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A PSYCHIATRIC CAN OF WORMS

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I. INTRODUCTION

Over the past quarter century, the U.S. Supreme Court has repeatedly told the nation's criminal courts, "If you want to impose the death penalty, get psychiatric help!" After the Supreme Court ruled in 1972 that sentencers could not have "untrammeled discretion" in how they imposed the death penalty,¹ some states changed capital punishment statutes to make the death penalty automatic when homicides were committed under specific conditions.² But in rulings issued between 1976 and 1982, the Supreme Court said that this solution was unacceptable: state statutes had to let the judges and juries who issue death sentences consider individualized information about each defendant.³ Sentencers must have the opportunity to learn about any aspect of a defendant's character that might be offered in mitigation, and then must weigh potential mitigating factors when deciding a defendant's fate.⁴ Such factors include information presented in testimony by mental health professionals about a defendant's broken home, his being abused in childhood, and his adulthood emotional disturbances.⁵

In the late 1980s, the Supreme Court was asked whether simply having a mental disability—mild mental retardation—should exempt a murderer from the death penalty. The majority's answer in *Penry v. Lynaugh*⁶ was no. The Court did say that letting jurors consider expert testimony about retardation and childhood abuse was crucial to a "reasoned moral response" about whether to impose a death sentence.⁷ Yet when *Penry* was issued in 1989, only two states had statutes that prohibited execution of persons simply because they had mental retardation.⁸ The Court thought this was not "sufficient evidence at present of a national consensus" that executing such persons would be "cruel and unusual punishment."⁹

When the Supreme Court decided *Atkins v. Virginia*¹⁰ in June 2002, however, eighteen of the thirty-eight states that permitted capital punishment also had legislation that barred the execution of persons with mental retardation.¹¹ This legislative trend helped convince a majority of justices that the "national consensus" required to exempt mentally retarded persons from the death penalty now existed.¹²

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1. *Furman v. Georgia*, 408 U.S. 238, 248 (1972).

2. See generally *Woodson v. North Carolina*, 428 U.S. 280 (1976); *Lockett v. Ohio*, 438 U.S. 586 (1978).

3. *Woodson*, 428 U.S. 280; *Lockett*, 438 U.S. 586.

4. See *Eddings v. Oklahoma*, 455 U.S. 104, 113-17 (1982).

5. *Id.* at 107-08.

6. 492 U.S. 302 (1989). The Supreme Court issued a subsequent decision concerning the same appellant, *Penry v. Johnson*, 532 U.S. 782 (2001) (see *infra* note 28 for discussion of this later *Penry* case).

7. *Id.* at 322.

8. *Atkins v. Virginia*, 536 U.S. 304, 313-14 (2002).

9. *Penry*, 492 U.S. at 322.

10. 536 U.S. 304 (2002).

11. *Id.* at 314-15.

12. *Id.* at 316.

As a result, a practice that the Court found acceptable in 1989 had become unconstitutionally "cruel and unusual punishment" thirteen years later.

Whether *Atkins* reflects good legal reasoning or—as Justice Scalia called it in his dissent—"nothing but the personal views of its members,"¹³ it is poor psychiatric thinking for three reasons. First, *Atkins* implicitly assumes that persons with mental retardation comprise a discrete psychiatric category of individuals who are readily and naturally distinguishable from other persons, when, in fact, the opposite is the case: mental retardation is a classification defined by arbitrary statistical boundaries. Second, *Atkins* mistakenly (and perhaps ominously) approves of basing opinions about moral capacities on a person's psychiatric diagnosis; in offering protection to a group of mentally disabled persons, *Atkins* at the same time stigmatizes those citizens as morally inferior by virtue of their mental condition. Third, through its characterization of the links between reduced moral culpability, mental retardation, and exemptions from the death penalty, *Atkins* commits the American criminal justice system to deciding whether sufferers of other psychiatric disabilities also have reduced blameworthiness and deserve barriers to execution.

This article offers one psychiatrist's perspective on the problems *Atkins* raises for courts that handle death penalty cases. In contrast to the overarching aim of the majority's opinion in *Atkins*—making the administration of capital punishment more equitable—the Supreme Court's latest prescription of psychiatric help may only add a new layer of complexity and confusion to the already capricious process through which the U.S. criminal justice system imposes death sentences. To explain why, I first provide a brief review of the Supreme Court's 1989 *Penry* decision, focusing on the role that evidence of mental retardation played in death penalty cases before *Atkins* was decided. Section III then considers Daryl Renard Atkins' criminal case, which nicely illustrates the type of information that *Penry* required jurors to consider in making death penalty determinations—and the contributions of mental health professionals to those jury determinations. Following this, the article looks at how the Supreme Court majority in *Atkins* characterized the appellant's mental condition and the diagnostic process. Section IV discusses the actual process of diagnosing mental retardation, the ambiguities in that process, and the way that courts and legislatures may distort clinical diagnosis for use in legal proceedings. Section V describes the contradiction between professional organizations' treatment of, and response to, *Atkins* and these organizations' customary stance on the use of diagnoses for non-clinical purposes. Section VI describes the potential implications of the *Atkins* decision for capital defendants with psychiatric problems as incapacitating as, or more disabling than, mental retardation. Section VII concludes with a summary of how the *Atkins* majority's statements may affect testimony by mental health experts, and the effect of such testimony in future death-sentencing determinations.

13. *Id.* at 338.

II. THE BACKDROP FOR *ATKINS*: *PENRY V. LYNAUGH*

In October 1979, Johnny Paul Penry entered the home of Pamela Livingston and raped, beat, and fatally stabbed her.¹⁴ Penry, a then-twenty-two-year-old man on parole following a previous rape conviction, gave authorities two confessions following his arrest, and, after being found competent to proceed with adjudication by the trial court, Penry underwent a jury trial for capital murder in March 1980.¹⁵ Penry raised the insanity defense at his trial, so that before jurors made their decision about his guilt, they had heard defense-introduced psychiatric testimony describing his mental retardation, the beating he suffered in childhood, and the brain damage that probably resulted.¹⁶ The defense also presented testimony from Penry's mother, sister, and aunt describing his physical and emotional mistreatment during childhood and his problems with mastering even modest cognitive tasks.¹⁷ Jurors also had heard rebuttal testimony from two psychiatrists called by the prosecution.¹⁸ Although the State's experts did not support an insanity verdict, they both acknowledged that Penry's intellect was extremely limited and that he could not learn from mistakes.¹⁹

The jury found Penry guilty of capital murder.²⁰ The following day, at the close of Penry's penalty hearing, the jury decided whether Penry deserved a death sentence by considering three "special issues":

- (1) whether the conduct of the defendant that caused the death of the deceased was committed deliberately and with the reasonable expectation that the death of the deceased or another would result;
- (2) whether there is a probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society; and
- (3) if raised by the evidence, whether the conduct of the defendant in killing the deceased was unreasonable in response to the provocation, if any, by the deceased.²¹

The jury gave unanimous affirmative responses, which, under then-existing Texas law, required the trial court impose a death sentence.²²

In his habeas petition to the U.S. Supreme Court, Penry made two claims: (1) the Texas death-sentencing process violated the Eighth Amendment prohibition against cruel and unusual punishment by precluding jurors from weighing mitigating evidence about his mental condition in their sentencing deliberations and (2) to execute a mentally retarded killer would itself be cruel and unusual punishment.²³ The Court endorsed Penry's first claim.²⁴ Writing for the majority, Justice Sandra Day O'Connor noted that the Court had previously endorsed Texas's sentencing

14. *Penry*, 492 U.S. at 307.

15. *Id.* at 307-08.

16. *Id.* at 308-09.

17. *Id.* at 309.

18. *Id.*

19. *Id.* at 310.

20. *Id.*

21. *Id.* (quoting TEX. CODE CRIM. PROC. ANN., art. 37.071(b) (Vernon 1981 & Supp. 1989)).

22. *Id.*

23. *Id.* at 312.

24. *Id.*

scheme "'on the assurance that...[it] would...allow the jury to consider...mitigating circumstances..., including a defendant's prior criminal record, age, and mental or emotional state,'"²⁵ and that "the Eighth and Fourteenth Amendments require that the sentencer 'not be precluded from considering, *as a mitigating factor*, any aspect of a defendant's character...as a basis for a sentence less than death.'"²⁶ The Court found that the wording of Texas's special issues, and the jury instructions at Penry's trial, prevented jurors from expressing their "reasoned moral response" to the mitigating evidence that Penry presented.²⁷ For this reason, the Supreme Court remanded Penry's case for re-sentencing.²⁸

However, four Justices²⁹ endorsed Penry's assertion that the Eighth Amendment required a per se death penalty exemption for all mentally retarded defendants. The majority felt that, under the Court's Eighth Amendment jurisprudential standards for ascertaining "evolving standards of decency,"³⁰ "[t]he clearest and most reliable objective evidence of contemporary values is the legislation enacted by the country's legislatures."³¹ Poll data available in 1989 clearly suggested that the public opposed executing mentally retarded persons,³² but only Georgia and Maryland had enacted legislative bars.³³ This was not enough "evidence of a national consensus against executing mentally retarded people" to convince a majority that such executions must always be unconstitutional.³⁴ The majority decision signaled, however, that the Court might well conclude that executions of mentally retarded persons *did* offend "evolving standards of decency"³⁵ if several more state legislatures had enacted bars to such executions.³⁶

The *Penry* majority also considered arguments from amicus briefs, filed by the American Association on Mental Retardation (AAMR) "and other groups working with the mentally retarded," stating that mentally retarded persons' deficits in

25. *Id.* at 316 (quoting *Jurek v. Texas*, 428 U.S. 262, 272-73 (1976)).

26. *Id.* at 317 (quoting *Lockett v. Ohio*, 438 U.S. 586, 604 (1978)). The Court added that it had reaffirmed this position in holding that "just as the State may not by statute preclude the sentencer from considering any mitigating factor, neither may the sentencer refuse to consider, *as a matter of law*, any relevant mitigating evidence." *Id.* at 318 (quoting *Eddings v. Oklahoma*, 455 U.S. 104, 113-14 (1982)).

