants who pled insanity and 82% of defendants who were found NGRI had one or more psychiatric hospitalizations. Furthermore, 55.2% of defendants who pled insanity, and 83.9% of defendants who were NGRI had schizophrenia or another major psychological disorder.

Research also shows most defendants who plead insanity are not malingering (i.e., faking). For example, researchers found that experienced forensic psychologists diagnosed malingering in 25 (8%) of 314 cases of defendants referred for pretrial evaluations of insanity, competency to stand trial, or both. In another study, researchers surveyed 320 experienced forensic evaluators who estimated that malingering occurred in 15.7% of their cases.

Research further suggests that mental health professionals can detect malingering with a high degree of accuracy in insanity cases. In one study, twenty-two forensic diplomate psychologists and twenty-two general clinical psychologists reviewed a variety of psychological data from one of four actual cases involving the insanity defense. In two of the cases, the defendants had malingered, and in the other two cases, they had not malingered. Of the forty-four psychologists, 86.4% accurately assessed whether the defendant in their case was malingering.


236. Id.

237. Malingering is “the intentional production of false or grossly exaggerated physical or psychological symptoms, motivated by external incentives.” AM. PSYCHIATRIC ASS’N, DIAGNOSTIC & STATISTICAL MANUAL 726–27 (5th ed. 2022).

238. Dewey G. Cornell & Gary L. Hawk, Clinical Presentation of Malingerers Diagnosed by Experienced Forensic Psychologists, 13 L. & HUM. BEHAV. 375, 375, 382 (1989) (“Defendants diagnosed as malingered tended to present obvious symptoms that the lay person might readily associate with severe mental disorder, such as visual hallucinations and suicidal ideas. As Ossipov (1944) noted, ‘Every malinger is an actor who portrays an illness as he understands it.’ In contrast, malingerers may overlook subtle, yet actually more common, symptoms of psychosis, such as blunted or inappropriate affect, and formal thought disorder (e.g., loose or tangential speech patterns). This is consistent with Resnick’s view (1984) that malingers mimic content, but not the form, of psychotic thinking.” (citation omitted)).


240. Murray Ferguson & James R. P. Ogloff, Criminal Responsibility Evaluations: Role of Psychologists in Assessment, 18 PSYCHIATRY, PSYCH. & L. 79, 89 (2011) (“While psychologists should be mindful of malingering when undertaking any forensic evaluation, they should be comforted in the fact that research suggests that psychologists are quite adept at assessing it.”).


242. Id.

243. Id.
In a second study, researchers identified thirty criminal defendants who were likely malingering and thirty others who were likely not malingering. After identifying the two groups, the researchers had two experienced forensic psychologists review the mental status section of each report for the sixty defendants while remaining blind to a defendant’s psychiatric history, diagnosis, psychological test results, and psycholegal opinions. Using only the mental status report, the forensic psychologists were able to distinguish the suspected malingering defendants from the non-malingering ones at a 90% accuracy rate.

Because mental health experts find few defendants insane, even if many defendants malingered insanity, it is unlikely they would convince their evaluator they were insane. For instance, in three studies in Virginia, with large samples of defendants who pled insanity, mental health experts found defendants insane in only 8% to 16.9% of the cases. In a study of insanity rates in three states, mental health experts evaluated as insane 7% of 1,104 defendants in Michigan, 13% of 779 defendants in Ohio, and 9% of 488 defendants in Virginia. Lastly, some defendants who have a valid insanity defense do not assert it because they do not want the stigma and consequences associated with having a psychological disorder. They also fear they will spend a longer time in a psychiatric hospital than they would spend in prison if they were convicted of a crime.

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245. Id. at 582.

246. Id. at 583.


248. Janet I. Warren, W. Lawrence Fitch, Park Elliot Dietz & Barry D. Rosenfeld, *Criminal Offense, Psychiatric Diagnoses, and Psycholegal Opinion: An Analysis of 894 Pretrial Referrals*, 19 Bull. Am. Acad. Psychiatry & L. 63, 66 (1991) (finding that of 894 pretrial referrals in Virginia, of which 617 defendants asserted the insanity defense, the defendant was evaluated as insane in only 47 (8%) of the cases); see also Warren et al., supra note 247, at 173 (finding that of 5,175 insanity evaluations in Virginia over 10 years, 11% of the defendants were evaluated as insane); Brett O. Gardner, Daniel C. Murrie & Angela N. Torres, *Insanity Findings and Evaluation Practices: A State-Wide Review of Court-Ordered Reports*, 36 Behav. Sci. L. 303, 309 (2018) (finding that in the latest study in Virginia, out of 1,111 insanity evaluations, 16.9% of the defendants were evaluated insane).


251. Michael L. Perlin, *There’s No Success Like Failure and Failure’s No Success at All: Exposing the Pretextuality of Kansas v. Hendricks*, 92 Nw. U. L. Rev. 1247, 1259 (1998) ("The fear that defendants will ‘fake’ the insanity defense to escape punishment continues to paralyze the legal system in spite of an impressive array of empirical evidence revealing: (1) the minuscule number of such cases; (2) the ease with which trained clinicians are usually able to ‘catch’ malingering in such cases; (3) the inverse greater likelihood that defendants, even at grave peril to their life, will more likely try to convince examiners that they’re ‘not crazy’; (4) the high
Some defendants who were insane during a crime “may retrospectively distort accounts of their offenses due to amnesia, delirium, or simply the desires to have irrational behavior make sense.” In sum, most defendants who plead insanity do not mangle; and if they do, a skilled and diligent forensic psychologist or psychiatrist is likely to detect their malingering.

B. Additional Important Scientific Research About the Insanity Defense

This Part discusses scientific research about two other topics related to the insanity defense. The topics are judges’ and attorneys’ knowledge, attitudes, and beliefs about mental health defenses and psychological disorders, and the recidivism rates for insanity acquittees and criminal offenders. These topics, like Perlin’s myths about the insanity defense, are essential to understanding insanity law and the risk that NGRI acquittees pose to society.

1. Prosecutors’, Defense Attorneys’, and Judges’ Knowledge, Attitudes, and Beliefs About Mental Health Defenses and Psychological Disorders

Some research has examined the knowledge, attitudes, and beliefs attorneys and judges have about mental health defenses and psychological disorders. For example, researchers surveyed 492 members of the criminal bar of South Carolina about mental health defenses and psychological disorders. Even though the attorneys in the survey had practiced criminal law for many years (i.e., 20% had been in their current job between six and ten years and 58% had been in their current job for more than ten years), risk in pleading the insanity defense (leading to statistically significant greater prison terms meted out to unsuccessful insanity pleaders); and (5) the fact that most of the small numbers of insanity pleaders who are successful remain in maximum security facilities for a longer period than they would have if convicted of the underlying criminal indictment.”; see also Sherin S. Vitro, Promoting Therapeutic Objectives through LB 518: A Sane Amendment to Nebraska Law Governing the Disposition of Insanity Acquittees, 72 Neb. L. Rev. 837, 844 (1993).


253. Forensic psychologists and psychiatrists use the clinical interview, collateral information, and psychological tests to detect malingering. The Minnesota Multiphasic Personality Inventory (MMPI-3), the Structured Inventory of Reported Symptoms (SIRS-2), the Miller Forensic Assessment of Symptom Test (M-FAST), the Structured Inventory of Malingered Symptomatology (SIMS), and the Millon Clinical Multiaxial Inventory (MCMI-III) can help detect malingering of a psychosis. For suspected malingering of cognitive impairment, the following tests can aid in the detection of malingering: the Validity Indicator Profile (VIP), the Digit Memory Test (DMT), the Portland Digit Recognition Test (PDRT), the Rey Fifteen Item Test (FIT), The Word Memory Test (WMT) and the Test of Memory Malingering (TOMM). It has also been suggested that methods that induce greater cognitive load for liars, but not for truth tellers, such as the Autobiographical Implicit Association Test (AIAT), the Timed Antagonistic Response Alethiometer (TARA), and the Time-Restricted Integrity Confirmation (TRI-Con) can be useful in detecting malingering. Barbara E. McDermott, Psychological Testing and the Assessment of Malingering, 35 Psychiatric Clinics N. Am. 855, 859–70 (2012); Jeffrey J. Walczyk, Nate Sewell & Meghan B. DiBenedetto, A Review of Approaches to Detecting Malingering in Forensic Contexts and Promising Cognitive Load-Inducing Lie Detection Techniques, 9 Frontiers Psychiatry 1, 2–10 (2018).

most of the attorneys had limited experience with insanity cases.\textsuperscript{255} Forty-four percent of the attorneys had never handled an insanity case, 44\% had handled between one and five insanity cases, 9\% had handled between six and fifteen insanity cases, and only 3\% had handled more than fifteen insanity cases.\textsuperscript{256}

Twenty-seven percent of the attorneys in the survey did not know that the GBMI verdict\textsuperscript{257} in South Carolina not only requires that a defendant have a psychological disorder, but it also requires that the defendant could not conform their behavior to the requirements of the law at the time of the crime.\textsuperscript{258} Eighty-two percent of the attorneys erroneously believed that a GBMI verdict means a defendant is sent to a hospital outside of prison before they are sent to prison.\textsuperscript{259} Another 41\% of the attorneys did not know that a defendant who is found GBMI can be executed.\textsuperscript{260} The researchers concluded that attorneys' lack of knowledge about the GBMI verdict could adversely affect their ability to accurately inform defendants about its consequences.\textsuperscript{261}

Additionally, half of the attorneys surveyed said they would prefer to work with clients who do not have a psychological disorder, 37\% gave a neutral response to this question, and only 13\% responded that they are just as willing to work with a defendant with a psychological disorder as they are with other defendants.\textsuperscript{262} The researchers concluded that attorneys' preferences for not working with defendants with psychological disorders might adversely affect their representation of such defendants.\textsuperscript{263}

The study also found that 50\% of prosecutors and judges believed the insanity defense should be eliminated compared to 11\% of the public defenders and 18\% of the private defense attorneys.\textsuperscript{264} The study further found that 74\% of the attorneys had not received training in recognizing psychological disorders, 83\% had not taken courses in mental health law, and 85\% believed their training in mental health law was inadequate.\textsuperscript{265} These statistics suggest that many attorneys cannot competently represent defendants with psychological disorders because attorneys lack the necessary training and skills.