27. *Id.* at 328.

28. *Id.* at 340. When Texas retried Penry in 1990, he was again found guilty of capital murder and sentenced to death. *Penry*, 532 U.S. at 782. Penry's case once again found its way to the U.S. Supreme Court where, in *Penry v. Johnson*, 532 U.S. 782 (2001), the Court held that instructions given to the jury during resentencing still did not allow jurors to properly utilize mitigating evidence at sentencing, and that the jury instructions were internally inconsistent. *Id.* at 799-800. As a result, the Court once again vacated Penry's death sentence and remanded his case to the trial court. *Id.* at 804.

29. In separate opinions, Justice Brennan (joined by Justice Marshall) and Justice Stevens (joined by Justice Blackmun), concurring in part and dissenting in part, argued that the Eighth Amendment prohibits execution of mentally retarded offenders. *Penry*, 492 U.S. at 341-50. Justice Brennan asserted that an offender's retardation always "limits his or her culpability so that...the ultimate penalty of death is always and necessarily disproportionate to his or her blameworthiness and hence is unconstitutional." *Id.* Justice Stevens asserted that the majority's discussion of competing arguments "respecting capital punishment of the mentally retarded...compels the conclusion that such executions are unconstitutional." *Id.* at 350.

30. *Penry*, 492 U.S. at 330-31 (quoting *Trop v. Dulles*, 356 U.S. 86, 101 (1958)).

31. *Id.* at 331.

32. *Id.* at 334-35 (summarizing data).

33. *Id.* at 334.

34. *Id.* at 335.

35. *Id.* at 331.

36. *Id.* at 335.

cognition and moral reasoning always prevented them from having the level of culpability needed to impose a death sentence.³⁷ Although these deficits made mental retardation a mitigating factor that the sentencer "must be allowed to consider,"³⁸ the *Penry* majority could not "conclude that all mentally retarded people...—by virtue of their mental retardation alone, and apart from any individualized consideration of their personal responsibility—inevitably lack the cognitive, volitional, and moral capacity" to deserve a death sentence.³⁹ As the then-current edition of AAMR's classification manual pointed out, persons with mental retardation are "a heterogeneous population" with "marked variations in the degree of deficit manifested."⁴⁰

Penry urged the Court to consider "mental age"—estimated by one expert in *Penry*'s case as six and one-half years—as a reason to bar his execution, because a normal child so young would certainly be spared the death penalty.⁴¹ Justice O'Connor noted, however, that mental age calculations were imprecise and did not factor in the capacity of mentally retarded persons to utilize adulthood experiences.⁴² Moreover, making a retarded person's mental age a barrier to execution "could have a disempowering effect if applied in other areas of the law. Thus, on that premise, a mildly mentally retarded person could be denied the opportunity to enter into contracts or to marry by virtue of the fact that he had a 'mental age' of a young child."⁴³

The heterogeneity of mentally retarded persons and the inherent imprecision in specifying mental impairment combined to convince a Supreme Court majority that it would be incorrect, and potentially stigmatizing, to declare that the diagnosis of mental retardation identified a group of persons who always lacked full moral accountability.⁴⁴ Instead, said *Penry*, a capital defendant with mental retardation should be judged as would any other such defendant—as a unique individual, any of whose personal traits might serve as a factor militating against the ultimate sanction.⁴⁵ This majority position served as the backdrop against which jurors assessed the culpability of Daryl Renard Atkins, whom the Commonwealth of Virginia tried for capital murder in 1998.⁴⁶

III. THE ATKINS DECISION

III.A. *Prelude to Murder*

Though Daryl Atkins was still a teenager when he was arrested for murder, his intellectual limitations and potential criminality had been evident for years.

37. *Id.* at 336.

38. *Id.* at 337.

39. *Id.* at 338.

40. *Id.* (quoting CLASSIFICATION IN MENTAL RETARDATION 12 (Herbert J. Grossman, M.D. ed., Am. Ass'n on Mental Deficiency 1983)). Concerning the tenth edition, see *infra* note 83 and accompanying text.

41. *Penry*, 492 U.S. at 339.

42. *Id.*

43. *Id.* at 340.

44. *Id.* at 338.

45. *Id.* at 319.

46. See *Atkins v. Commonwealth*, 510 S.E.2d 445, 448 (Va. 1999) (noting that jury selection took place in February 1998).

Documents prepared by Atkins' appeals attorneys report that he flunked and repeated second grade and received mainly Ds and Fs through seventh grade.⁴⁷ School officials finally referred him for special education testing, but he never was evaluated.⁴⁸ He got all Fs in eighth grade, and despite not meeting requirements for entering high school, he was placed in the ninth grade, where his average was D+.⁴⁹ During the two years he spent in the tenth grade, he averaged a D-.⁵⁰ He did better once he was placed in classes for "slow learners," but he still left school without graduating.⁵¹ By age eighteen⁵²—when he was arrested and charged with the murder of Eric Nesbitt—Atkins had not learned how to do laundry or cook meals for himself.⁵³

Atkins' serious antisocial behavior began in early adolescence. At age thirteen, he was convicted of breaking and entering and petty larceny,⁵⁴ and he started abusing drugs in the eighth grade.⁵⁵ At age seventeen, he was convicted of two counts of grand larceny for stealing from two other boys.⁵⁶ A few months before Nesbitt's murder, Atkins participated with other youths in two armed robberies; during one of these he hit the victim on the head with a bottle.⁵⁷ Two weeks before Nesbitt's murder, Atkins approached a woman, held a pistol to her head, hit and knocked her down with the gun, started to leave, then returned and shot her in the stomach.⁵⁸

At around midnight on August 16, 1996—having spent the day drinking alcohol and smoking marijuana—Atkins and William Jones drove to a 7-11 store, intending to rob a customer.⁵⁹ Eric Nesbitt, an airman from Langley Air Force Base, became their victim. The two men robbed Nesbitt at gunpoint, then took him to a nearby ATM and forced him to withdraw \$200.⁶⁰ They then drove to a deserted area and, ignoring Nesbitt's pleas to leave him unharmed, shot him eight times.⁶¹ A videotape of the ATM transaction allowed police to identify and locate the two men.⁶² When arrested, Atkins told police that Jones had shot Nesbitt.⁶³ Jones gave no statement when police caught him, but later, with a lawyer present, Jones told authorities

47. Brief for Petitioner at 10-11, *Atkins v. Virginia*, 536 U.S. 304 (2000) (No. 00-8452), available at http://supreme.lp.findlaw.com/supreme_court/briefs/00-8452/00-8452.mer.petitioner.pdf (last visited Apr. 7, 2003) [hereinafter Brief for Petitioner in *Atkins*].

48. *Id.*

49. *Id.* at 11.

50. *Id.*

51. *Id.* at 10.

52. *Id.* at 2. According to information maintained by Virginians for Alternatives to the Death Penalty, Atkins' date of birth is November 6, 1977, which means he was eighteen and three-fourths years old in August 1996. Virginians for Alternatives to the Death Penalty, *The Men on the Row*, at <http://www.vadp.org/menrow.htm> (last visited Apr. 7, 2003).

53. Brief for Petitioner in *Atkins*, *supra* note 47, at 15 n.24.

54. *Id.* at 13 n.20.

55. *Id.* at 12 n.19.

56. *Id.* at 13 n.20.

57. *Id.*

58. *Id.*

59. *Atkins*, 536 U.S. at 338 (Scalia, J., dissenting).

60. *Id.*

61. *Id.*

62. Brief for Petitioner in *Atkins*, *supra* note 47, at 1-2.

63. *Id.* at 2.

Atkins did the shooting, and was allowed to plead guilty to first-degree murder in exchange for his testimony against Atkins.⁶⁴

III.B. *Atkins's Trial and State Appeal*

At Atkins' trial, both men said the other shot and killed Nesbitt, but Jones' testimony was "more coherent and credible," and the jury convicted Atkins of capital murder.⁶⁵ During the trial's penalty phase, jurors heard about Atkins' previous criminal activity.⁶⁶ The defense responded with one witness, a psychologist, who testified about his interviews of people who knew Atkins, his examination of school and court records, and results of an IQ test he had administered on which Atkins scored only 59.⁶⁷ Despite the psychologist's testimony that Atkins was "mildly mentally retarded" and would not pose a threat to others in prison, the jury sentenced Atkins to death.⁶⁸ Atkins had to have a second sentencing hearing because the original trial court had used a misleading verdict form.⁶⁹ At the second hearing, jurors again heard psychological testimony about Atkins' retardation, plus testimony from his father and grandmother.⁷⁰ Nonetheless, Atkins again received a death sentence.⁷¹

On appeal, Atkins' lawyers did not argue that execution would be disproportionate to penalties imposed for similar crimes in Virginia.⁷² Rather, they contended that Atkins should not be sentenced to death because he was mentally retarded.⁷³ A majority of the Virginia Supreme Court justices rejected this contention, relying on the holding in *Penry* that mental retardation could be a mitigating factor, but not an absolute barrier to capital punishment.⁷⁴ Two of the justices disagreed, however, stating that although retarded persons commit crimes, they are "less culpable for their criminal acts" than other offenders because they "have substantial limitations not shared by the general population. A moral and civilized society diminishes itself if its system of justice does not afford recognition and consideration of those limitations in a meaningful way."⁷⁵

III.C. *The U.S. Supreme Court's Decision*

Impressed by "the gravity of the concerns expressed" in the Virginia Supreme Court's dissenting opinion, the U.S. Supreme Court agreed to hear Atkins' case and to revisit their 1989 decision in *Penry*.⁷⁶ Between 1989 and 2002, the number of states with laws barring death sentences for mentally retarded persons had grown

64. *Id.*

65. *Atkins*, 536 U.S. at 307

66. *Id.* at 308.

67. *Id.* at 308-09.