\textsuperscript{255} Id. at 487.
\textsuperscript{256} Id. at 488.
\textsuperscript{257} Id. at 484 (citing S.C. CODE ANN. § 17-24-20 (1976)).
\textsuperscript{258} Id. at 488.
\textsuperscript{259} Id.
\textsuperscript{260} Id.
\textsuperscript{261} Id. at 488, 490.
\textsuperscript{262} Id. at 488.
\textsuperscript{263} Id. at 490.
\textsuperscript{264} Id. at 489.
\textsuperscript{265} Id. at 488; see also Michael L. Perlin, Fatal Assumption: A Critical Evaluation of the Role of Counsel in Mental Disability Cases, 16 L. & HUM. BEHAV. 39, 39 (1992) [hereinafter Perlin, Fatal Assumption] (“This article questions the assumption that mentally disabled individuals are regularly afforded competent counsel. It finds that such counsel is frequently not available and that our failure to challenge this assumption threatens to make illusory reform efforts by lawyers and mental health professionals alike.”); Michael L. Perlin, On Sanism, 46 SMU L. REV. 373, 405 (1993) [hereinafter Perlin, On Sanism] (“Merely educating lawyers about psychiatric techniques and psychological nomenclature did not materially improve lawyers’ performances because attitudes did not change. Counsel was especially substandard in cases involving mentally disabled criminal defendants.”) (footnotes omitted)).
In another study, which surveyed 293 legal professionals in New York State, only 5% of respondents believed the insanity defense worked well, 34% believed it worked fairly well, 40% believed it worked fairly poorly, and nearly 21% believed it worked very poorly.\textsuperscript{266} The study further found that almost half (45.4\%) of the prosecutors, 29.4\% of the combined attorneys (i.e., they had some combination of attorney, public defender, or prosecutor position), 19\% of the judges, 5.1\% of the private attorneys, and 4.3\% of the public defenders believed it was too easy to be found insane.\textsuperscript{267} In contrast, 4.1\% of the prosecutors, 10.3\% of the judges, 35.3\% of the combined attorneys, 59.3\% of the private attorneys, and 65.2\% of the public defenders believed it was too difficult to be found insane.\textsuperscript{268} The researchers concluded the legal professionals in the survey appeared “to reflect the trend toward ‘demedicalizing’ criminal deviance by incarceration rather than hospitalization after acquittal.”\textsuperscript{269}

Although there is limited research on legal professionals’ knowledge, attitudes, and beliefs about the insanity defense and psychological disorders, the extant research suggests the following: attorneys and judges handle few insanity cases and frequently have little education and training in psychological disorders and mental health law.\textsuperscript{270} Many prosecutors and some judges have a negative attitude toward the insanity defense.\textsuperscript{271} Therefore, prosecutors and judges may be reluctant to agree that a defendant is insane—even when the evidence clearly supports an insanity defense.\textsuperscript{272} Attorneys, like the general public, tend to be biased against people with psychological disorders.\textsuperscript{273} This bias likely affects their handling of criminal cases where defendants have psychological disorders, especially major psychological disorders.

Moreover, as Perlin states, “[e]mpirical surveys are consistent . . . [that] [t]he quality of counsel remains the single most important factor in the disposition of cases . . .
in the trial of mentally disabled criminal defendants.”274 Perlin also states that “the trial record of defense counsel representing criminal defendants with mental disabilities in general is abysmal.”275 These deficits and other factors likely make it difficult for defense attorneys to effectively represent defendants in insanity cases, for prosecutors to accurately evaluate insanity cases, and for judges to properly adjudicate insanity cases. In sum, it appears judges’ and attorneys’ knowledge, attitudes, and beliefs about the insanity defense and psychological disorders make it difficult for defendants to obtain an insanity acquittal even when it is justified.

2. How Recidivism Rates Compare for Insanity Acquittees and Criminal Offenders

Researchers have examined how recidivism rates for insanity acquittees compare with recidivism rates for other criminal offenders. For example, one study of NGRI acquittees, mentally ill offenders, and non-mentally ill offenders found that 127 NGRI acquittees (54%) had significantly lower convictions rates over a five-year period after release than 135 non-mentally ill offenders (65%) and 127 mentally ill offenders (73%).276 Moreover, seventeen years after release, the NGRI acquittees in the study had a recidivism rate of 66%, compared to a 75% and 78% recidivism rate for the non-mentally ill and mentally ill offenders, respectively.277 Significantly, more mentally ill offenders than the NGRI acquittees were rehospitalized after being released.278

A different study likewise found that 238 NGRI acquittees had a significantly lower recidivism rate (41%) than a matched group of 238 offenders (54%) over a seven-year period after release.279 The two groups were matched on age, offense, and criminal history.280 The study concluded the results “strongly suggest that insanity acquittees (particularly those who would receive a psychotic DSM-III diagnosis) are less likely than their convicted counterparts to commit any offense or any violent offense upon release.”281

When NGRI acquittees are released from a hospital, they are frequently placed on conditional release.282 A conditional release requires the NGRI acquittees to comply with

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277. Id.
278. Id.
280. Id. at 381.
281. Id. at 393.
several conditions to remain in the community (e.g., medication compliance, not using illegal drugs, etc.). When researchers studied 238 NGRI acquittees in Oregon on conditional release during a five-year period, they found that 66% of insanity acquittees maintained their release for the entire duration of the study (between four and nine years) and only 33.6% had their conditional release revoked. Moreover, only one insanity acquittee had his conditional release revoked for committing a crime, which was nonviolent.

The researchers compared the results of their study with the most recent U.S. statistics on criminal recidivism from the National Institute of Justice, which showed that 67.8% of inmates released from prison were rearrested after three years, and over 75% were rearrested after five years. The researchers concluded:

This study continues the recent trend of demonstrating the success of CR [conditional release] programs with individuals found NGRI as shown by low rates of criminal recidivism and moderate rates of CR revocation. To that end, revocation could be viewed as a good outcome that serves to protect the public and the acquittee to the extent that it is preventative of bad outcomes, inclusive of violence recidivism.

Another study examined what happened to the 365 NGRI acquittees who were committed to the Psychiatric Security Review Board (PSRB) in Connecticut over a thirty-year period. During that period, the PSRB granted conditional release to 177 NGRI acquittees and discharged another 215 NGRI acquittees. Fifty-five (31.1%) of the 177 NGRI acquittees had their conditional release revoked over the thirty years. However, only four (2.3%) of the NGRI acquittees were arrested over the thirty-year period. The charges in two of the four arrests were dismissed and the other two arrests resulted in misdemeanor convictions.

The study further found that NGRI acquittees, on average, had lived in a community after discharge for 12.5 years. Nineteen of the 215 NGRI acquittees who PSRB discharged died while in the psychiatric hospital, leaving 196 who lived in a community after PSRB discharged them.

283. Id.
284. Id. at 405–06.
285. Id.
286. Id. at 409. They also compared their results to felony probation statistics for Oregon, which indicated that 48% of individuals on felony probation were rearrested within three years. Id. Although the revocation rate for conditional release for NGRI acquittees was like the rearrest rate in Oregon, it was lower than the recidivism rate in Oregon. Id.
287. Id. at 411.
289. Id. at 432.
290. Id. at 433.
291. Id.
292. Id. at 439 (“The absence of felony arrests on [conditional release] is an important result in that it demonstrates that clinicians and monitoring officials were able to offer community release to acquittees without compromising public safety.”).
293. Id. at 436. Nineteen of the 215 NGRI acquittees who PSRB discharged died while in the psychiatric hospital, leaving 196 who lived in a community after PSRB discharged them. Id. at 435.
91% of those who were rearrested were rearrested for a nonfelony. Of the thirty-nine NGRI acquittees who had been accused of murder and were discharged, only two (5%) were rearrested, and they were rearrested for assault. Additionally, the NGRI acquittees who were discharged were significantly less likely to be rearrested than released non-mentally ill offenders over a two-year period (56%), released mentally ill offenders over a six-month period (28.3%), and released mentally ill offenders over a six-month period who participated in a specialized reentry program (14.1%).

In sum, research shows NGRI acquittees are significantly less likely to recidivate than non-mentally ill offenders, and the difference in recidivism rates is even greater when NGRI acquittees are compared to mentally ill offenders. Consequently, society is safer when defendants with major psychological disorders are found NGRI rather than guilty or GBMI. The next Part examines the effectiveness of insanity reforms in reducing insanity verdicts.

C. The Effectiveness of Insanity Reforms

Over the years, legislatures and courts have implemented several reforms to the insanity defense to decrease its use and success. These reforms fall into five major categories: (1) changing the insanity test; (2) prohibiting experts from giving their opinion on the ultimate issue in insanity cases; (3) changing the burden and standard of proof; (4) adding the GBMI verdict; and (5) abolishing the insanity defense. However, scientific research shows these reforms have generally not accomplished their goals. These reforms and their shortcomings are discussed below.

1. What Effect Does Changing the Insanity Test Have on the Rate of Acquittals?

Although some research suggests that different insanity tests produce different rates of insanity acquittals, most research indicates that different insanity tests do not affect insanity acquittals. For example, one study examined three consecutive two-year periods, in which Wyoming used either (1) the McNaughton test of insanity plus the irresistible impulse test with a single-phase trial; (2) the ALI insanity test with a bifurcated trial; or (3) the ALI test with a single-phase trial. The study found that none of the changes in Wyoming’s insanity law had a significant effect on the frequency

294. Id. at 436, 439.
295. Id. at 436; see also Yanick Charette, Anne G. Crocker, Michael C Seto, Leila Salem, Tonia L. Nicholls & Malijai Caulet, The National Trajectory Project of Individuals Found Not Criminally Responsible on Account of Mental Disorder in Canada. Part 4: Criminal Recidivism, 60 CAN. J. PSYCHIATRY 127, 129 (2015) (noting that the participants in the study, who had committed the most serious crimes that resulted in an insanity verdict, had the lowest recidivism rates).
298. Id.
300. Blau & Pasewark, supra note 297, at 83.
of insanity pleas or their success, the characteristics of defendants asserting the insanity defense, or the court’s dispositions of defendants.\textsuperscript{301}

Relatedly, another study examined the effects of California replacing the ALI test with the McNaughton test of insanity, which was intended to reduce insanity acquittals in the state.\textsuperscript{302} To assess the effects of the change, the researchers gathered information on all defendants who entered an insanity plea and all defendants who successfully asserted the defense in seven counties in California, three years before and three years after the change to the McNaughton test.\textsuperscript{303} The seven counties the researchers selected were responsible for two-thirds of all insanity cases in California.\textsuperscript{304} The researchers found that the change in California’s insanity law had no effect on the rate of insanity pleas or acquittals, the characteristics of defendants asserting the defense, or the number of defendants found NGRI.\textsuperscript{305}

\textit{i. Effects of Different Insanity Tests on Jurors}

Although legislators and judges have hotly debated for centuries the best way to conceptualize and phrase the insanity test,\textsuperscript{306} research shows that different insanity tests do not affect jurors’ verdicts.\textsuperscript{307} For instance, one study examined if Congress’s enactment of the Insanity Defense Reform Act of 1984 would clarify the insanity standard for jurors and reduce insanity acquittals.\textsuperscript{308} The study gave mock jurors one of three insanity tests: the IDRA, the ALI, or the wild beast/mens rea test.\textsuperscript{309} Other mock jurors received no insanity test and were told to use their own judgment in deciding the cases.\textsuperscript{310} The study instructed the mock jurors to render a verdict in four insanity cases and explain the reasons for their verdicts.\textsuperscript{311} The results showed the different insanity tests did not produce significant differences in the mock jurors’ verdicts.\textsuperscript{312} Nor did the verdicts of the mock jurors, who were not given an insanity test and told to use their own judgment in deciding the cases, differ from the mock jurors who were given an insanity test.\textsuperscript{313}

\textsuperscript{301}. Id.
\textsuperscript{302}. Id. at 84.
\textsuperscript{303}. Id. at 83–84.
\textsuperscript{304}. Id.
\textsuperscript{305}. Id.
\textsuperscript{307}. Daniel S. Bailis, John M. Darley, Tracy L. Waxman & Paul H. Robinson, \textit{Community Standards of Criminal Liability and the Insanity Defense}, 19 L. & HUM. BEHAV. 425, 427 (“Results have consistently shown that instructing mock jurors to apply different legal tests of insanity makes remarkably little difference in the verdicts these jurors return.”).
\textsuperscript{309}. Id. at 407–08.
\textsuperscript{310}. Id. at 408.
\textsuperscript{311}. Id. at 409.
\textsuperscript{312}. Id. at 411.
\textsuperscript{313}. Id.
Another study found the strongest predictors of mock jurors’ verdicts were not the insanity test or the facts of the case, but rather how mock jurors construed the evidence in the case and their attitudes toward the insanity defense.\textsuperscript{314} Extensive research in social cognition shows that attitudes can bias every aspect of information processing and impact cognitive functions, from attention to memory.\textsuperscript{315} Other research further indicates that jurors’ attitudes toward the insanity defense have a powerful effect on jurors’ verdicts and minimizes the impact of different insanity tests and differences in case facts.\textsuperscript{316}

Additionally, research shows the public has strong negative attitudes about the insanity defense, and these attitudes are difficult to change.\textsuperscript{317} Even when jurors’ attitudes about the insanity defense are improved, the improvement may be insufficient to change their verdicts.\textsuperscript{318} In sum, the problem with jurors’ assessment of insanity is not that they are likely to be duped into an insanity verdict by a malingering defendant, but rather that jurors are unlikely to find a defendant insane even when an insanity verdict is warranted. Moreover, it is plea bargains and bench trials that are responsible for the vast majority of insanity acquittals, not jury verdicts.\textsuperscript{319} This fact further supports the conclusion that judges’ and legislators’ attempts to decrease juries’ insanity acquittals by changing the insanity test are misguided and a waste of time and resources.