68. *Atkins v. Commonwealth*, 510 S.E.2d 445, 451, 453 (Va. 1999).

69. *Id.* at 457-58.

70. Brief for Petitioner in *Atkins*, *supra* note 47, at 14-17.

71. *Id.* at 20.

72. *Commonwealth v. Atkins*, 534 S.E.2d 312, 318 (Va. 2000).

73. *Id.*

74. *Id.* at 319.

75. *Id.* at 325 (Hassell, J., dissenting).

76. 536 U.S. at 310.

from two to eighteen, and legislatures in three other states had taken steps toward adopting such laws.⁷⁷ Because of the passage of so many laws since the *Penry* decision, a Supreme Court majority opinion, written by Justice Stevens, stated that "[m]uch has changed" in the public's attitude about executing retarded persons.⁷⁸ This "national consensus,"⁷⁹ which reflected "the evolving standards of decency that mark the progress of a maturing society,"⁸⁰ required the Court to change the stance it had adopted just thirteen years earlier. Henceforth, a diagnosis of mental retardation would spare any murderer from the death penalty.

Footnote three in *Atkins* quotes at length from diagnostic criteria that professional organizations have developed to identify people with mental retardation.⁸¹ The ninth edition⁸² of the AAMR's classification manual states that the term "mental retardation" refers

to substantial limitations in present functioning. It is characterized by significantly subaverage intellectual functioning, existing concurrently with related limitations in two or more of the following applicable adaptive skill areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure, and work. Mental retardation manifests [itself] before age 18.⁸³

The current diagnostic manual of the American Psychiatric Association (APA) describes mental retardation as

significantly subaverage general intellectual functioning...accompanied by significant limitations in adaptive functioning in at least two of the following skill areas: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety...[with] onset...before age 18 years.⁸⁴

Referring to such criteria, Justice Stevens' opinion states that, "by definition," persons with mental retardation "have diminished capacities to understand and process information, to communicate, to abstract from mistakes and learn from experience, to engage in logical reasoning, to control impulses, and to understand the reactions of others."⁸⁵ Although retarded criminals may know right from wrong, their mental deficiencies "diminish their personal culpability....Thus, pursuant to

77. *Id.* at 314-15.

78. *Id.* at 314.

79. *Id.* at 316.

80. *Id.* at 311-12 (quoting *Trop v. Dulles*, 356 U.S. 86, 101 (1958) (describing criterion for interpreting the Eighth Amendment's prohibition of cruel and unusual punishment)).

81. *Atkins*, 536 U.S. at 309 n.3.

82. Concerning the current edition, see *infra* note 83.

83. AMERICAN ASSOCIATION ON MENTAL RETARDATION, MENTAL RETARDATION: DEFINITION, CLASSIFICATION, AND SYSTEMS OF SUPPORTS 5 (9th ed. 1992) [hereinafter AAMR 9]. For the most current edition of this text see AMERICAN ASSOCIATION ON MENTAL RETARDATION, MENTAL RETARDATION: DEFINITION, CLASSIFICATION, AND SYSTEMS OF SUPPORTS (10th ed. 2002) [hereinafter AAMR 10].

84. AMERICAN PSYCHIATRIC ASSOCIATION, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS (4th ed., text revision 41, 2000) [hereinafter DSM-IV-TR]. This definition is quoted in *Atkins*, 536 U.S. at 309 n.3.

85. *Atkins*, 536 U.S. at 318.

our narrowing jurisprudence, which seeks to ensure that only the most deserving of execution are put to death, an exclusion for the mentally retarded is appropriate."⁸⁶

III.D. Official Praise

In official mental health circles, reactions to *Atkins* have been favorable. The AAMR and the APA were among the many mental health organizations that had signed on to amicus briefs urging the Supreme Court to ban execution of retarded persons.⁸⁷ When the *Atkins* decision was announced, Doreen Croser, AAMR's Executive Director, was "deeply grateful" that the Supreme Court stopped "this barbaric practice of killing persons who do not have the full intellectual capacity to understand the crime they committed.... This is an important day for disability advocates and for our country."⁸⁸ Renée Binder, M.D., chair of the APA's Committee on Judicial Action, praised the decision "because it recognizes that there are objective and reliable determinations of whether an individual has mental retardation when the assessment is done by qualified professionals with substantial experience."⁸⁹

Dr. Binder's comment echoes points emphasized in the amicus brief that the APA (along with the American Psychological Association and the American Academy of Psychiatry and Law) filed with the Supreme Court.⁹⁰ The brief argued that making a psychiatric diagnosis the basis for a life-or-death legal decision would cause no scientific or practical problems.⁹¹ Both "incorrect diagnoses" and "unnecessary legal wrangling" could be avoided when determining whether an accused killer has mental retardation "because mental retardation can be identified using time-tested instruments and protocols with proven validity and reliability."⁹² To diagnose a person as having mental retardation, states the brief, professionals must find that "three necessary criteria are all present: significant limitations in intellectual functioning, significant limitations in practical or 'adaptive' functioning, and onset before adulthood."⁹³ The brief claims that psychologists and psychiatrists can make "an objective determination" about whether an accused killer suffers from mental retardation using established tests of intelligence and adaptive functioning,

86. *Id.* at 319.

87. *Id.* at 316 n.21.

88. American Association of Mentally Retarded Persons, *AAMR Applauds U.S. Supreme Court Decision to Ban Execution of Persons with Mental Retardation*, at http://www.aamr.org/Policies/death_penalty.shtml (last updated July 5, 2002).

89. Ken Hausman, *Court Bars Execution of Mentally Retarded Criminals*, 37 PSYCHIATRIC NEWS, July 19, 2002, at 1, available at <http://pn.psychiatryonline.org>.

90. Brief Amici Curiae American Psychological Association, American Psychiatric Association, and American Academy of Psychiatry and the Law, *McCarver v. North Carolina*, 532 U.S. 941 (2001) (00-8727) [hereinafter APoA/APaA/AAPL Brief]. In March 2001, the Supreme Court agreed to hear *McCarver*, a case brought by a North Carolina inmate who, like *Atkins*, was mentally retarded. 532 U.S. 941. When North Carolina later passed a statute barring execution of persons with mental retardation, *McCarver* became moot, and the Supreme Court dismissed the case. *McCarver v. North Carolina*, 533 U.S. 975 (2001). The Court subsequently allowed amici curiae briefs submitted in *McCarver* to be considered in support of Daryl Atkins' appeal. *Atkins v. Virginia*, 534 U.S. 1053 (2001). Perusal of the amicus briefs filed by mental health organizations for *McCarver* suggests that these were highly influential in the majority's decision in *Atkins*.

91. APoA/APaA/AAPL Brief, *supra* note 90, at 3.

92. *Id.*

93. *Id.*

so that clinicians "undertaking separate assessments should reach the same conclusion."⁹⁴ Yet to anyone knowledgeable about mental retardation, the tests used to establish its presence, how clinicians diagnose mental retardation, and the status of psychiatry in general, this assertion is remarkable.

IV. IS MENTAL RETARDATION A DISTINCTIVE CATEGORY?

IV.A. *Psychiatric Diagnosis: Utility versus Validity*

In a recent article, psychiatrists Robert Kendell and Assen Jablensky describe the beneficial influence that current, ruled-based diagnostic schemes have had on psychiatric practice.⁹⁵ The APA's 1980 diagnostic manual⁹⁶ established an approach to classifying psychiatric disorders, maintained in subsequent editions, in which diagnoses are not dependent on theories of pathogenesis. Instead, mental disorders are categorized using lists of explicit criteria, a minimum number of which are required to render a specific diagnosis.⁹⁷ Among the benefits of a standard, psychiatric *lingua franca* are better diagnostic agreement and communication between mental health professionals and "improve[d] communication with the users of services, care-givers, and society at large."⁹⁸

Although current diagnostic classifications help psychiatrists organize clinical information and make treatment decisions, that does not necessarily mean that those classifications accurately reflect reality. "Thoughtful clinicians" recognize the still-primitive nature of psychiatric diagnosis, state Drs. Kendell and Jablensky.⁹⁹ Yet many a diagnostic concept nonetheless

tends to become reified. That is, people too easily assume that it is an entity of some kind that can be invoked to explain the patient's symptoms and whose validity need not be questioned....[T]he mere fact that a diagnostic concept is listed in an official nomenclature and provided with a precise, complex definition tends to encourage this insidious reification.¹⁰⁰

Drs. Kendell and Jablensky note that most medical specialties do not characterize disorders according to constellations of symptom, but by underlying pathological processes.¹⁰¹ With a few exceptions (*e.g.*, Alzheimer's disease), however, the entities that psychiatrists call "disorders" are not associated with or defined by patterns of neuronal pathology but represent only commonly occurring associations of symptoms and signs of illness.¹⁰² As Drs. Kendell and Jablensky put it, "Psychiatry

94. *Id.*

95. Robert Kendell & Assen Jablensky, *Distinguishing Between the Validity and Utility of Psychiatric Diagnoses*, 160 AM. J. PSYCHIATRY 1, 4 (2003), available at <http://ajp.psychiatryonline.org>.

96. AMERICAN PSYCHIATRIC ASSOCIATION, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS (3rd ed. 1980) [hereinafter DSM-III].

97. *Id.*

98. Kendell & Jablensky, *supra* note 95, at 4. *Atkins* represents graphic evidence of this last point, in that the majority's position directly applies easily understood psychiatric diagnostic criteria to a legal decision. See *Atkins*, 536 U.S. at 318.

99. Kendell & Jablensky, *supra* note 95, at 5.

100. *Id.*

101. *Id.* at 8-9.