\textit{ii. Effects of Different Insanity Tests on Expert Witnesses}

Similar to the lack of impact different insanity tests have on jurors, research shows different insanity tests are also unlikely to affect experts’ opinions about insanity because experts frequently do not understand the tests.\textsuperscript{320} Moreover, experts’ attitudes toward the

\begin{itemize}
  \item Daniel A. Krauss, Jennifer Gongola, Nicholas Scurich & Brendan Busch, \textit{Mental State at Time of Offense in the Hot Tub: An Empirical Examination of Concurrent Expert Testimony in an Insanity Case}, 36 BEHAV. SCI. L. 358, 367 (2018) (“These findings are consistent with an extensive social cognition literature which argues that relevant attitudes can bias information processing from start to finish, as well as more specific insanity research, which indicates that jurors’ attitudes towards the insanity defense may overwhelm the effects of jurors’ prototypes concerning the insane and the intended effects of different legal insanity standards.” (citations omitted)); see also Louden & Skeem, supra note 315, at 464 (“This is consistent with the robust finding that attitudes toward the insanity defense exert considerable influence on mock jurors’ verdicts in insanity cases.”).
  \item Evelyn M. Maeder, Susan Yamamoto & Kristin L. Fenwick, \textit{Educating Canadian Jurors About the Not Criminally Responsible on Account of Mental Disorder Defence}, 47 CAN. J. BEHAV. SCI. 226, 226 (2015).
  \item See Henry J. Steadman, Margaret A. McGreevy, Joseph P. Morrissey, Lisa A. Callahan, Pamela Clark Robbins & Carmen Cirincione, \textit{Before and After Hinckley: Evaluating Insanity Defense Reform} 71 (1993) (“As we discussed with regard to other states, most cases in which the defendant pleaded insanity were resolved by plea bargains (60%) both before and after the burden and standard reform.”).
\end{itemize}
insanity defense are a far better predictor of their insanity opinions than the insanity test used in the case.\textsuperscript{321}

For instance, in one study, researchers conducted a national survey of Canadian forensic mental health professionals.\textsuperscript{322} All respondents in the survey were well trained and highly experienced.\textsuperscript{323} The study found that 65.5\% of the respondents had an inaccurate understanding of the meaning of “disease of the mind,” 39.2\% had an inaccurate understanding of the meaning of “appreciate the nature and quality” of the defendant’s actions, and 55.3\% had an inaccurate understanding of the meaning of “wrongfulness.”\textsuperscript{324}

In another study, researchers evaluated mental health experts’ understanding of the McNaughton and the IDRA tests of insanity, using a vignette that was designed to elicit a different opinion about insanity depending on which insanity test the forensic psychologist or psychiatrist used to evaluate the vignette.\textsuperscript{325} All the forensic psychologists and psychiatrists in the study had extensive experience conducting insanity evaluations.\textsuperscript{326} Nonetheless, the study found the experts’ opinions about whether the defendant was insane in the vignette did not vary depending on which insanity test they used.\textsuperscript{327}

In a different study, researchers obtained a national sample of 262 psychologists and psychiatrists who gave their opinion about whether the defendant was insane in one of three hypothetical cases.\textsuperscript{328} If an expert was a psychiatrist, identified as a liberal, or had a favorable attitude toward the insanity defense, predicted if an expert thought the defendant was insane in the cases.\textsuperscript{329} The expert’s attitude toward the insanity defense was the best predictor of their insanity opinion.\textsuperscript{330} However, whether the expert came from a state that used the McNaughton test or the ALI test of insanity did not predict their insanity opinion.\textsuperscript{331} In sum, different insanity tests do not appear to affect expert opinions about insanity.\textsuperscript{332}

\textsuperscript{322} Rogers et al., supra note 320, at 691.
\textsuperscript{323} Id. at 692.
\textsuperscript{324} Id. at 692–93.
\textsuperscript{325} De Jesus-Zayas et al., supra note 44, at 23.
\textsuperscript{326} Id. at 31.
\textsuperscript{327} Id. at 34.
\textsuperscript{328} Homant & Kennedy, supra note 321, at 47–48.
\textsuperscript{329} Id. at 55.
\textsuperscript{330} Id. at 52; see also Tess M. S. Neal, Discerning Bias in Forensic Psychological Reports in Insanity Cases, 36 BEHAV. SCI. & L. 325, 327 (2018) (“In a series of studies, Homant and Kennedy showed that a host of subjective factors on part of forensic evaluators biased their decision-making processes and conclusions. Most significantly, they showed that evaluators’ political ideology and training were predictive of their attitude toward the insanity defense in general, and that this attitude toward the insanity defense was predictive of how the experts responded to fixed insanity case vignettes.” (citations omitted)).
\textsuperscript{331} Homant & Kennedy, supra note 321, at 55.
2. Prohibiting Experts in Federal Court from Giving Their Opinion on the Ultimate Issue in Insanity Cases

Under the Insanity Defense Reform Act of 1984, Congress amended Rule 704 of the Federal Rules of Evidence.333 The amendment prohibits an expert from giving their opinion about whether a defendant was insane at the time of the crime.334 The purpose of the amendment was to reduce the number of insanity verdicts.335

Researchers have conducted studies to determine the effects of experts’ ultimate opinion testimony on jurors’ verdicts.336 For example, in one study, mock jurors were randomly assigned to read one of ten different versions of a case vignette that varied (a) whether an expert testified; (b) whether an expert testified for the defense, prosecution, or both; and (c) the level of inferences that the expert(s) made.337 The expert’s level of inference was either diagnostic testimony only; diagnostic and penultimate issue testimony; or diagnostic, penultimate, and ultimate issue testimony.338

The diagnostic testimony consisted of the defendant’s diagnosis and its effect on the defendant’s ability to see reality clearly.339 The penultimate testimony concerned the defendant’s ability to think about the consequences and the wrongfulness of their acts at the time of the crime.340 The ultimate issue testimony consisted of the expert’s opinion about whether the defendant was insane at the time of the crime.341 The mock jurors were given jury instructions, which included the Insanity Defense Reform Act of 1984.342

The results showed that whether the expert gave diagnostic, penultimate, or ultimate issue testimony had no effect on the mock jurors’ verdicts.343 The researchers concluded that the amendment to Rule 704 failed to achieve its goal of reducing the number of insanity verdicts, constituting yet another example of the need for “data-driven” policy changes.344 In sum, though there is limited research, it does not appear that experts’ ultimate opinion testimony affects jurors’ verdicts.345

336. See, e.g., Rogers et al., supra note 335, at 226.
337. Fulero & Finkel, supra note 335, at 495.
338. Id. at 498–99.
339. Id.
340. Id. at 499.
341. Id.
342. Id.
343. Id. at 501, 504.
344. Id. at 504 (“One reasonable way to judge the efficacy of a change motivated by a policy rationale is to judge the outcome of that change against its desired effect. By that criterion, our results would suggest that this attempt was unsuccessful. Indeed, we would argue further that the lesson to be derived is one that has been noted by others: Policy changes that are not data-driven are likely to fail. It is not unreasonable to expect that prior to such changes, there ought to be evidence that change is warranted or necessary.” (citations omitted)).
3. Changing the Burden and Standard of Proof

Another reform to reduce insanity verdicts is changing the burden and standard of proof in insanity cases. At the time of John Hinckley’s trial for the attempted assassination of President Reagan, federal courts and most state courts required the prosecution to prove beyond a reasonable doubt that the defendant was sane at the time of the crime. Currently, federal courts and most state courts place the burden on the defendant to prove that they were insane at the time of the crime either by a preponderance of the evidence or by clear and convincing evidence. Research indicates, however, that shifting the burden and standard of proof in insanity cases does not reduce insanity verdicts.

One study conducted two experiments to determine the effect of the burden and standard of proof on jurors’ verdicts in insanity cases. In the first experiment, mock jurors were given standard jury instructions about insanity. The jury instructions varied in terms of the insanity test (ALI, McNaughton, and no test); who had the burden of proof (the defendant or the prosecution); and what was the standard of proof (preponderance of the evidence, clear and convincing evidence, or beyond a reasonable doubt). The mock jurors were instructed to render one of four verdicts: guilty of first-degree murder, guilty of second-degree murder, guilty of voluntary manslaughter, or NGRI. The results of the first experiment showed that neither the burden nor the standard of proof had a significant effect on the mock jurors’ verdicts.

In the second experiment, mock jurors were given only two verdict choices: guilty of second-degree murder and NGRI. An open-ended question asked them to indicate what insanity defense standard they were given in the jury instructions. A questionnaire also tested whether the mock jurors could recall, based on the jury instructions, who had the burden of proving insanity and what was the standard of proof.

Once again, the results showed that neither the burden nor the standard of proof affected the mock jurors’ verdicts. Additionally, 36.1% of the mock jurors incorrectly identified the party that had the burden of proof, and 48.4% of the mock jurors incorrectly identified the standard of proof. The researchers hypothesized that the burden and

348. See infra notes 349–357 and accompanying text.
350. Id. at 513–14.
351. Id. at 514.
352. Id. at 515.
353. Id. at 516.
354. Id.
355. Id.
356. Id.
357. Id. at 519.
358. Id. at 521.
standard of proof may not have made a difference in the mock jurors’ verdicts because many of the mock jurors either did not remember or did not understand them.\textsuperscript{359}

In another study, researchers evaluated whether Hawaii’s change in the burden of proof in insanity cases, from the prosecution to the defense, affected the number of insanity pleas and NGRI verdicts.\textsuperscript{360} To assess the effect of the change in the burden of proof, the study examined insanity cases filed three years before and after the change.\textsuperscript{361} There were no significant differences in the frequency of insanity pleas and NGRI verdicts following the change in the burden of proof.\textsuperscript{362} In sum, scientific research fails to show that changing the burden and standard of proof reduces the number of insanity verdicts.\textsuperscript{363}

4. The Guilty but Mentally Ill Verdict

Some states have attempted to reduce the number of NGRI acquittals and provide treatment for defendants with a psychological disorder by using the GBMI verdict.\textsuperscript{364} Since 1976, about a quarter of the states have enacted the GBMI verdict.\textsuperscript{365} In the majority of those states, a GBMI verdict requires the defendant to have a psychological disorder at the time of the crime that substantially impaired their ability to conform their behavior to the requirements of the law.\textsuperscript{366} And while the GBMI statutes vary from state to state, they generally give a jury in an insanity trial a choice between one of four verdicts: (1) guilty of the crime; (2) not guilty of the crime; (3) NGRI; or (4) GBMI.\textsuperscript{367}

Defendants found GBMI typically receive the same sentence they would have received if they had been found guilty of the crime, including the death sentence.\textsuperscript{368} In fact, GBMI defendants often receive longer sentences than defendants who are found guilty.\textsuperscript{369} Some states also impose stricter provisions for probation and parole on GBMI defendants than on guilty defendants.\textsuperscript{370} Moreover, while in some states GBMI defendants receive treatment in a hospital and are transferred to prison after the treatment is complete, in most states GBMI defendants are sent to prison to receive whatever psychological services are available there.\textsuperscript{371}

\textsuperscript{359} Id. at 525.
\textsuperscript{360} Richard A. Pasewark, Barbara Parnell & Jane Rock, Insanity Defense: Shifting the Burden of Proof, 10 J. POLICE & CRIM. PSYCH. 1, 3 (1994).
\textsuperscript{361} Id. at 1.
\textsuperscript{362} Id.
\textsuperscript{363} Borum & Fulero, supra note 346, at 390–91 (“Changing the burden of proof and the standard of proof required has had virtually no effect.”).
\textsuperscript{364} GREENE & HEILBRUN, supra note 20, at 242.
\textsuperscript{365} Id.
\textsuperscript{366} Borum & Fulero, supra note 346, at 383.
\textsuperscript{367} Id.
\textsuperscript{370} Melville & Naimark, supra note 369, at 554.
\textsuperscript{371} GREENE & HEILBRUN, supra note 20, at 242.
The GBMI verdict has been severely criticized. The American Bar Association’s Criminal Justice Mental Health Standards, the American Psychiatric Association’s Position Statement on the Insanity Defense, the National Mental Health Association’s Commission on the Insanity Defense, the American Psychological Association, and the National Alliance for the Mentally Ill all oppose its use. Plus, the GBMI verdict does not appear to have achieved its goal of reducing the number of NGRI acquittals. Data from Michigan, South Carolina, Georgia, and Illinois suggest that the GBMI verdict does not significantly reduce the rate of insanity acquittals.