102. *Id.* at 9.

is in the position—that most of medicine was in 200 years ago—of still having to define most of its disorders by their syndromes.”¹⁰³ Indeed, these authors note,

Several well-informed commentators have produced evidence suggesting that there may be no natural boundary between recognized mental disorder and normality or health....Cloninger...stated firmly that “there is no empirical evidence” for “natural boundaries between major syndromes,” that “no one has ever found a set of symptoms, signs, or tests that separate mental disorders fully into non-overlapping categories,” and that “the categorical approach...is fundamentally flawed....” The accumulation of such evidence and opinions led Allen Frances, the chairperson of the task force that produced DSM-IV, and Helen Egger to comment gloomily, but perhaps presciently, that “we are at the epicycle stage of psychiatry where astronomy was before Copernicus and biology before Darwin. Our inelegant and complex current descriptive system will undoubtedly be replaced by...simpler, more elegant models.”¹⁰⁴

IV.B. Defining Mental Retardation

What is true of psychiatric diagnosis in general is especially true when it comes to mental retardation.¹⁰⁵ The “by definition” language of the *Atkins* decision suggests that persons who receive the diagnosis of mental retardation comprise a group of individuals whose constellation of deficits clearly distinguishes them from non-retarded persons.¹⁰⁶ Yet the diagnosis of mental retardation—despite its clinical usefulness—is an entirely artificial construct: the line that separates persons who receive this diagnosis from individuals whose mental capacities are only well below average¹⁰⁷ is a changing and arbitrary one.

There is no better illustration of this last point than decisions of the AAMR to “update” its definition of mental retardation ten times over the past century.¹⁰⁸ The most recent changes were published five days before the *Atkins* decision, in the tenth edition of the AAMR’s official classification manual.¹⁰⁹ Although psychiatric

103. *Id.*

104. *Id.* at 7 (citations omitted).

105. Though I describe here the flaws and limitations of current psychiatric diagnostic schemes, I am *not* claiming that mental illness is merely a social construct for identifying deviant individuals whose behavior makes us label them as “different.” Like almost all psychiatrists, I think that persons who are diagnosed with mental disorders generally have real (and often biologically based) problems, but our current diagnostic schemes are far from perfect. For the classic statement of the view that mental illnesses are really just problems in living, see Thomas S. Szasz, *The Myth of Mental Illness*, 15 AM. PSYCHOLOGIST 113 (1960) (“the concept of mental illness has outlived whatever usefulness it might have had and that it now functions merely as a convenient myth”); but see Michael S. Moore, *Some Myths About “Mental Illness”*, 32 ARCHIVES GEN. PSYCHIATRY 1483 (1975) for a discussion of five versions of the “mental-illness-is-a-myth” argument in radical psychiatry and reasons for rejecting each version.

106. *Atkins*, 536 U.S. at 310.

107. Psychiatrists refer to such persons as having “borderline intellectual functioning.” This is not deemed an official “disorder” but is one of several “conditions that may be a focus of clinical attention.” DSM-IV-TR, *supra* note 84, at 740.

108. American Association on Mental Retardation, *Definition of Mental Retardation*, at http://www.aamr.org/Policies/faq_mental_retardation.shtml (last updated July 29, 2002). The changes are summarized in AAMR 9, *supra* note 83, at ix. Between 1959 and 1973, persons with IQs as high as 85 might have satisfied the then-current AAMR definition. *Id.* For a short historical summary of definitions and terms used to describe persons with mental retardation, see Edmund J. Sass, *Definitions of Mental Retardation: A Chronological List With Dates and References*, at <http://www.cloudnet.com/~edrbass/mrdefinitions2.htm> (last updated Feb. 15, 2001).

109. AAMR 10, *supra* note 83.

diagnoses are often revised to reflect new understandings, scientific breakthroughs, or availability of new treatment approaches, sometimes social and political developments play a role.¹¹⁰ The AAMR advertisements for *Mental Retardation: Definition, Classification and Systems of Supports* state (unabashedly) that the 2002 edition

proposes a state-of-the-art method to define, classify, and support an individual with mental retardation. In view of the recent U.S. Supreme Court decision to ban execution of persons with mental retardation, the 10th edition is a timely and critical resource to the states as they strive to come up with a current and fuller definition of mental retardation.¹¹¹

The AAMR currently defines mental retardation as "a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. This disability originates before the age of 18."¹¹² This characterization appears reasonably close to the previously quoted definition used by the American Psychiatric Association. Beyond this point, however, the two groups begin to part. The APA's diagnostic manual categorizes mental retardation according to its global severity, that is, as either mild, moderate, severe, or profound.¹¹³ Since 1992, however, the AAMR has rejected this approach.¹¹⁴ Instead, diagnosticians are asked to examine patterns of limitations in a person's everyday functioning, and to then describe the degree of support those persons need, which may be "intermittent," "limited," "extensive," or "pervasive."¹¹⁵

If persons with mental retardation were members of a homogeneous, discrete biological or psychological category of persons, readily distinguished from persons without mental retardation, professional organizations might have an easier time settling on clinical criteria for diagnosing the condition. Some retarded persons exhibit impairments that make them easily identifiable: they have severe academic

110. See generally HERB KUTCHINS & STUART A. KIRK, MAKING US CRAZY: DSM: THE PSYCHIATRIC BIBLE AND THE CREATION OF MENTAL DISORDERS (1997). For example, the authors observe,

Although the conventional view claims that science and hard evidence underlie decisions about DSM, we find that political negotiation and advocacy—as well as personal interest—are just as, and often more, important in determining whether a diagnosis is created...[S]cience is often subordinated to social and political influences in the development and use of the diagnostic categories contained in DSM.

Id. at 16.

111. American Association on Mental Retardation, AAMR Home Page, *Hot Off the Press*, at <http://www.aamr.org/> (last visited Apr. 12, 2003).

112. AAMR 10, *supra* note 83, at 1.

113. DSM-IV-TR, *supra* note 84, at 42-44.

114. As the AAMR states,

Rather than mold individuals into pre-existing diagnostic categories and force them into existing models of service, the supports approach evaluates the specific needs of the individual and then suggests strategies, services and supports that will optimize individual functioning. The supports approach also recognizes that individual needs and circumstances will change over time. Supports were an innovative aspect of the 1992 AAMR manual and they remain critical in the 2002 system.

American Association on Mental Retardation, *Fact Sheet: Frequently Asked Questions About Mental Retardation: What are Supports?*, at http://www.aamr.org/Policies/faq_mental_retardation.shtml (last updated July 29, 2002).

115. The AAMR's recommended diagnostic process is summarized in AAMR 9, *supra* note 83, at 23-34.

problems during childhood, limited communication skills, and need, even as grown-ups, to be supervised at work or where they live.¹¹⁶ But such individuals make up only 15 percent of all retarded persons.¹¹⁷ Mildly retarded persons, who comprise about 85 percent of all retarded individuals, usually develop social and work skills that are "adequate for minimum self-support," though they need guidance in making complicated decisions.¹¹⁸ As preschoolers, they often are indistinguishable from non-retarded children.¹¹⁹ The medical conditions that can cause intellectual impairment are countless and include chromosomal defects, biochemical abnormalities, and infections that alter the brain's development before birth or during early childhood.¹²⁰ Doctors often can find a distinct biological source of a child's retardation, although many things that can cause serious intellectual impairment do not always do so.¹²¹ In many cases of mild mental retardation, doctors can point to no specific medical reason for the person's limitations.¹²² Clinicians thus cannot use biological tests to decide whether a person is mentally retarded.

IV.C. Placement on the "Bell Curve"

Instead, professionals identify persons with mental retardation using tests that measure intelligence and social capabilities.¹²³ When the intellectual capabilities of a large, randomly selected group of persons are measured by such tests, the result is what statisticians call a "normal distribution," often described as a "bell curve"¹²⁴ (which gave the title to Herrnstein and Murray's controversial book¹²⁵ on the subject). At one end of the distribution lie geniuses and on the other end are

116. The impairments of these individuals would result in their being diagnosed, in the DSM-IV-TR classification system, as having moderate, severe, or profound retardation. DSM-IV-TR, *supra* note 84, at 43-44.

117. *Id.*

118. *Id.* at 43.

119. *Id.*

120. *Id.* at 45-46. For additional discussion of conditions that may cause mental retardation, see *Developmental Problems*, in THE MERCK MANUAL § 19, ch. 262 (Mark H. Beers, M.D., & Robert Berkow, M.D., eds., 2003), at <http://www.merck.com/pubs/mmanual/section19/chapter262/262e.htm> (last visited Aug. 26, 2003).

121. *Id.*

122. See DSM-IV-TR, *supra* note 84, at 45 ("In approximately 30%-40% of individuals seen in clinical settings, no clear etiology for the Mental Retardation can be determined despite extensive evaluation efforts. Specific etiologies are more likely to be identified in individuals with Severe or Profound Mental Retardation.").

123. See generally AAMR 10, *supra* note 83, at 24-25.

124. Mathematicians often call this a "Gaussian" distribution, a term that honors the important work of the German mathematician and astronomer Carl Friedrich Gauss (1777-1855). The normal distribution was first described by Abraham De Moivre in 1733, but his paper was not discovered until 1924. The formula for the curve is

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{(x-\mu)^2}{2\sigma^2}}$$

where μ is the mean (center) of the distribution and σ is the standard deviation. WAYNE W. DANIEL, BIOSTATISTICS: A FOUNDATION FOR ANALYSIS IN THE HEALTH SCIENCES, THIRD EDITION 79 (1983). When the normal distribution is used to represent the scores of a population, the fraction of the total area under the curve that lies between two points along the distribution represents the fraction of the population having scores that fall within a particular range.