Research also shows that, generally, GBMI defendants do not receive more psychological treatment than defendants who are found guilty. For example, a Georgia study found that only 3 of 150 GBMI defendants were treated in a hospital. A Michigan study found 75% of GBMI defendants were sent to prison without receiving treatment. And in Illinois, none of the first 44 GBMI defendants were ever hospitalized. Additionally, an Illinois Court of Appeals held that failure to assure treatment for GBMI defendants does not make Illinois’s GBMI statute unconstitutional. Such a holding is not unusual; most statutes and courts do not give GBMI defendants a right to treatment.

The existence of a GBMI verdict may thus mislead defendants, prosecutors, defense attorneys, juries, and judges by causing them to overestimate how frequently GBMI defendants receive psychological treatment. Moreover, as discussed above, jurors appear to have difficulty understanding insanity tests. The GBMI verdict may only

372. See Lynn W. Blunt & Harley V. Stock, Guilty but Mentally Ill: An Alternative Verdict, 1 BEHAV. SCI. & L. 49, 63–64 (1985) (“In summary, it appears that the GBMI verdict is a superfluous one as it pertains to mental health treatment. It has had virtually no impact on the number of NGRI adjudications or the disposition of persons after the NGRI verdict in Michigan.”); see also Linda C. Fentiman, “Guilty but Mentally Ill”: The Real Verdict is Guilty, 26 B.C. L. REV. 601, 652 (1985) (“The GBMI statutes improperly cloak a punitive attitude toward the mentally ill criminal in the guise of treatment, confusing the very different theoretical underpinnings of a system of punishment and a system of treatment.”); Bradley D. McGraw, Daina Farthing-Capovich & Ingo Keilitz, The “Guilty but Mentally Ill” Plea and Verdict: Current State of the Knowledge, 30 VILL. L. REV. 117, 121 (1985); Melville & Naimark, supra note 369, at 554; Slobogin, supra note 368, at 527.
373. Borum & Fulero, supra note 346, at 381.
374. Id. at 391 (“Later, the GBMI option appeared on its face to be an attractive alternative for those interested in limiting the insanity defense. However, GBMI does not appear to increase effective treatment options or enhance public safety. In addition, the empirical research reviewed here does not support the position that NGRI acquittals will decrease with the introduction of the GBMI option. Indeed, it appears that those found GBMI come not from the group of defendants that would formerly have been found NGRI, but instead from the population that would formerly have been found guilty.”).
375. Id. at 383.
376. Id. at 384, 391.
377. Id. at 384.
378. GREENE & HEILBRUN, supra note 20, at 242.
381. See Blau & Pasewark, supra note 297, at 93; Slobogin, supra note 368, at 512–14.
383. See supra Part III.C.1.i.
add to jurors’ confusion by requiring them to make the arcane distinction between when an NGRI and a GBMI verdict is warranted. The GBMI verdict may also cause jurors to reach a compromise verdict rather than grapple with the complex decision of whether a defendant should be found NGRI. Finally, the GBMI verdict does not appear to increase public safety.

5. Abolition of the Insanity Defense

The last reform of the insanity defense is states abolishing it altogether. Montana, Idaho, Utah, and Kansas have eliminated the affirmative defense of insanity. Instead, they allow a defendant to use a mental health expert to show that they lacked the mens rea for the crime. If a defendant with a major mental illness is found guilty in these states, the defendant is either sent to prison, where they can receive the limited psychological treatment available in prisons, or they are temporarily sent to a state psychiatric facility. But research, though limited, suggests that abolishing the insanity defense does not reduce the number of mental health defenses asserted in criminal cases. Nor does it alter how defendants with major psychological disorders are processed. In other words, defendants are still being sent to a state’s forensic mental health system, not to a state’s correctional system.

For example, in Montana, researchers examined the effects of abolishing the insanity defense in seven counties over a nine-year period, which had produced 73% of Montana’s insanity acquittals. The study included all 916 defendants charged with a felony who raised mental health as an issue in their defense. The study found that, even though there were significantly fewer successful insanity pleas, there was no decrease in the number of mental health defenses asserted in criminal cases.

384. See Greene & Heilbrun, supra note 20, at 242 (“If regular insanity instructions are confusing to jurors, the GBMI only adds to the confusion by introducing the very difficult distinction for juries to make between mental illness that results in insanity and mental illness that does not.”); see also Melville & Naimark, supra note 369, at 553 (“Jurors typically comprehend 50 percent of the jury instructions on insanity. GBMI may exacerbate this problem by adding a further subtle distinction to the degree of mental illness.”); Lisa M. Sloat & Richard L. Frierson, Juror Knowledge and Attitudes Regarding Mental Illness Verdicts, 33 J. AM. ACAD. PSYCHIATRY L. 208, 209 (2005) (“Another criticism is that jurors may not understand the difference between the NGRI and GBMI verdicts and may see a GBMI finding as a compromise verdict between guilty and NGRI.”); Slobogin, supra note 368, at 509.


386. See Borum & Fulero, supra note 346, at 384; see also Slobogin, supra note 368, at 511.


388. See Borum & Fulero, supra note 346, at 385.

389. See id. at 387.

390. See id. at 388.

391. See id.

392. See id.


394. Id.

395. Id. at 107.
Because the insanity defense had been abolished, Montana courts were finding defendants incompetent to stand trial rather than insane, which increased the number of defendants whose charges were either dismissed or deferred. This change in outcome for defendants asserting a mental health defense also increased the number of defendants with major psychological disorders who were released without being hospitalized. Accordingly, it is questionable whether Montana’s abolition of the insanity defense increased public safety or caused defendants with major psychological disorders to be confined for a longer time.

The abolition of the insanity defense also has unintended consequences. For instance, abolishing the insanity defense means that some defendants who were previously found insane will now be found not guilty of their crimes, which is likely to cause public outrage. Furthermore, the abolition of the insanity defense revives the diminished capacity defense because states that abolished the insanity defense have to permit defendants to present expert testimony that they lacked the requisite intent to commit the crime. The number of cases where this happens likely has increased significantly in states that abolished the insanity defense. The prosecution in these cases must prove beyond a reasonable doubt that the defendant had the requisite intent to commit the crime. In contrast, with the insanity defense, the defendant has the burden of proving insanity at the time of the crime. As researchers commented about the abolition of the insanity defense:

Abolition, then, is likely to have unintended effects that not only fail to solve perceived existing problems, but actually create worse problems. It is therefore prototypical of policy changes that are influenced by a few cases, by myths and misconceptions, and by political considerations instead of logic, rationality, or empirical data.

In summary, legislatures and courts have created an insanity jurisprudence that is incoherent, irrational, unjust, immoral, and contrary to scientific research. It is also detrimental to society and defendants with psychological disorders. Moreover, the reforms that legislatures and courts have created to reduce the use and success of the insanity defense are generally ineffective and, in some instances, counterproductive.

IV. REASONS FOR THE CURRENT STATE OF INSANITY LAW

Having discussed the ineffectiveness of various reforms to reduce the use of the insanity defense, this Section explains the reasons for the current dysfunctional state of
insanity law. These reasons are discussed in the following Parts: Part IV.A, media portrayals of people with psychological disorders; Part IV.B, sanism’s effect on insanity law; Part IV.C, judges’ and legislators’ lack of understanding of major psychological disorders like schizophrenia; and Part IV.D, judges and legislators ignoring scientific research about the insanity defense.

A. Media’s Portrayal of People with Psychological Disorders

Research shows that as many as 75% of the public views people with psychological disorders as dangerous and violent. This belief is a major source of prejudice and discrimination against people with psychological disorders. Media is an important source of information for the public about people with psychological disorders. The media’s portrayal of people with psychological disorders, however, is often inaccurate and frequently consists of negative stereotypes that depict people with psychological disorders as dangerous and violent. This depiction occurs even though there is a weak relationship between psychological disorders and violence. For example, research shows that people suffering from schizophrenia commit homicides at a rate of about one in ten thousand per year after treatment. In fact, demographic factors, such as age and gender, are far better predictors of violence than psychological disorders. Thus males are 300% more likely than people with psychological disorders to commit violence.

Nonetheless, movies often portray people with schizophrenia and other psychological disorders as dangerous and violent. Consider a study that analyzed all English-language movies featuring at least one main character with schizophrenia shown in movie theaters between 1990 and 2010. The study found that most movie characters with schizophrenia displayed violent behavior towards themselves or other people, and

407. Id.
408. Ginny Chan & Philip T. Yanos, Media Depictions and the Priming of Mental Illness Stigma, 3 STIGMA & HEALTH 253, 253 (2018); see also Corrigan & Watson, supra note 406, at 154; Owen, supra note 317, at 655; Otto F. Wahl, Amy Wood & Renee Richards, Newspaper Coverage of Mental Illness: Is It Changing, 6 PSYCHIATRIC REHAB. SKILLS 9, 10 (2002).
409. See, e.g., Perlin, On Sanism, supra note 265, at 392 (“When they are depicted in the news or entertainment media, it is inevitably in a negative or distorted manner.”).
411. Matthew Large & Christopher J. Ryan, Sanism, Stigma and the Belief in Dangerousness, 46 AUSTL. & N.Z. J. PSYCHIATRY 1099, 1099 (2012); see also Olav Nielsen & Matthew Large, Rates of Homicide During the First Episode of Psychosis and After Treatment: A Systematic Review and Meta-analysis, 36 SCHIZOPHRENIA BULL. 702, 708 (2010).
412. See Nielsen & Large, supra note 401, at 707.
415. See id. at 656.
nearly one-third of the violent movie characters with schizophrenia committed homicides.\footnote{Id. at 657.} According to the researchers of the study, “[t]he cinematic association of schizophrenia with behavior that is violent, unpredictable, and seemingly without justification potentially fuels an ‘us versus them’ mentality that conveys the message that people with schizophrenia are different and should be feared and avoided.”\footnote{Id. at 658; see also Heather Stuart, Media Portrayal of Mental Illness and Its Treatments: What Effect Does It Have on People with Mental Illness?, 20 CNS DRUGS 99, 101 (2006).}

TV shows also portray people with psychological disorders as violent and dangerous.\footnote{See Stuart, supra note 407, at 100.} One study showed that one-fifth of primetime TV programs depict some aspect of psychological disorders, and 2–3% of adult TV characters have a psychological disorder.\footnote{Id.} Twenty-five percent of the characters with a psychological disorder on primetime TV shows kill someone, and half of them hurt someone.\footnote{Id.} Primetime TV characters with a psychological disorder are ten times (30% vs. 3%) more likely to commit a crime than primetime TV characters who do not have a psychological disorder.\footnote{Id.}

Furthermore, primetime TV shows generally portray people with psychological disorders as lacking the capacity to recover from their disorders; lacking the ability to become productive members of society; and not having a family, occupation, or social identity.\footnote{Id. at 100–01.} Even children’s TV programs present negative stereotypes of people with psychological disorders by portraying them as “objects of fear, derision or amusement” who lack control over their behavior.\footnote{Patrick W. Corrigan, Karina J. Powell & Patrick Michaels, The Effects of News Stories on the Stigma of Mental Illness, 201 J. NERVOUS & MENTAL DISABILITY 179, 179 (2013); see also Corrigan et al., Newspaper Stories, supra note 412, at 551.}

Newspapers, too, play an important role in propagating the belief that people with psychological disorders are dangerous and violent.\footnote{See Corrigan et al., Newspaper Stories, supra note 413, at 551.} Newspapers provide a “factual basis” for the negative stereotypes about people with psychological disorders.\footnote{See id.} For example, a study analyzed 3,353 stories, which included all relevant stories about psychological disorders from all large U.S. newspapers during a six-week period.\footnote{Id. at 551.} The study found that 39% of the stories focused on dangerousness and violence.\footnote{Id. at 553–54.} Only 4% of the stories focused on recovery as an outcome for people with psychological disorders.

Social media also helps shape public perceptions about people with psychological disorders. Poor understanding of psychological disorders is associated with the public’s
belief that people with psychological disorders are dangerous and violent. It is also associated with stigmatizing people with psychological disorders. For instance, researchers investigated stigmatizing and trivializing attitudes on Twitter for five psychological and five physical disorders. The psychological disorders in the study were 1.54 times more likely to be stigmatized and 2.10 times more likely to be trivialized than the physical disorders. The authors concluded their findings support the hypothesis that misinformed opinions about psychological disorders create a stigma about them.

Media reports about high profile murderers may also adversely affect the public’s attitude toward people with psychological disorders. This result may occur because the public assumes that high profile murderers are criminally insane even when this is not true. For example, a study asked respondents if they could remember having seen or heard stories on the radio, on TV, or in newspapers about criminally insane defendants. Forty-two percent of the respondents identified one or more high-profile murderers as criminally insane. However, when the researchers checked court records for verification, none of the defendants the respondents identified had been found insane. The results suggest the public assumes high-profile murderers are insane because of the type of crimes they committed. That is the public’s belief even though the vast majority of insanity defendants did not commit murder. The researchers attributed the respondents’ misconceptions about, and fear of, the criminally insane to media reporting about the criminally insane.

In summary, the media generally depicts people with psychological disorders as violent and dangerous, as well as lacking the ability to benefit from treatment and become productive members of society. This negative portrayal of people with psychological disorders affects how the public, jurors, legislators, attorneys, and judges view the

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430. Id.
431. Id. at 52. The five psychological disorders were autism, depression, eating disorders, OCD, and schizophrenia. Id. The five physical disorders were AIDS, asthma, cancer, diabetes, and epilepsy. Id.
432. Id. at 53–54.
433. Id. at 55.
435. See id.
436. Id.
437. Id. at 527.
438. Id. at 528.
439. Id. at 532.
440. See supra Part III.A.2.
441. Steadman & Cocozza, supra note 435, at 531–32.
insanity defense. Consequently, the media’s portrayal of people with psychological disorders is one of the main reasons for the current dysfunctional state of insanity law. Sanism is another major reason why insanity law is dysfunctional and is discussed in the next Part.

B. Sanism

1. Definition and Reasons for Sanism

Michael Perlin defines sanism as discrimination based on prejudice against people with psychological disorders. Sanism has a long history. For centuries, people have considered a psychological disorder to be a product of sin, evil, and a sign of God’s punishment inflicted on a person for their wickedness. People with psychological disorders have also been viewed as subhumans who have lost the ability to reason. Psychological disorders tend to provoke fear and dread. As Sander Gilman explains:

[The most elementally frightening possibility is loss of control over the self, and loss of control is associated with loss of language and thought perhaps even more than with physical illness. Often associated with violence (including aggressive sexual acts), the mad are perceived as the antithesis to the control and reason that define the self. Again, what is perceived is in large part a projection: for within everyone’s fantasy life there exists . . . an incipient madness that we control with more or less success.]

In short, the public tends to view people with psychological disorders as the “Other.” This perspective allows members of the public to believe they are fundamentally different from people with psychological disorders, and therefore quells their fear that they will develop a psychological disorder.

2. Individual and Structural Sanism

Sanism is prevalent in the United States. It not only occurs in the public’s attitude toward people with psychological disorders, but it is also found in our laws and

443. Perlin, On Sanism, supra note 265, at 397.
444. See id. at 400.
447. Perlin, On Sanism, supra note 257, at 388–89.
448. Id.
449. Id. at 391.
institutions.\textsuperscript{454} In short, there are two types of prejudice against people with psychological disorders: individual and structural prejudice.\textsuperscript{455}

Individual prejudice against people with psychological disorders includes the following examples: (1) employers are less likely to hire people with psychological disorders; (2) landlords are less likely to lease apartments to them; and (3) the public is more likely to report violent crimes when the perpetrator has a psychological disorder.\textsuperscript{456} The public’s belief that people with psychological disorders are dangerous is an important cause of the prejudice against people with psychological disorders.\textsuperscript{457}

Structural prejudice, on the other hand, occurs when private and governmental institutions restrict the opportunities of people with psychological disorders.\textsuperscript{458} For example, a study examined state statutes that restrict the rights of people with psychological disorders in five areas: jury service, voting, holding a public office, marriage, and parenting.\textsuperscript{459} The results of the study revealed the following state restrictions on the civil rights of people with psychological disorders: (1) thirty-eight states restricted the right of people with psychological disorders to serve on a jury; (2) twenty-five states restricted their right to vote; (3) eighteen states restricted their right to hold public office; (4) thirty-two states restricted their right to remain married (i.e., a psychological disorder is grounds for a divorce); and (5) twenty-six states restricted their parental rights.\textsuperscript{460} The study also found that states had added eighteen restrictions to these five civil rights of people with psychological disorders in the ten years prior to the study.\textsuperscript{461} The researchers attributed this increase to legislators shifting away from a rehabilitative approach for people with a psychological disorder to a more punitive approach.\textsuperscript{462} The researchers concluded:

The findings of this study . . . indicate that the mentally ill and the incompetent suffer from the restriction of a number of civil rights. These rights are key components of full participation in society, both in the public forum and in the home. Any restrictions on such rights should be imposed only after a careful analysis of the purpose and impact of the restriction. Unfortunately, there is little evidence that such analysis has occurred prior to the enactment of such restrictions.\textsuperscript{463}


\textsuperscript{456} Corrigan et al., Stigmatizing Attributions, supra note 442, at 92; Perlin, On Sanism, supra note 265, at 391.

\textsuperscript{457} Large & Ryan, supra note 411, at 1099.

\textsuperscript{458} See id.

\textsuperscript{459} Craig Hemmens, Milo Miller, Velmer S. Burton, Jr. & Susan Milner, The Consequences of Official Labels: An Examination of the Rights Lost by the Mentally Ill and Mentally Incompetent Ten Years Later, 38 Cmty. Mental Health J. 129, 129 (2002).

\textsuperscript{460} Id. at 137–38.

\textsuperscript{461} Id. at 137.

\textsuperscript{462} Id. at 138.

\textsuperscript{463} Id.
3. Sanism in the Legal System

Sanism is prevalent in the legal system. For example, in Shannon v. United States, the Supreme Court held that jurors do not need to be informed of the consequences of an NGRI verdict. This holding, however, is generally contradicted by scientific research. Research shows that jurors’ beliefs about the disposition of an NGRI defendant make many jurors reluctant to find a defendant NGRI. Moreover, as one researcher pointed out, informing jurors of the consequences of an NGRI verdict would not cause any harm.

Other examples of sanist attitudes include allowing GBMI defendants to be executed and not requiring states to fund the treatment of GBMI defendants. As previously discussed, most GBMI defendants go directly to prison and receive the same mental health services in prison as guilty defendants do. Perlin thus concludes: “Sanism regularly and relentlessly infects the courts in the same ways that it infects the public discourse.”

Attorneys, too, tend to believe the myths about psychological disorders and have sanist attitudes. Moreover, as described earlier, most attorneys appear to have little education and training in psychological disorders and mental health law. As a result, the quality of legal representation for defendants alleging mental health defenses, including insanity, is poor.

Sanism is present at the legislative level as well. For example, as stated previously, people with psychological disorders are frequently deprived of their civil rights, such as jury service, voting, and holding public office. In addition, legislatures

466. Id. at 587.
467. See generally Michael Peters & Len Lecci, Predicting Verdicts, Adherence to Judge’s Instructions, and Assumptions About the Defendant in a Case Involving the Insanity Defense, 18 PSYCH., CRIME & L. 817 (2012).
469. Peters & Lecci, supra note 455, at 818; see also RITA JAMES SIMON, THE JURY AND THE DEFENSE OF INSANITY 92, 96 (1967) (“[W]e think it would be a useful precaution to include such an instruction under all circumstances and not leave it to the common sense of the jury. On occasion it can do some good and it can never do any harm.”).
470. See Harris v. State, 499 N.E.2d 723, 725–28 (Ind. 1986); People v. Crews, 522 N.E.2d 1167, 1172 (Ill. 1988); State v. Wilson, 413 S.E.2d 19, 22 (S.C. 1992); see also LEVINE & WALLACH, supra note 29, at 211.
472. See supra Part III.C.4.
474. Id. at 404–06.
475. Id.; see supra Part III.B.1.
476. Id.; see also supra Part IV.B.3.
478. Id.; Hemmens et al., supra note 459, at 137–38; see Part IV.B.2.
have failed to correct the substandard quality of legal assistance available to individuals who assert the insanity defense.\footnote{479}{Perlin, \textit{Stubborn}, supra note 275, at 476.}

Legislatures have also failed to remedy the problem of incarcerating people with major psychological disorders rather than hospitalizing them. Nor do they provide adequate mental health services for inmates with psychological disorders.\footnote{480}{A ZZA ABUDAGGA, SIDNEY WOLFE, MICHAEL CAROME, AMANDA PHATDOUANG & E. FULLER TORREY, \textit{Pub. Citizen’s Health Rsch. Grp. & Treatment Advoc. Ctr., Individuals with Serious Mental Illnesses in County Jails: A Survey of Jail Staff’s Perspectives} 1, 56–60 (2016), https://www.treatmentadvocacycenter.org/storage/documents/jail-survey-report-2016.pdf [https://perma.cc/E424-K4LL] (providing recommendations on how to address the problem of lack of adequate mental health services in jails).} Jails and prisons have replaced psychiatric hospitals as the main custodians of people with major psychological disorders.\footnote{481}{Id. at i; see also Batastini et al., \textit{supra} note 273, at 674; Redding, \textit{Why It Is Essential}, \textit{supra} note 270, at 408–09.} As many as ten times more people with major psychological disorders are in jails and prisons than are in psychiatric hospitals.\footnote{482}{AbuDagga et al., \textit{supra} note 480 at 1, 9.} Yet, many of these inmates have committed minor crimes, and their crimes are frequently a product of their psychological disorders.\footnote{483}{Id. at 1.} Nonetheless, they are sent to jails with either no or limited mental health services and with staff who lack the training to cope with people with major psychological disorders.\footnote{484}{Id. at ii.} Prisons also provide limited mental health services to inmates with psychological disorders and frequently lack the resources to handle inmates with major psychological disorders.\footnote{485}{See Batastini et al., \textit{supra} note 273, at 675; Jamie Fellner, \textit{A Corrections Quandary: Mental Illness and Prison Rules}, \textit{41 Harv. C.R.-C.L. L. Rev.} 391, 391 (2006).}

Sanism is a prejudice.\footnote{486}{Large & Ryan, \textit{supra} note 411, at 1100.} As two psychiatrists stated:

\begin{quote}
We all are prone to the cognitive errors of prejudice and should not be afraid or ashamed to admit this when it is revealed. . . . We know that a propensity to sexism, ageism, or racism lies within us all and that we must tackle these prejudices. Now we must guard against and combat sanism just as vigorously.\footnote{487}{Id.}
\end{quote}

Accordingly, if legislators and judges are going to improve insanity law, they must recognize their own vulnerability to sanism.