125. RICHARD J. HERRNSTEIN & CHARLES MURRAY, THE BELL CURVE (1994).

profoundly impaired persons; bright, average, and dull folks make up the vast majority in the middle. Intelligence testing lets psychologists place an individual along the spectrum of cognitive ability because such testing produces a numerical result—an “intelligence quotient” or IQ score. Less-well-known tests let psychologists and mental retardation specialists rank individuals in terms of other “adaptive” capabilities¹²⁶—such as communication abilities, work skills, and caring for oneself—for which the population as a whole is also continuously distributed.¹²⁷

IQ scores are set up so that the “mean” or average score is 100, and the “standard deviation”—a statistical term referring to mathematical properties of the bell curve—is 15. Approximately ninety-five percent of a normally distributed population lies within two standard deviations of the mean, and individuals lying outside this arbitrary statistical boundary are often deemed “abnormal.” A cut-off IQ score of “approximately 70”¹²⁸—two standard deviations below the mean score of 100—is the intelligence score used in the APA’s current diagnostic manual to separate persons with mental retardation from those designated as having “borderline intellectual functioning.”¹²⁹

The modifier “approximately” in the APA’s diagnostic criteria reminds mental health professionals that using 70 as a cut-off score reflects a statistical convention rather than a natural boundary between two distinctive groups of individuals. When conscientious mental health professionals interpret IQ scores and plan treatment interventions, they keep in mind that someone who scores 69 on an IQ test is practically indistinguishable from someone who scores 71, and that two persons with an IQ of, say, 67 and 73 have much more in common with each other than with a person who scores 88. If pre-*Atkins* state statutes and post-*Atkins* decisions are any guide, however, legislatures and courts often ignore such considerations when they put *Atkins* into practice. Of the eighteen state statutes in effect when *Atkins* was

126. Examples include the Vineland Adaptive Behavior Scales (VABS) and the AAMR Adaptive Behavior Scales. The VABS may be used to assess the social and personal skills of both disabled and nondisabled persons and covers the age range of birth to adulthood. The AAMR school scale is specifically designed for children who may have mental retardation and measures social skills, social adjustment, and level of independence. The AAMR residential and community scale is designed for adults who may have mental retardation and assesses social behavior, personal independence, and responsibility in daily living. For a description and explanation of these, and other behavior assessment scales, see JEROME M. SATTLER, *ASSESSMENT OF CHILDREN: BEHAVIORAL AND CLINICAL APPLICATIONS* 191-209 (4th ed. 2002).

127. At its website, the AAMR states,

Adaptive behavior is the collection of conceptual, social, and practical skills that people have learned so they can function in their everyday lives. Significant limitations in adaptive behavior impact a person's daily life and affect the ability to respond to a particular situation or to the environment.

Limitations in adaptive behavior can be determined by using standardized tests that are normed on the general population including people with disabilities and people without disabilities. On these standardized measures, significant limitations in adaptive behavior are operationally defined as performance that is at least 2 standard deviations below the mean of either (a) one of the following three types of adaptive behavior: conceptual, social, or practical, or (b) an overall score on a standardized measure of conceptual, social, and practical skills.

AAMR, *Fact Sheet: Frequently Asked Questions About Mental Retardation: What is Adaptive Behavior?*, at http://www.aamr.org/Policies/faq_mental_retardation.shtml (last updated July 29, 2002).

128. DSM-IV-TR, *supra* note 84, at 42, 49.

129. *Id.* at 740.

decided, eleven had language that made specific IQ scores part of the criteria for exempting a defendant from facing a possible death penalty.¹³⁰

Some subsequent state court decisions have followed the same pattern. For example, in defining mental retardation for purposes of capital sentencing, the Oklahoma Court of Criminal Appeals required that "no person shall be eligible to be considered mentally retarded unless he or she has an intelligence quotient of seventy or below."¹³¹ The Ohio Supreme Court's declaration of "substantive standards and procedural guidelines in determining whether convicted defendants facing the death penalty are mentally retarded" begins with the clinical definitions promulgated by the AAMR and APA. After noting, however, that most existing "state statutes prohibiting the execution of the mentally retarded require evidence that the individual has an IQ of 70 or below," the Ohio Supreme Court's definition adds to clinicians' criteria "a rebuttable presumption that a defendant is not mentally retarded if his or her IQ is above 70."¹³² Using such precise cut-offs mistakenly suggests that a one-point difference in two persons' scores reflects a significant difference in their cognitive capacity.

IV.D. Reliability of Measurements

The availability of IQ test scores suggests that mental health professionals can offer courts objective, precise methods for deciding who is, or is not, impaired enough to receive the death penalty. Yet the numbers that IQ tests generate are far from being perfectly reliable measurements of a person's cognitive ability. Under the best conditions, IQ tests have a "measurement error" of about five points.¹³³ An individual who scores, say, 68 on one administration has a ninety-five percent chance of scoring between 63 and 73 on subsequent administrations. More than half

130. MD. ANN. CODE § 2-202(b)(1)(i) (2002) (IQ "of 70 or below"); KY. REV. STAT. § 532.130(2) (2002) (IQ "of 70 or below"); TENN. CODE ANN. § 39-13-203(a)(1) (IQ "of 70 or below"); N.M. STAT. ANN. § 31-20A-2.1(A) (2003) (IQ "of 70 or below"); ARK. CODE ANN. § 5-4-618 (2) ("rebuttable presumption of mental retardation when a defendant has an intelligence quotient of sixty-five (65) or below"); WASH. REV. CODE § 10.95.030(2)(c) (2003) (defining significantly below average intellectual functioning as IQ less than 70); NEB. REV. STAT. § 28-105.01(3) (stating that IQ less than 70 is "presumptive evidence of mental retardation"); S.D. CODIFIED LAWS § 23A-27A-26.2 (stating that IQ less than 70 is "presumptive evidence of mental retardation"); ARIZ. REV. STAT. ANN. 13-703.02 (2003) (pre-screening IQ score of 75 triggers additional assessment; IQ less than 65 establishes rebuttable presumption of mental retardation); FLA. STAT. ANN. § 921.137(1) (2002) ("significantly subaverage general intellectual functioning" means performance that is two or more standard deviations from the mean score on a standardized intelligence test"); N.C. SESS. LAW 2001-346 § 1 ("significantly subaverage general intellectual functioning" means performance that is two or more standard deviations from the mean score on a standardized intelligence test").

131. *Murphy v. State*, 54 P.3d 556, 568 (Okla. Crim. App. 2002).

132. *State v. Lott*, 779 N.E.2d 1011, 1014 (Ohio 2002).

133. DSM-IV-TR, *supra* note 84, at 41. For this reason, a leading text on child assessment states, "Individuals who use the test findings need to know that the IQ and other major scores used to make decisions about the child are not perfectly accurate because they inherently contain measurement error." JEROME M. SATTLER, *ASSESSMENT OF CHILDREN: COGNITIVE APPLICATIONS* 109 (4th ed. 2001). Similar considerations underlie recommendations in psychologists' official technical manual to report IQ scores using a range (or interval) of values:

[R]eporting a score in terms of confidence intervals is a means of expressing the reliability of that test score. Confidence intervals assist the examiner in test interpretation by delineating a range of scores in which the examinee's "true" score most likely falls, and reminds the examiner that the observed score contains measurement error.

THE PSYCHOLOGICAL CORPORATION, 1997 WAIS-III-WMS-III TECHNICAL MANUAL 182.

of those persons whose IQ results fall in the mildly retarded range receive scores of 65 to 70,¹³⁴ that is, their scores' margin of error will include 70.

Another source of uncertainty stems from the fact that, for many items, the test administrator has to decide how many points a subject's response deserves. In normal clinical use, these imperfections do not matter a great deal. When testing a defendant for whom a one- or two-point change in IQ score has life-and-death implications, however, clinicians may have a hard time being dispassionately "objective" about how they interpret a response. The net result of all these imperfections is that judges, or juries,¹³⁵ will often have a hard time deciding on which side of the arbitrary line between mentally retarded and merely "dull" a defendant falls.

If IQ testing generates nettlesome problems with imprecision and measurement error, measuring adaptive functioning—a key feature defining mental retardation¹³⁶—is even trickier. As one leading text on behavioral assessment points out, several

134. On an IQ test for a normally distributed population with a mean of 100 and standard deviation of 15, 1.29 percent of results can be expected to fall between 65 and 70, and 2.14 percent of results will fall between 55 and 70. Thus, about 57 percent of the results between 55 and 70 lie between 65 and 70. See DANIEL, *supra* note 124, at 491 (Table F).

135. The issue of who is constitutionally permitted or required to make the ultimate determination about mental retardation goes far beyond the scope of this article. In *Ring v. Arizona*, 122 S. Ct. 2428 (2002), the U.S. Supreme Court held that aggravating factors in Arizona's death penalty statute operate as "the functional equivalent of an element of a greater offense," and that the Sixth Amendment therefore requires that a jury—not merely a judge—must determine that they are present if a death sentence is to be imposed. *Id.* at 2443 (quoting *Apprendi v. New Jersey*, 530 U.S. 466, 494 n.19 (2000)). Whether, following *Atkins*, the absence of mental retardation is an aggravating factor that must be determined by jurors remains a still open question.

Yet, even if courts or statutes assign this determination to jurors, judges may still play a key role. For example, *Murphy v. State* remands a condemned prisoner's case back to the district court

for an evidentiary hearing on the sole issue of Petitioner's claim of mental retardation in accordance with this Order. At that hearing, . . . the District Judge shall determine if Petitioner has raised sufficient evidence (at trial, on appeal, or at the evidentiary hearing) of his mental retardation . . . for the issue of mental retardation to be decided as a question of fact by a jury at a resentencing hearing.

Murphy, 54 P.3d at 570.

Murphy appears to give the judge a gate-keeping role and the jury the ultimate decision-making role. However, the decision also states,

The trial judge's duty at an *Atkins* hearing [on mental retardation] is to determine whether or not the factual determinations relating to the issue of mental retardation were imposed by the jury under the influence of passion, prejudice, or any other arbitrary factor. In administering this duty, the trial judge shall conduct his or her own *de novo* review of the evidence presented at trial. . . . Where a trial judge determines that a defendant is mentally retarded and, consequently, that the jury's decision finding the defendant not mentally retarded was due to the influence of passion, prejudice, or other arbitrary factor, that issue may be raised as a proposition of error for this Court to consider as part of its mandatory sentence review.

Id. at 569.

By contrast, the Ohio Supreme Court has placed the decision-making power solely in the hands of the trial judge:

The trial court shall make written findings and set forth its rationale for finding the defendant mentally retarded or not mentally retarded. We believe that these matters should be decided by the court and do not represent a jury question. In this regard, a trial court's ruling on mental retardation should be conducted in a manner comparable to a ruling on competency (i.e., the judge, not the jury, decides the issue).

Lott, 779 N.E.2d at 1015.

136. See SATTler, *supra* note 126 (describing DSM-IV-TR definition of mental retardation).

features of adaptive behavior make it "difficult to define."¹³⁷ Adaptive behavior is really not separable from intelligence; individuals use both cognitive and behavioral abilities to master social problems and function in their environment. What counts as adaptive behavior changes as one grows older: during school years, academic performance is crucial, but in adulthood, living independently and ability to earn a living are paramount. Adaptive behavior is also a function of a person's living situation and the demands of his unique social environment. Some people can function adequately in a close-knit rural town but cannot cope with demands of life in an urban metropolis. Far more than is the case with measuring intelligence, "adaptive behavior represents the interaction of personal, cognitive, social, and situational variables."¹³⁸ Finally, the various available instruments for measuring adaptive behavior may give different results. This may be a consequence of differences in the instruments' content, the type of responses the instruments require, the times at which the instruments were created, the types of persons used to develop the instruments, or simply the persons who do the ratings.¹³⁹

V. DIAGNOSES, LEGAL CATEGORIES, AND DISCRIMINATION

The APA's support of the *Atkins* decision is strikingly at odds with organized psychiatry's well established opposition to using diagnostic categories for legal and social purposes. In a 1996 amicus brief filed in *Kansas v. Hendricks*¹⁴⁰—a Supreme Court case concerning post-prison confinement of sex offenders—the APA explained why legal decisions should not be determined by categories derived from a medical diagnostic scheme.¹⁴¹

The classification schemes are developed and periodically altered, through comprehensive field trials, research, and analysis, to serve diagnostic and statistical functions, forming a common (and always imperfect) language for gathering clinical data and for communication among mental health professionals....Such comprehensive classification schemes are not...designed to identify those [persons who are] subject to various legal standards....Not all

137. *Id.* at 190.

138. *Id.*

139. *Id.*

140. *Kansas v. Hendricks*, 521 U.S. 346 (1997) (holding that Kansas's Sexually Violent Predator Act, which permits civil commitment of persons who, due to a mental abnormality or a personality disorder, are likely to engage in "predatory acts of sexual violence," satisfies substantive due process requirements and violates neither the Constitution's double jeopardy prohibition nor its ban on ex post facto lawmaking).

141. Leroy Hendricks suffered from pedophilia. *Hendricks*, 521 U.S. at 360. According to DSM-IV-TR, pedophilia is diagnosed when a person is sixteen years or older, [o]ver a period of at least 6 months, [has] recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving sexual activity with a prepubescent child or children (generally age 13 years or younger)[,]...[t]he person has acted on these urges, or the sexual urges or fantasies cause marked distress or interpersonal difficulty[, and]...[t]he person is at least age 16 years and at least 5 years older than the child or children. DSM-IV-TR, *supra* note 84, at 572.

individuals who come within a DSM-IV^{142]} category suffer an impairment that diminishes their autonomy.¹⁴³

In recent decades, each edition of the APA's diagnostic manual has included a "Cautionary Statement" stating that the manual's purpose

is to provide clear descriptions of diagnostic categories in order to enable clinicians and investigators to diagnose, communicate about, study, and treat people with various mental disorders.... The clinical and scientific considerations involved in categorization of these conditions as mental disorders may not be wholly relevant to legal judgments, for example, that take into account such issues as individual responsibility¹⁴⁴

The APA's diagnostic manuals also have emphasized the limitations of the diagnostic schemes they exemplify. The manuals have aimed not to categorize *people*, but to categorize their mental disorders. Therefore, it is wrong to believe that all individuals who are diagnosed with a particular disorder "are alike in all important ways.... [I]ndividuals sharing a diagnosis are likely to be heterogeneous even in regard to the defining features of the[ir] diagnosis and boundary cases will be difficult to diagnose in any but a probabilistic fashion."¹⁴⁵ Noting that the "imperfect fit" between legal and medical categories poses "risks" and "dangers" of misusing diagnoses, the current manual warns (as did its predecessor) that, when deciding whether a person meets a particular legal standard of responsibility, "additional information is usually required beyond that contained in the [manual's] diagnosis. This might include information about the individual's functional impairments and how these impairments affect the particular abilities in question."¹⁴⁶ In other words, until *Atkins*, the APA consistently opposed equating a person's moral and legal responsibility to his psychiatric diagnosis.

Since its enactment in July 1990, the APA has vigorously endorsed the Americans With Disability Act (ADA), which provides broad protections against discrimination based on mental or physical disabilities.¹⁴⁷ This position is consistent with organized psychiatry's longstanding wish to reduce the discrimination and stigma associated with having a mental disorder.¹⁴⁸ In a 1997 position statement, the

142. "DSM-IV" refers to AMERICAN PSYCHIATRIC ASSOCIATION, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS (4th ed. 1994) [hereinafter DSM-IV]. This was the current edition of the DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS when this statement was written.

143. Brief of Amici Curiae for the American Psychiatric Association at 22-23, *Kansas v. Hendricks*, 521 U.S. 346 (1995) (Nos. 95-1649, 95-075).

144. DSM-IV-TR, *supra* note 84, at xxxvii; DSM-IV, *supra* note 142, at xxvii; AMERICAN PSYCHIATRIC ASSOCIATION, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS (3rd ed., revised xxix, 1987). A similar, but shorter, statement appeared in DSM-III, *supra* note 96, at 12.

145. DSM-IV-TR, *supra* note 84, at xxxi.

146. *Id.* See also DSM-IV, *supra* note 142, at xxii (containing the same language as DSM-IV-TR).

147. 42 U.S.C. §§ 12101 *et seq.* (1994).

148. See Eve Bender, *With Politics and Mental Illness, the More Things Change*, PSYCHIATRIC NEWS, Nov. 1, 2002, at 10 (describing the persistence of bias against political candidates with mood disorders) (quoting Steven Mirin, M.D., APA Medical Director, who stated, "The fight against stigma has been waged on a number of fronts...[including] the arena of public education, where the APA has a leadership role"). Two former APA presidents have co-edited a book aimed at reducing the stigma associated with mental illness. See STIGMA AND MENTAL ILLNESS (Paul Fink & Allan Tasman eds., 1992). See also Paul Jay Fink, *Dealing with Psychiatry's Stigma*, 37 HOSP. COMM. PSYCHIATRY 814 (1986) (contending that "[t]he stigma associated with psychiatry is the most

APA criticized allowing psychiatric diagnoses to influence decisions about employment, insurance, housing, or credit, because such decisions often reflect widespread but baseless beliefs about mental conditions.¹⁴⁹ Indeed, said the APA,

categorical distinctions based on mental disorder are tantamount to class discrimination because they assume that everyone who has received a particular diagnosis or treatment is identical. In fact, individuals with the same diagnosis...may manifest different kinds of symptoms; even when the symptoms are the same, they may vary widely in their severity. Nor is there a direct or simple connection between symptoms severity and impairments that may be relevant to a particular decision.¹⁵⁰

Yet *Atkins* makes exactly this kind of "categorical distinction": it says explicitly that *all* persons diagnosed with mental retardation necessarily lack the capacity to accept full moral responsibility for their actions.¹⁵¹ Justice Scalia made this very point in his dissent: "[T]he Court concludes that no one who is even slightly mentally retarded can have sufficient 'moral responsibility to be subjected to capital punishment for any crime. As a sociological and moral conclusion that is implausible....'"¹⁵²

Justice Scalia might have added that, in many social contexts, making blanket decisions about people because of a mental disability—for example, denying them jobs, accommodations, or public services out of a belief that their disability makes them less responsible—has become illegal since the passage of the ADA.¹⁵³ The more progressive approach—the approach mandated by the ADA and (usually) advocated by mental health professionals—is to make an individualized decision about a defendant, taking into account his mental condition, but not allowing it to determine his moral worth.¹⁵⁴ Individualized decision making was the capital sentencing process that the Supreme Court's *Penry* decision had recommended and that two sentencing juries implemented when they condemned *Atkins*.¹⁵⁵ After hearing ample testimony about his mental retardation, jurors concluded, as Justice Scalia put it, that *Atkins*' condition "was not a compelling reason to exempt him from the death penalty in light of the brutality of his crime and his long demonstrated propensity for violence."¹⁵⁶

In criticizing his colleagues for their support of the majority's position in *Atkins*, psychologist-attorney Donald Bersoff has voiced the same concerns about an absolute ban on executing retarded persons that Justice O'Connor had articulated in

critical problem facing the profession").

149. APA Council on Psychiatry and Law, *Position Statement on Discrimination Against Persons with Previous Psychiatric Treatment*, 154 AM. J. PSYCHIATRY 1042 (1997).

150. *Id.*

151. *Atkins*, 536 U.S. at 321.

152. *Id.* at 339 (Scalia, J., dissenting) (quoting *Thompson v. Oklahoma*, 487 U.S. 815, 863-64 (1988) (Scalia, J., dissenting)).

153. See 42 U.S.C. § 12112 (1994) (barring disability-based discrimination in employment); see also 42 U.S.C. § 12132 (1994) (barring disability-based discrimination related to public services); 42 U.S.C. § 12182 (1994) (prohibiting discrimination by public accommodations suppliers).

154. See state statutes, *supra* note 130.

155. *Penry*, 492 U.S. at 320-22; *Atkins*, 536 U.S. at 308-09.

156. *Atkins*, 536 U.S. at 339 (Scalia, J., dissenting).