\section*{C. Judges and Legislators Have an Inadequate Understanding of Major Psychological Disorders Like Schizophrenia}

Because judges handle few insanity cases and usually have little education and training in psychological disorders and mental health, judges likely lack an adequate understanding of major psychological disorders.\footnote{488}{Redding, \textit{Why It Is Essential}, \textit{supra} note 270, at 407; see also \textit{supra} Part III.B.1.} The same is also likely true of
legislators. Although several psychological disorders can produce psychosis, the present discussion focuses on schizophrenia because most defendants found NGRI have schizophrenia. People with schizophrenia may experience disorganized speech (i.e., speech that does not make sense), grossly disorganized behavior (i.e., behavior that is not logical or rationale), and catatonic behavior (i.e., assume bizarre postures or are agitated and excited for no reason). Hallucinations are a common schizophrenic symptom and can involve any of the five senses, though auditory hallucinations (i.e., hearing voices) are the most common type of hallucination. Hallucinations are vivid, clear, and appear to be normal perceptions.

People with schizophrenia also frequently have delusions. The types of delusions that commonly cause criminal behavior include: (1) persecutory (i.e., a belief that someone is trying to harm them); (2) grandiose (i.e., a belief a person has great abilities, made an important discovery, etc.); and (3) religious (i.e., delusions with religious content). Persecutory delusions can cause a person with schizophrenia to falsely believe that a person or a group is trying to harm them. Of all the symptoms of schizophrenia, persecutory delusions are most strongly associated with violence. Grandiose delusions can cause a person to believe that rules and laws do not apply to

489. See, e.g., Jonathan Purtle, Ross C. Brownson & Enola K. Proctor, Infusing Science into Politics and Policy: The Importance of Legislators as an Audience in Mental Health Policy Dissemination Research, 44 ADMIN. POL’Y MENTAL HEALTH 160, 160 (2017) (emphasizing the importance of disseminating mental health research to legislators to improve the quality of mental health law, presumably, in part, because they lack an understanding of psychological disorders); see also Kari A O Tikkinen, Jarno Rutanen, Allen Frances, Brea L. Perry, Brittany B Dennis, Arnav Agarwal, Anna Maqbool, Shanil Ebrahim, Janne S Leinonen, Teppo L N Järvinen & Gordon H Guyatt, Public, Health Professional and Legislator Perspectives on the Concept of Psychiatric Disease: A Population-Based Survey, BMJ OPEN 1, 4 (2019) (“Perceptions differed by group: the inclination to medicalise states of being was highest among psychiatrists and other medical professionals, and lowest among MPs [legislators] and other laypeople, suggesting considerable divergence between professional and lay conceptions of [mental] disease.”).


492. Id. at 87–88.

493. Id.

494. Id. at 87.

495. Id.


them. Religious delusions can produce an overwhelming motivation to engage in certain behaviors even if they are illegal. For example, this may occur because the person believes that God commanded the aggressive behavior.

Rational decisions and actions require accurate perceptions of reality and rational thought. Delusions, hallucinations, disorganized thinking, and other psychotic symptoms can severely impair these abilities. Furthermore, three primary purposes of the criminal law—retribution, deterrence, and rehabilitation—are not served when a person commits a crime because of a psychological disorder. The criminal law imposes retribution only when it can attach blame to a person. For example, a person cannot be executed if the person does not understand the reason for the punishment. People who do not perceive reality accurately and cannot think and act rationally at the time of a crime are not blameworthy.

However, because a defendant was experiencing hallucinations, delusions, disorganized thinking, or other psychotic symptoms at the time of the crime does not mean they should be found NGRI. For psychotic symptoms to be a sufficient basis for insanity, they must be the primary cause of the crime. Research shows that, in most cases, when people with schizophrenia commit crimes, their psychotic symptoms are not the primary cause of their crimes. But when they are the primary cause, the person should be found NGRI.


501. Id.

502. See Felthous, supra note 490, at 753.


505. Morris, supra note 33, at 584 (“One of the fundamental premises underlying modern Anglo-Saxon criminal law is that an individual must be responsible for his actions before he is criminally liable.”); see also Vars, supra note 182, at 99.


509. Royzman, supra note 107, at 54.

510. See Battastini et al., supra note 273, at 675; Fellner, supra note 485, at 391.

511. See Felthous, supra note 490, at 754 (“An act based upon a delusion or hallucination alone does not necessarily mean that a defendant could not have restrained himself. Schizophrenic patients often resist acting on compelling psychotic symptoms.”); see also Peterson et al., supra note 490, at 439.

512. See Peterson et al., supra note 490, at 439–40.

513. Peterson et al., supra note 490, at 439.
It is in the best interest of society that people who commit crimes because of psychological disorders are found NGRI. Only a small percentage of insanity cases involve murder. Consequently, most people with major psychological disorders who commit crimes will be released from prison. In contrast to prisons, psychiatric hospitals can provide treatment for people with major psychological disorders that reduces their risk of violence and tendency to commit crimes. If treatment is ineffective, a state can hold an NGRI defendant indefinitely in a psychiatric hospital until the defendant is no longer mentally ill and dangerous. Moreover, as was previously discussed, the recidivism rate for NGRI defendants is significantly lower than the rate for defendants with major psychological disorders who were sent to prison.

Lastly, morality requires that people who are not responsible for their crimes be found NGRI. Punishing people who cannot perceive reality accurately and think and act rationally at the time of a crime undermines the moral basis of criminal law. Blame is central to criminal responsibility. Consequently, the criminal law should only punish people who can choose freely to commit a crime and, therefore, are morally culpable. As Judge Thurman stated: “To punish a man who lacks the power to reason is as undignified and unworthy as punishing an inanimate object or an animal. A man who cannot reason cannot be the subject to blame. Our collective conscience does not allow punishment where it cannot impose blame.”

In sum, psychological disorders can cause a person to lack an accurate perception of reality and the ability to think and act rationally at the time of a crime. When a

514. See supra Part III.A.2.
515. See supra Part III.A.2.
516. Rice et al., supra note 279.
517. See Fouche v. Louisiana, 504 U.S. 71, 77 (1992) (holding that an NGRI defendant “may be held as long as he is both mentally ill and dangerous, but no longer”).
518. See supra Part III.B.2 for a discussion of recidivism rates among NGRI defendants.
520. See Stephen J. Morse, Excusing the Crazy: The Insanity Defense Reconsidered, 58 S. Cal. L. Rev. 777, 780 (1985) (“Those who believe that the insanity defense should be abolished must claim either that no defendant is extremely crazy at the time of the offense or that it is morally proper to convict and punish such people.”); see also Roytman, supra note 107, at 54 (“Kansas’s scheme violates the deeply rooted principle that criminal liability cannot be assigned to a defendant who, as a result of mental illness, lacks the capacity to understand that his actions were wrong.”).
521. See Morse, supra note 506, at 781 (“The basic precondition for desert in all contexts, legal and otherwise, is the actor’s responsibility as a moral agent.”); see also Dressler, supra note 15, at 420 (“But, the issue here is not one of mercy or compassion, but of justice, as Professor Sanford Kadish has written, ‘[t]o blame a person is to express a moral criticism, and if the person[] . . . does not deserve criticism, blaming him is a kind of falsehood and is . . . unjust to him.’” (alteration in original) (omissions in original)).
522. See Dressler, supra note 15, at 419 (“The point of the insanity defense, as with the common law infancy excuse, is that some people, because of a condition for which they are not responsible—mental illness or age—are not deemed moral agents and, therefore, are not morally and legally responsible for their actions.”); see also Felthous, supra note 490, at 21; Henry M. Hart, The Aims of the Criminal Law, 23 L. & CONTEMP. PROBS. 401, 405 (1958).
523. Holloway v. United States, 148 F.2d 665, 666–67 (D.C. Cir. 1945); United States v. Freeman, 357 F.2d 606, 615 (2d Cir. 1966) (“Society has recognized over the years that none of the three asserted purposes of the criminal law—rehabilitation, deterrence and retribution—is satisfied when the truly irresponsible, those who lack substantial capacity to control their actions, are punished.”); see also Greenawalt, supra note 508.
524. AM. PSYCHIATRIC ASS’N, supra note 237, at 87–88; see also Felthous, supra note 490, at 752.
person lacks an accurate perception of reality and cannot act rationally at the time of the
crime, the person should be found NGRI. Legislators’ and judges’ lack of understanding
of the nature of schizophrenia and other major psychological disorders likely explains,
at least in part, their failure to create a rational insanity law.

D. Ignoring Scientific Research About the Insanity Defense

Insanity laws are not based on scientific research because, when determining
insanity law, legislators and judges frequently (1) use motivated reasoning; (2) engage
in Type 1 thinking; (3) employ a rapid intuitive process for their moral judgments; (4)
utilize irrational thinking and irrelevant factors; and (5) do not understand scientific
research.525

1. Motivated Reasoning

People’s attitudes and values affect their decisions.526 These effects occur because
of motivated reasoning.527 When values and attitudes cause a preference for whether an
insanity bill becomes law or how an insanity case is decided, this preference affects how
information and arguments are processed and evaluated.528 Research shows that people
tend to pay close attention to and heavily weigh evidence and arguments that support
their preferences while either ignoring or undervaluing contrary evidence and arguments
that contradict their preferences.529

Motivated reasoning is generally unconscious.530 As a result, people are usually
unaware that motivated reasoning is affecting their decisions.531 Most people have
negative attitudes and beliefs about the insanity defense and people with psychological
disorders.532 Consequently, motivated reasoning is likely to cause people to pay close
attention to and heavily weigh evidence and arguments that support limiting the insanity
defense while ignoring or undervaluing contrary evidence and arguments.

2. Type 1 Thinking

In addition to motivated reasoning, people frequently use Type 1 thinking when
considering insanity legislation or deciding insanity cases. The dual process model of
thinking states there are two kinds of thinking: Type 1 and Type 2.533 Type 1 thinking is

525. Michael L. Perlin, Psychodynamics and the Insanity Defense: ‘Ordinary Common Sense’ and
526. G REENE & HEILBRUN, supra note 20, at 37.
527. Id.
528. See id.
529. Id.
530. Id.; see also Dan M. Kahan, David A. Hoffman, Donald Braman & Danieli Evans, They Saw a
531. Kahan et al., supra note 530, at 892.
532. See supra Parts III.B.1., III.C.1.i.
ed. 2016).
fast, autonomous, and high capacity. However, it provides no conscious experience of how the information was processed. Type 1 thinking can be surprisingly accurate, but it can also produce errors when used in the wrong circumstances. Errors occur with Type 1 thinking because the person is unaware of how they arrived at a decision, and because Type 1 thinking relies heavily on heuristics. Consequently, Type 1 thinking may use illusions of covariation, ignore base rates and sample size, engage in stereotypical thinking, and make other errors in arriving at a decision.