Penry.¹⁵⁷ The support by mental health professionals of the barring of executions of retarded persons, Professor Bersoff argues,

is short-sighted....As important as it is to protect those who cannot protect themselves, it is equally important to promote the right of all persons to make their own choices, and, as a corollary, to be accountable for those choices. It is simply untrue that no person with mental retardation is incapable of carrying out a horrible murder with the requisite intent or foresight. If we accept the concept of blanket incapacity, we relegate people with retardation to second class citizenship, potentially permitting the State to abrogate the exercise of such fundamental interests as the right to marry, to have and to rear one's children, to vote, or such everyday entitlements as entering into contracts of making a will.¹⁵⁸

VI. CONSEQUENCES OF *ATKINS*

VI.A. *Broad Discretion in Implementing Atkins*

The most obvious and immediate consequences of *Atkins* stem from the substantive and procedural latitude given to state courts and legislatures that will implement the decision. The decision uses the diagnostic criteria of experts in mental disability to show that persons with mental retardation are "by definition"¹⁵⁹ less culpable and can never deserve a death sentence. Yet nothing in *Atkins* requires states to follow diagnostic criteria used by mental health professionals when they effectuate the decision's constitutional mandate. To the contrary, the *Atkins* majority specifically left the task of codifying criteria for mental retardation to the states.¹⁶⁰

In many states with pre-*Atkins* statutes, specific IQ scores are either required for a diagnosis of mental retardation or constitute presumptive evidence for or against that diagnosis.¹⁶¹ Such laws potentially give results of a single administration of a single intelligence measure far more weight than mental health professionals believe is warranted and reflect a mode of decision making that is explicitly rejected in the previously quoted APA and AAMR diagnostic criteria.¹⁶² In most cases, statutes use two standard deviations below the mean IQ score as the cut-off point,¹⁶³ but in some statutes, other scores (*e.g.*, 65¹⁶⁴ or 75¹⁶⁵) are used for key decisions. In addition to adopting different IQ cut-off scores, states may create other substantive variations in their definitions of mental retardation. Also, states would appear to have some latitude in procedural matters, *e.g.*, statutory provisions for testing and introducing

157. Donald N. Bersoff, *Some Contrarian Concerns About Law, Psychology, and Public Policy*, 26 LAW & HUM. BEHAV. 565, 568 (2002).

158. *Id.*

159. See *Atkins*, 536 U.S. at 318.

160. *Id.* at 317 (quoting *Ford v. Wainwright*, 477 U.S. 399, 416-17 (1986) ("As was our approach in *Ford v. Wainwright*, with regard to insanity, 'we leave to the State[s] the task of developing appropriate ways to enforce the constitutional restriction upon its execution of sentences.'")).

161. See state statutes, *supra* note 130.

162. See section III.C, *supra*.

163. See state statutes, *supra* note 130.

164. ARK. CODE ANN. § 5-4-618 (a)(2) (2003) ("rebuttable presumption of mental retardation when a defendant has an intelligence quotient of sixty-five (65) or below").

165. ARIZ. REV. STAT. ANN. 13-703.02(C) (pre-screening IQ score of 75 triggers additional evaluation).

evidence about intellectual functioning. The result could well be that, when states implement the *Atkins* ban, some will do so in ways that will permit execution of persons whom many mental health professionals would deem mentally retarded. Also, varying definitions and procedures could mean that some states will execute persons whom the statutes of other states would have exempted from the death penalty.

The problems with giving courts or legislatures the job of defining a mental disorder are reflected in some early post-*Atkins* decisions. At least one state supreme court has stated that it would leave this task to the legislature:

It would not be appropriate for this court to usurp the authority of the legislature by fashioning procedural and substantive standards in relation to the *Atkins* hearing. Such matters are best left to the determination of the legislature following discussion and debate. The legislature may choose to eventually adopt procedural standards to govern *Atkins* issues that arise prior to conviction and sentence. We recognize that the circuit courts will have to conduct these hearings, at least for the time being, without definitive guidance from the legislature or from this court.¹⁶⁶

By contrast, in September 2002, the Ohio Supreme Court ordered, *sua sponte*, that oral argument be held on the "appropriate procedures" and the "appropriate substantive standard" for deciding whether a capital defendant has mental retardation,¹⁶⁷ and subsequently created a definition that gives decision-making power to the trial court.¹⁶⁸

When the Oklahoma Court of Criminal Appeals faced the task of creating its state's definition of mental retardation, it observed,

That puts this State in an interesting position, considering our legislature has attempted to do just that, but our Governor has apparently disagreed with the legislature's efforts. Thus, the task falls upon this Court to develop standards to guide those affected until the other branches of government can reach a meeting of the minds on this issue.¹⁶⁹

Oklahoma's definition is substantially similar to the one found in DSM-IV-TR and requires the defendant "to prove he or she is mentally retarded by a preponderance of the evidence at trial."¹⁷⁰ The court notes that "[i]ntelligence quotients are one of the many factors that may be considered," and "are not alone determinative" of mental retardation.¹⁷¹ Despite this, the court's definition states that "to be considered mentally retarded," a defendant must have "an intelligence quotient of seventy or below, as reflected by at least one scientifically recognized, scientifically approved, and contemporary intelligent quotient test."¹⁷²

166. *People v. Pulliam*, No. 89141, 2002 Ill. LEXIS 947, *62 (Ill. Oct. 18, 2002).

167. *State v. Lott*, 774 N.E.2d 1220, 1221 (Ohio 2002).

168. *State v. Lott*, 779 N.E.2d 1011, 1015 (Ohio 2002).

169. *Murphy v. State*, 54 P.3d 556, 567 (Okla. Crim. App. 2002).

170. *Id.* at 568.

171. *Id.*

172. *Id.* (citations omitted).

At least one federal court has already commented on the lack of direction in *Atkins*.¹⁷³ In *Bell v. Cockrell*, the court had to determine "what to do with a capital habeas case in which the petitioner has consistently offered clinical evidence of mental retardation since his first trial, which took place in the 1970's."¹⁷⁴ Discussing the disagreement between the petitioner's and Texas's beliefs about handling the case, the court said,

What this divergence of views exhibits is the welter of uncertainty following *Atkins*.... The Supreme Court neither conclusively defined mental retardation nor provided guidance on how its ruling should be applied to prisoners already convicted of capital murder.... In these circumstances, inferior federal courts have no useful role to play until and unless following *Atkins*, a death sentence is reaffirmed or again imposed on Bell by the state courts. Just how the state courts will implement *Atkins*, we cannot say.¹⁷⁵

VI.B. *Misplaced Fears of Faking*

The belief that exculpatory mental problems are easily faked has deep roots in Anglo-American law.¹⁷⁶ As Professor Michael Perlin has noted, fear of feigned mental illness has "permeated the American legal system for over a century,"¹⁷⁷ and "the fear of feigned insanity and the distrust of expert witnesses' ability to identify malingering behavior continues to dominate insanity defense jurisprudence."¹⁷⁸ It is therefore not surprising that Justice Scalia's *Atkins* dissent raises the fear of faking mental retardation by capital defendants, asserting that exempting mentally retarded persons from the death penalty will turn "the process of capital trial into a game," and that a simple reading of the official AAMR and APA definitions of mental retardation shows "this condition can readily be feigned."¹⁷⁹

In fact, examination of diagnostic criteria suggests that mental retardation is hard to fake successfully, because the criteria require evidence that retardation began during childhood—evidence, that is, that the condition existed years before the defendant committed a capital crime. On occasion—for example, when young criminals like *Atkins* are involved—information about the defendant's childhood academic performance and social functioning may be sparse or ambiguous. In these cases, the defendant's current behavior (feigned or genuine) may influence what mental health experts conclude about his life-long capacities. But a possibility of spurious claims is not a reason for barring all legal claims of a certain sort, assuming that the reason for allowing such claims is sound in the first place.¹⁸⁰ State

173. *Bell v. Cockrell*, 310 F.3d 330 (5th Cir. 2002).

174. *Id.* at 331.

175. *Id.* at 332-33.

176. Joel Eigen, *Historical Developments in Psychiatric Forensic Practice: The British Experience*, 6 INT'L J.L. & PSYCHIATRY 423, 427-28 (1984) (quoting statement made in 1681 by Sir Robert Holbron that "a man may counterfeit himself to be mad, he may do it so cunningly as it cannot be discerned whether he be mad or so").

177. Michael L. Perlin, *The Supreme Court, the Mentally Disabled Criminal Defendant, and Symbolic Values: Random Decisions, Hidden Rationales, or Doctrinal Abyss?*, 29 ARIZ. L. REV. 1, 98 (1987).

178. MICHAEL L. PERLIN, *THE HIDDEN PREJUDICE: MENTAL DISABILITY ON TRIAL* 236 (2000).

179. *Atkins*, 536 U.S. at 353 (Scalia, J., dissenting).

180. See, e.g., *Dillon v. Legg*, 441 P.2d 912, 917-18 (Cal. 1968) (stating the possibility of "fraudulent assertions...in isolated cases does not justify wholesale rejection of the entire class of claims in which that potentiality arises").

legislatures do not like to be perceived as coddling violent criminals, but concerns about faking did not stop many states from adopting statutory bars against executing the mentally retarded.¹⁸¹ Presumably, courts can deal with false claims of mental retardation as well as they deal with false claims of medical and psychological problems that arise in a variety of other legal circumstances. Moreover, in considering Justice Scalia's concern, it is important to recognize that assessing malingering is a core skill for mental health clinicians,¹⁸² particularly in contexts where being (or appearing) ill may confer advantages (e.g., avoiding punishment, financial awards) on the evaluatee.¹⁸³

Malingering is not, strictly speaking, a psychiatric diagnosis, because a feigned disorder is not, after all, a real disorder. Yet the APA diagnostic manual lists malingering as one of the "conditions that may be a focus of clinical attention" and tells clinicians,

Malingering should be strongly suspected if any combination of the following is noted:

1. Medicolegal context of presentation (e.g., the person is referred by an attorney to the clinician for examination)
2. Marked discrepancy between the person's claimed stress or disability and the objective findings [i.e., what the clinician directly observes in the evaluatee's behavior]
3. Lack of cooperation during the diagnostic evaluation and in complying with the prescribed treatment regimen
4. The presence of Antisocial Personality Disorder¹⁸⁴

Mental health professionals can use several tests specifically designed to detect feigned psychological problems, including the validity scales on the Minnesota Multiphasic Personality Inventory-2 (MMPI-2),¹⁸⁵ the Structured Interview of Reported Symptoms (SIRS),¹⁸⁶ the Validity Indicator Profile (VIP),¹⁸⁷ and the Test

181. *Atkins*, 536 U.S. at 315-16. The *Atkins* Court states,

Given the well-known fact that anticrime legislation is far more popular than legislation providing protections for persons guilty of violent crime, the large number of States prohibiting the execution of mentally retarded persons (and the complete absence of States passing legislation reinstating the power to conduct such executions) provides powerful evidence that today our society views mentally retarded offenders as categorically less culpable than the average criminal. The evidence carries even greater force when it is noted that the legislatures that have addressed the issue have voted overwhelmingly in favor of the prohibition.