In contrast, Type 2 thinking is reflective, slow, and resource demanding. And while it is more effortful, Type 2 thinking is also more accurate and less likely to produce heuristic errors. Importantly, however, people often use Type 2 thinking to rationalize their Type 1 thinking.

Type 1 thinking can occur even when people are trying to be careful and are making important professional judgments. For example, a physician diagnosing a patient to determine if they have a life-threatening illness may unknowingly use Type 1 thinking. Thus, whether a person uses Type 1 or Type 2 thinking is not just a matter of deliberate choice.

Several factors, however, can increase the probability of Type 2 thinking. For instance, Type 2 thinking is more likely to occur when a person is not under time pressure and can focus their attention on the judgment being made. But Type 1 thinking can still occur in the absence of time pressure or distractions even when the decision is

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535. Jonathan St B T Evans, *Intuition and Reasoning: A Dual-Process Perspective*, 21 PSYCH. INQUIRY 313, 313–14 (2010) (“For example, when we perceive a face or listen to a piece of music, we have a conscious experience that includes a representation of the object and accompanying emotional experiences. We have, however, no conscious experience of the complex information processing that precedes this experience. Indeed, we could not have such experience because the parallel and rapid processing that is required far exceeds the capacity of working memory, which seems to be the only part of the mind that is consciously accessible, at least in a cognitive sense.”).
538. See Epstein, supra note 537, at 711; REISBERG, supra note 533, at 442.
539. Pennycook et al., supra note 534, at 35.
540. REISBERG, supra note 533, at 442.
541. Laura D. Scherer, J. Frank Yates, S. Glenn Baker & Kathrene D. Valentine, *The Influence of Effortful Thought and Cognitive Proficiencies on the Conjunction Fallacy: Implications for Dual-Process Theories of Reasoning and Judgment*, 43 PERSONALITY & SOC. PSYCH. BULL. 874, 885 (2017) (“This corroborates other evidence that very knowledgeable or intelligent individuals may often use their skills in the service of confirmatory processing, expending effort arguing in favor of their initially preferred judgment rather than considering the validity of alternative judgments. In this way, these data point to the power of confirmation bias or ‘myside bias’ in reasoning, even among the highly skilled.” (internal citations omitted)).
542. REISBERG, supra note 533, at 443.
543. Id.
544. Id.
545. Pennycook et al., supra note 534, at 36.
546. REISBERG, supra note 533, at 472.
important and concerns a familiar topic.547 The probability of using Type 2 thinking is higher when there are no competing demands, the person is motivated to think rationally, and feels a lack of confidence in their initial intuition.548 Type 2 thinking occurs more often when the data can be easily converted into statistical terms.549 It is also more likely when a person has the knowledge necessary to code the data and to understand how sample bias and base rates affect the reliability and validity of data.550

3. Moral Foundation Theory

Moral foundation theory is a prominent theory that explains how people decide moral issues like insanity.551 Moral foundation theory provides that moral systems consist of “interlocking sets of values, practices, institutions, and evolved psychological mechanisms that work together to suppress or regulate selfishness and make social life possible.”552 Based on a synthesis of evolutionary, neurological, and social-psychological research, moral foundation theory posits that moral judgment is generally a “rapid intuitive process” rather than a product of reason.553 People use moral reasoning primarily to justify their intuitive or emotional reactions to moral issues, or in those rare instances when intuitions or emotions about morality conflict.554

4. Irrational Thinking and Irrelevant Factors Affect Insanity Law

As Michael Perlin states, irrational thinking, as well as irrelevant factors, affect insanity beliefs.555 Why does this happen? There are several reasons. Sensational insanity trials, such as John Hinckley’s insanity trial for the attempted assassination of President Reagan, have frequently shaped insanity law.556 Vivid and emotionally arousing insanity trials are more attention-grabbing than “boring” scientific research about insanity law.

When people think about insanity, they may believe that NGRI verdicts violate deontological ethics that it is always wrong to commit a crime and that people who

547. Id.
548. Evans, supra note 535, at 314.
549. REISBERG, supra note 533, at 472.
550. Id.
553. Id. at 69.
554. See id. (“The SIM [Social Intuitionist Model] posits that moral judgment is much like aesthetic judgment—a rapid intuitive process—and defines moral intuitions as follows: ‘the sudden appearance in consciousness, or at the fringe of consciousness, of an evaluative feeling (like-dislike, good-bad) about the character or actions of a person, without any conscious awareness of having gone through steps of search, weighing evidence, or inferring a conclusion.”’ (internal citations omitted)); Jasmine R. Silver & Eric Silver, Why Are Conservatives More Punitive than Liberals? A Moral Foundations Approach, 41 L. & HUM. BEHAV. 258, 259 (2017) (“Developed to explain cross-cultural differences in moral judgments and beliefs, moral foundations theory posits that judgments about morality tend to arise from intuitions about what is right and wrong, which often operate below the level of consciousness, rather than from systematic moral reasoning.” (internal citations omitted)).
555. Perlin, Psychodynamics, supra note 525, at 61.
556. See id. at 8–9.
 violate the law should always be punished. People may view NGRI verdicts as depriving victims and their families of “justice” because defendants are not punished for their crimes. In addition, as Assistant U.S. Attorney General Stephen Trott said about John Hinckley after he was found NGRI: “The people really don’t care if he couldn’t help himself. They want to know what do you do to protect me.” Accordingly, many people fear NGRI acquittees will be quickly released back into the community even though they are still dangerous. Sanism indicates that many people have implicit prejudices against people with major psychological disorders and view them as dangerous and fundamentally different from themselves.

As previously stated, moral judgments are generally a “rapid intuitive process” and represent an emotional reaction to a moral issue rather than being a product of reason and logical analysis. Insanity cases tend to arouse strong emotions, including strong moralistic and fear reactions in people. Consequently, when people think about insanity, they tend first to decide the outcome intuitively and emotionally and then use Type 2 reasoning to rationalize their intuitive and emotional decision. Unfortunately, because motivated reasoning, Type 1 thinking, moral decisions, and implicit biases (i.e., sanism) are generally unconscious processes, they are likely to affect legislators and judges when deciding insanity law despite their best efforts to be objective and impartial.

5. Not Understanding Scientific Research

Legislators and judges often reject scientific research about the law. One reason they do so is because, like other nonscientists, they often do not understand the scientific research.

558. See Perlin, Unpacking the Myths, supra note 557, at 727.
562. See supra Part IV.D.3; Haidt, supra note 552, at 69.
563. See Perlin, Unpacking Myths, supra note 557 at 726–29.
564. See Scherer et al., supra note 541, at 885.
565. Jeffrey J. Rachlinski & Andrew J. Wistrich, Judging the Judiciary by the Numbers: Empirical Research on Judges, 13 ANN. REV. L. SOC. SCI. 203, 203 (2017) (“Do judges make decisions that are truly impartial? A wide range of experimental and field studies reveal that several extralegal factors influence judicial decision making. Demographic characteristics of judges and litigants affect judges’ decisions. Judges also rely heavily on intuitive reasoning in deciding cases, making them vulnerable to the use of mental shortcuts that can lead to mistakes. Furthermore, judges sometimes rely on facts outside the record and rule more favorably toward litigants who are more sympathetic or with whom they share demographic characteristics. On the whole, judges are excellent decision makers and sometimes resist common errors of judgment that influence ordinary adults. The weight of the evidence, however, suggests that judges are vulnerable to systematic deviations from the ideal of judicial impartiality.”).
566. See Margaret Bull Kovera & Bradley D. McAuliff, The Effects of Peer Review and Evidence Quality on Judge Evaluations of Psychological Science: Are Judges Effective Gatekeepers?, 85 J. APPLIED PSYCH. 574, 584 (2000); Perlin, Psychodynamics, supra note 525, at 58.
method and statistics.\textsuperscript{567} Their lack of understanding frequently makes it difficult for them to comprehend and evaluate insanity research.\textsuperscript{568} It also makes it hard for them to convert scientific data into statistical terms, thus increasing the likelihood they will engage in Type 1 thinking about insanity research.\textsuperscript{569}

Does this mean if legislators and judges understood insanity research, it would affect their decisions about insanity law? Not necessarily.\textsuperscript{570} People frequently exhibit confirmation bias.\textsuperscript{571} They tend to pay attention to and seek evidence that confirms their beliefs and to underuse or reinterpret evidence that contradicts their beliefs.\textsuperscript{572} Furthermore, confirmation bias can produce belief perseverance.\textsuperscript{573} Belief perseverance occurs when a belief is maintained even though evidence has thoroughly discredited the belief.\textsuperscript{574} Belief perseverance likely occurs because people engage in a biased memory search for information that supports their belief when it is challenged.\textsuperscript{575} The evidence produced by the biased memory search remains even after the original basis for the belief has been discredited by evidence.\textsuperscript{576}

Despite these obstacles, legislators and judges must use scientific research when deciding insanity law.\textsuperscript{577} A basic principle of human behavior is that “[o]ur experience of the world is highly subjective.”\textsuperscript{578} Accordingly, scientists use the scientific method to counteract their subjective view of the world, so that they can arrive at conclusions that are as objective as possible.\textsuperscript{579} Likewise, legislators and judges need insanity research to counter their subjective views of the insanity defense and people with psychological disorders.\textsuperscript{580} They also need insanity research to help prevent motivated reasoning, prejudices, emotions, irrelevant information, and Type 1 thinking from affecting their decisions about insanity.\textsuperscript{581}


\textsuperscript{568} Kovera et al., Assessment, supra note 552, at 180.

\textsuperscript{569} See Reissberg, supra note 533, at 472.

\textsuperscript{570} Perlin, \textit{Psychodynamics}, supra note 525, at 61.

\textsuperscript{571} Reissberg, supra note 533, at 449.

\textsuperscript{572} Id.

\textsuperscript{573} Id. at 450.

\textsuperscript{574} Id. at 450–51.

\textsuperscript{575} Id. at 451–52.

\textsuperscript{576} Id. at 472.


\textsuperscript{579} Id.

\textsuperscript{580} See Redding, Restructuring, supra note 562, at 602 (“[I]t has been shown that judges’ sociopolitical attitudes play a significant role in how they interpret legal and scientific evidence.”).

\textsuperscript{581} See Perlin, \textit{On Sanism}, supra note 265, at 399.
6. Weaknesses of Scientific Research

Of course, scientific research has weaknesses. Researchers’ biases can affect how they define and conceptualize problems. These biases can also affect what data they collect and how they analyze the data. For example, female researchers are more likely than male researchers to analyze data for gender biases. Researchers’ biases and interests can also produce demand characteristics that affect how participants behave, how the data is collected, and how the results of the study are interpreted.

Moreover, biases can affect peer review. For instance, reviewers are more likely to give a favorable review when an article matches the reviewers’ theoretical perspective. Reviewers are also more likely to overlook methodological flaws if an article concerns a topic the reviewers consider important.

Researchers are often under pressure to publish to obtain tenure, promotions, salary increases, grants, and recognition. Studies that do not find statistically significant results are often unpublishable. This “file drawer” phenomenon (i.e., non-published studies) can produce two problems. First, researchers may subtly manipulate (whether consciously or unconsciously) data collection and analysis to obtain significant results. Second, published research may produce unjustified confidence in its findings because readers are unaware of the potential unpublished studies on the same topic that did not find significant results.

Researchers are also under pressure to produce research that is counterintuitive because research that confirms existing beliefs is often viewed as less important. Another problem is that a study may have weak external validity (i.e., its result may not apply well to the real world). And a study may not account for all relevant factors that affect a legal issue. Many legal issues involve a conflict in values or morals that scientific research cannot resolve.
However, science has safeguards that substantially reduce the probability that researchers’ biases will significantly affect their research. For example, researchers cannot define variables, design studies, or conduct statistical analyses in any manner that they desire. An extensive scientific literature exists on how to design scientific studies and conduct statistical analyses. Peer review will generally reveal flaws in methodological design and faulty statistical analyses. Researchers are trained to be objective, and objectivity does not just reside in individual researchers but also in the scientific community as a whole.

Replication of scientific studies is another safeguard that helps identify biased or flawed studies. So is the Open Science Framework, which encourages researchers to make their studies publicly available, including the development of a research idea, the design of the study, the data and its analysis, and the writing and publishing of reports and papers about the study.

The problem of external validity can also be mitigated. Conceptual replication of lab studies in a variety of contexts and triangulating the results of lab studies with

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599. See id. at 609–10 (“While scientific method is subject to a number of biases and manipulations, the prevalence of generally accepted scientific methods implies limits on the extent to which studies may be manipulated (consciously or unconsciously) to achieve particular results.”).

600. Id. at 610 (“A scientist cannot simply define variables or conduct analyses any way he or she chooses.”); see also Weiten, supra note 578, at 36 (“In contrast, the scientific approach requires that people specify exactly what they are talking about when they formulate hypotheses. This clarity and precision enhance communication about important ideas.” (emphasis in original)).

601. There are psychological journals devoted exclusively to research methods (e.g., Advances in Methods and Practices in Psychological Science, Behavior Research Methods, Methodology, Methods in Psychology, Psychological Methods). There are also journals that focus on statistics (e.g., The American Statistician, British Journal of Mathematics and Statistical Psychology, Mathematical Psychology, Open Journal of Statistics).

602. Bruce Alberts, Brooks Hanson & Katrina L. Kelner, Reviewing Peer Review, 321 SCI. 15, 15 (2008) (“Reviews improve most papers, some dramatically so. Our authors sometimes thank reviewers for catching an embarrassing conclusion or for revealing a new one. We’ve seen peer review expose fraud (alas, not always), clarify results, and spur new insights.”); see also Jonathan P. Tennant, The State of the Art in Peer Review, 365 FEMS MICROBIOLOGY LETTERS 1, 1 (2018) (“Peer review is purported to serve many functions, including quality control as a screening mechanism, legitimisation of scientific research and the self-regulation of scientific communities. As such, in modern academia peer review remains critical in defining professional advancement and the hierarchical structure of research institutes, and is generally held in high regard across research communities.” (internal citations omitted)).

603. Charles M. Judd, Eliot R. Smith & Louise H. Kiefer, Research Methods in Social Relations 18 (6th ed. 1991) (“Although individual scientists may invest a great deal in trying to ‘prove’ a hypothesis or in trying to demonstrate that all competitors are in error, the scientific community, by requiring that research be critically reviewed before being published, sees to it that hypotheses are usually critically evaluated, and they are only cautiously accepted by the scientific community as a whole.”); see also Weiten, supra note 578, at 37 (“The second and perhaps greatest advantage offered by the scientific approach is its relative intolerance of error. Scientists are trained to be skeptical. They subject their ideas to empirical tests. They also inspect one another’s findings with a critical eye. They demand objective data and thorough documentation before they accept ideas. When the findings of two studies conflict, the scientist tries to figure out why, usually by conducting additional research. In contrast, common sense analyses involve little effort to verify ideas or detect errors.”).

604. Weiten, supra note 578, at 48.

evidence from field studies can help address concerns about external validity. 606

Scientific research on topics such as eyewitness testimony and false confessions illustrates the important contributions that scientific research can make to the law. 607

What role should scientific research play in the law? As Professor Richard Redding states:

Social science can, however, force law to confront and critically examine the empirical assumptions upon which it is based, or else make explicit the normative values (rather than allegedly empirical “facts”) upon which the legal decision maker rests her judgment. Science thereby plays a useful role in grounding the normativity of law in empirical reality rather than in the prejudices and self-interests of the lawmaker. 608

As discussed above, people’s beliefs about insanity are often largely based on myths, sanism, emotions, irrelevant factors, motivated reasoning, and Type 1 thinking. If legislatures and courts are going to improve insanity law, their decisions about insanity must be based on scientific research instead.

RECOMMENDATIONS AND CONCLUSIONS

Researchers and organizations, such as the American Psychological Association and the American Psychiatric Association (together, “mental health organizations”), can positively affect insanity law. But to have a significant impact on insanity law, they must first understand the most effective ways to communicate insanity research to legislators. The following guidelines should be followed for disseminating insanity research to state legislators. 609 Researchers and mental health organizations need to make clear the impact, costs, and benefits of creating insanity legislation based on scientific research. 610 The information communicated to legislators can include both statistics and stories. 611 It

606. Gabriel Broughton & Brian Leiter, The Naturalized Epistemology Approach to Evidence, in PHILOSOPHICAL FOUNDATIONS OF EVIDENCE LAW 25, 28 (Christian Dahlman, Alex Stein & Giovanni Tuzet eds., 2021) (“The proper response is not to wash our hands of the investigation. It is to (i) replicate our simulation results in a variety of contexts, and (ii) triangulate those results with evidence from the field. Suppose, for instance, that the admission of a certain kind of statistical testimony in a simulated products liability trial causes a massive increase in jurors’ liability judgments. To establish the external validity of this result, we would next want to replicate it in another simulation using deliberating juries rather than individual jurors or using a different products liability trial. We might also conduct an archival analysis to test for a correlation between such testimony and plaintiff judgments. If we continue to observe the same effects in many different simulation studies, and we find converging evidence from outside the laboratory, then we can be reasonably confident in generalizing our findings to actual trials.” (emphasis in original) (internal citation omitted)).

607. See, e.g., Gary L. Wells & Adele Quigley-McBride, Applying Eyewitness Identification Research to the Legal System: A Glance at Where We Have Been and Where We Could Go, 5 J. APPLIED RSCH. MEMORY & COGNITION 290, 290 (2016) (“Psychology has played a major role over the last two decades in effecting change in the U.S. legal system regarding eyewitness identification evidence.”); Saul M. Kassin, False Confessions, 73 ALB. L. REV. 1227, 1228 (2010) (“Today, this phenomenon still exists and is better understood. In recent years, psychologists and other researchers have systematically studied false confessions and have produced a substantial empirical literature concerning their causes, characteristics, and consequences.”).

608. Redding, Reconstructing, supra note 577, at 606.


610. Id.

611. Id.
should be short (no longer than a page) and use bullet points. The information should be trustworthy, accurate, and unbiased. And it should be based on the most current research available. Current scientific information can include summaries of data that are being collected and analyzed. It is critical that state legislators view the researchers and mental health organizations that supply insanity information as responsive, helpful, timely, and credible.

When possible, the insanity information should be targeted to the specific state where the legislators are located rather than relying on national data. Legislators struggle to find information quickly and easily. Therefore, researchers and mental health organizations need to “actively disseminate information” to legislators. But the information should be sent to legislators who have a special interest in insanity legislation and their legislative staff rather than to all legislators and their staff. Establishing relationships with legislative staff, as well as with the legislators, is essential if researchers and mental health organizations are going to influence insanity legislation.

Legislators recommend creating a central source of information they can go to when seeking information, and they prefer oral over written communications. Consequently, mental health organizations need to create websites where the latest insanity information is available to legislators and their staff and to inform them about these websites. The information on their websites must be comprehensible to lay people and be as clear and concise as possible.

Additionally, researchers and mental health organizations should proactively seek opportunities to present insanity research to legislators and their staff. Because public opinion influences legislators, researchers and mental health organizations must also educate the public and the media about the insanity defense, psychological disorders, and the realities of the risk that people with psychological disorders pose to the public.

Researchers and mental health organizations should also consult with judges and legal scholars to ensure they are addressing insanity issues of importance to the criminal justice system and that their research is useful to judges. Judges should, in turn, encourage and be receptive to insanity research. Judges must change insanity law when

612. Id.
613. Id.
614. Id.
615. Id.
616. Id.
617. Id.
618. Id. at 844.
619. Id.
620. Id. at 845.
621. See id. at 841.
622. Id. at 845.
623. See id.
624. Id. at 844–45.
625. See id.
scientific research shows changes are warranted. Amicus curiae briefs of mental health organizations in insanity cases should focus on providing courts with relevant scientific research about insanity rather than making legal arguments.627 Mental health organizations should also inform judges and staff about websites with the latest insanity research.

Legislators need to be explicit about the purposes of insanity legislation. Judges, too, should be explicit about their reasons for insanity decisions, and the premises and assumptions of their decisions. Being explicit will allow researchers to evaluate whether legislators and judges are achieving their goals and whether their premises and assumptions are valid. Furthermore, legislators and judges need to improve their understanding of the scientific method and statistics and become more knowledgeable about psychological disorders. To help achieve these goals, law schools should offer courses on the scientific method and statistics. In addition, researchers and mental health organizations need to prepare information and courses about the scientific method, statistics, and psychological disorders for legislators and judges.

There are other psychological principles that legislators and judges must understand to improve insanity law. People generally recognize other people’s biases and how these biases affect other people’s judgments and decisions.628 However, people experience “naïve realism” when they evaluate their own judgments and decisions.629 They falsely believe their judgments and decisions are unaffected by biases and that they see the world the way it is.630 People also believe they objectively evaluate arguments, attributions of cause and effect, and interpretations of historical facts.631 Consequently, legislators and judges need to be aware of their “bias blind spots” when deciding insanity law and must take precautions to prevent their emotions and biases from affecting their decisions.632

Legislators and judges must also be cognizant of other flaws in human cognition. In most instances, people lose objectivity because they are engaging in Type 1 thinking.633 When people are under time pressure, they are more likely to engage in Type 1 thinking, and their decisions are more likely to be affected by emotions and stereotypes.634 Accordingly, legislators should ensure they have adequate time to consider insanity legislation. And judges’ caseloads should not be so overwhelming that they cannot properly evaluate insanity cases.

Additionally, if legislators and judges are going to improve insanity law, they will need more feedback on how to do so.635 For example, research shows that umpires in

627. The authors thank Laura Popps, Esq. for this excellent recommendation.
629. Id. at 378.
630. Id.
631. Id.
632. Pronin et al., supra note 628, at 369. Our “bias blind spot” is due to our motivation to see ourselves in a positive light (i.e., the “better-than-average effect”) and is also due to differences in cognitive availability. Id. at 369–370. We lack direct access to our own cognitive and motivational processes and therefore do not realize how they bias our judgment. Id. at 378–79.
634. Rachlinski & Wistrich, supra note 565, at 223.
635. Id.
Major League Baseball do not let their racial biases affect their calling of balls and strikes when they know that machines are recording and scoring their calls. Researchers and mental health organizations should provide scientific data to help legislators and judges evaluate if their biases and emotions are unduly affecting their insanity decisions.

Legislators and judges can also facilitate Type 2 thinking about insanity law by writing down reasons for their decisions—both pros and cons. They should have scripts or checklists of the factors they consider when deciding insanity law and make sure they hear cogent arguments on both sides of an insanity issue before deciding. Most importantly, to facilitate Type 2 thinking, legislators and judges must carefully consider scientific research when deciding insanity law.

In conclusion, insanity law is illogical, irrational, unjust, and immoral. It is also not in the best interest of society or defendants with psychological disorders. Legislatures’ and courts’ efforts to improve insanity law have been misguided and often counterproductive. If legislatures and courts are going to create a more rational, logical, coherent, just, and moral insanity law, they must base insanity law on scientific research. In addition, legislators and judges must engage in Type 2 thinking, not let their emotions, biases, and irrelevant factors affect their decisions, and recognize the flaws in human cognition. Engaging in these behaviors will not only improve insanity law, but also many other areas of the law.

636. *Id.*
637. *Id.*