Id.

182. See CLINICAL ASSESSMENT OF MALINGERING AND DECEPTION (Richard Rogers ed., 2nd ed. 1997), a leading text on the detection of malingering [hereinafter CLINICAL ASSESSMENT].

183. See generally Loren Pankratz & Laurence M. Binder, *Malingering on Intellectual and Neuropsychological Measures*, in CLINICAL ASSESSMENT, *supra* note 182, at 223-36 (describing general principles of assessment and examples of tests to detect malingered cognitive problems). These authors comment that "the clinician should attend to the possibility of malingering any time financial issues or other external incentives are present." *Id.* at 232.

184. DSM-IV-TR, *supra* note 84, at 739.

185. See Roger L. Greene, *Assessment of Malingering and Defensiveness by Multiscale Personality Inventories*, in CLINICAL ASSESSMENT, *supra* note 182, at 169-207 (describing development and use of various MMPI scales in detecting malingering).

186. See Richard Rogers, *Structured Interviews and Dissimulation*, in CLINICAL ASSESSMENT, *supra* note 182, at 169-207 (describing development, evaluation, and applications of the SIRS).

187. See Richard I. Frederick et al., *Validation of a Detector of Response Bias on a Forced-Choice Test of Nonverbal Ability*, 39 NEUROPSYCHOLOGY 118 (1994) (describing the evaluation of the VIP).

of Memory Malingering (TOMM).¹⁸⁸ Recent scholarship has offered clinicians new perspectives on the mathematical interpretation of results from malingering tests.¹⁸⁹

VI.C. A Psychiatric Can of Worms¹⁹⁰

Rather than worry about an onslaught of malingered mental retardation in the wake of *Atkins*, courts should ready themselves to address the decision's most obvious logical¹⁹¹ consequence: the claim that defendants with *other* serious mental limitations deserve diagnosis-based death penalty exemptions. Indeed, prominent psychiatrists called for this shortly after *Atkins* was announced.¹⁹² Dr. Diane H. Schetky, the principal author of the APA's position statement opposing death sentences for persons who commit crimes as juveniles, believes that "our current knowledge of neurological and psychological developments in adolescents" means that the Supreme Court's arguments for sparing retarded persons from the death penalty "can and should be applied to individuals who commit their crimes as juveniles."¹⁹³ Former APA president Dr. Alan A. Stone, noting that many forensic

188. See Tom N. Tombaugh, *The Test of Memory Malingering (TOMM): Normative Data from Cognitively Intact and Cognitively Impaired Individuals*, 9 PSYCH. ASSESSMENT 260 (1997) (describing the development and validation of the TOMM).

189. See Douglas Mossman & Kathleen J. Hart, *Presenting Evidence of Malingering to Courts: Insights from Decision Theory*, 14 BEHAV. SCI. L. 271 (1996) (introducing the concept of Bayes's Theorem for interpreting the results of malingering measures); Douglas Mossman, *The Meaning of Malingering Data: Further Applications of Bayes's Theorem*, 18 BEHAV. SCI. L. 761 (2000) (responding to other authors' criticisms of the Bayesian approach and describing additional techniques for test interpretation); Douglas Mossman, *Interpreting Clinical Evidence of Malingering: A Bayesian Perspective*, 28 J. AM. ACAD. PSYCHIATRY L. 293 (2000) (applying Bayesian methods to clinical data); Douglas Mossman, Daubert, *Cognitive Malingering, and Test Accuracy*, 27 LAW HUM. BEHAV. 229 (2003) (examining courts' application of *Daubert* to tests of cognitive malingering).

190. In its amicus brief to the Supreme Court in *Atkins*, the Criminal Justice Legal Foundation (CJLF) suggested that U.S. law on who might receive capital punishment was, after a "torturous" process, now fairly settled, but declaring a constitutional bar to executing mentally retarded persons would "reopen this can of worms" by causing "a disruption of the important and complex body of law surrounding capital punishment" that had developed since *Furman*. Brief of Amici Curiae of the Criminal Justice Legal Foundation at 7-8, *Atkins v. Virginia*, 536 U.S. 304 (2002) (No. 00-8452). The CJLF brief suggests that exempting persons with mental retardation would increase jurisprudential complexity and uncertainty as courts and legislatures attempted to predict future developments in death penalty law—that is, it would reopen a *legal* can of worms. This section suggests that by giving the Court's imprimatur to equating moral incapacity with one's mental disability, *Atkins* will force courts to examine the moral incapacities associated with other mental disabilities and has thus opened a *psychiatric* can of worms at least as messy as the legal problems that the CJLF feared.

191. As section VI.C explains, the whole notion of equating a particular mental disability with moral desert involves a logical mistake. Here, the phrase "logical consequence" only implies that, in establishing, as a constitutional principle, that defendants with mental retardation are less culpable and therefore deserve a death penalty exemption, the Supreme Court has obligated itself (and lower courts) to consider whether defendants with other, equally disabling mental disabilities also deserve an exemption. To refuse to do so would be logically inconsistent with *Atkins*.

192. Law professors immediately had similar thoughts. See RALPH REISNER, ET AL., 2002 UPDATE, LAW AND THE MENTAL HEALTH SYSTEM: CIVIL AND CRIMINAL ASPECTS 17 (3d ed. 2002) (discussing the logical extension of *Atkins*' protections to persons with mental illnesses); see also Christopher Slobogin, *What Atkins Could Mean for People with Mental Illness*, 33 N.M. L. REV. 293 (2003). Every lawyer and judge with whom the author has discussed the *Atkins* decision believes that it entails an exemption for persons with mental illness similar to the exemption now available for persons with mental retardation.

193. Diane H. Schetky, *Revisit Execution of Juveniles*, CLINICAL PSYCHIATRY NEWS, Sept. 2002, at 26. Puzzlingly, the Supreme Court declined to do this when, in a 5-4 decision in *In Re Stanford*, it refused to grant certiorari. 123 S. Ct. 472 (2002). As Justice Stevens commented in his dissent, the petitioner asked the Court "to hold that his execution would be unconstitutional because he was under the age of 18 when he committed his offense.... There are no valid procedural objections to our reconsideration of the issue now, and, given our recent decision in *Atkins v. Virginia*,... we certainly should do so." *Id.* at 472 (Stevens, J., dissenting) (citations omitted).

psychiatrists¹⁹⁴ favor total abolition of the death penalty, believes that if executing the mentally retarded is unconstitutional, then "it is certainly reasonable for the abolitionists to argue that it is equally unconstitutional to execute the mentally ill."¹⁹⁵ Mental illness and mental retardation have similar causes, says Dr. Stone, and "the mentally ill suffer from many of the same limitations" that (in the Supreme Court's view) diminish the blameworthiness of retarded persons.¹⁹⁶ "I believe the time will come when we recognize that it is equally indecent to execute the mentally ill."¹⁹⁷

VI.C.1. Cognitive Disorders Acquired after Childhood

Obvious candidates for mental illness-based exemptions would be defendants who acquire, after childhood, the types of intellectual and functional deficits that persons with mental retardation display throughout their lives. Because of their adulthood onset, psychiatrists call such conditions "cognitive disorders"¹⁹⁸ or "personality changes caused by medical conditions,"¹⁹⁹ rather than mental retardation. Examples include mental deterioration that sometimes follows drug abuse,²⁰⁰ or brain-damaging events such as head injuries, infections, and Alzheimer's disease.²⁰¹ Particularly when the brain's frontal lobes are affected, persons lose their ability to integrate information, utilize experience, and control impulses.²⁰² If a psychiatric definition is all that is required to lead courts to believe that retarded defendants are

194. Psychiatrists with special expertise in and knowledge about conducting evaluations that are used in making legal determinations.

195. Alan A. Stone, *Supreme Court Decision Raises New Ethical Questions for Psychiatry*, available at <http://www.psychiatristimes.com/p020901b.html> (last visited Apr. 13, 2003).

196. *Id.*

197. *Id.*

198. See generally DSM-IV-TR, *supra* note 84, at 135-80 (discussing and setting out diagnostic criteria for various deliria, dementias, and amnesic disorders).

199. *Id.* at 187. DSM-IV-TR characterizes a "personality change due to a general medical condition" as "a persistent personality disturbance that is judged to be due to the direct physiological effects of a general medical condition.... Common manifestations of the personality change include affective instability, poor impulse control, outbursts of aggression or rage grossly out of proportion to any precipitating psychosocial stressor, marked apathy, suspiciousness, or paranoid ideation." *Id.* For further description and diagnostic criteria, see *id.* at 187-90.

200. *Id.* at 168-70 (discussing conditions and diagnostic criteria for "substance-induced persisting dementia"). In contrast to states of intoxication or delirium caused by drugs or other chemical compounds, this condition "persists long after the individual has experienced the effects of Substance Intoxication or Substance Withdrawal." *Id.* at 169. Among the compounds that may produce this condition are inhalants, toxic medications, antiepileptic drugs, heavy metals, industrial solvents, and insecticides. *Id.*

201. The official nomenclature calls this last condition "dementia of the Alzheimer's type." *Id.* at 154-58. For a discussion of dementias with other causes, see *id.* at 158-67.

202. See Clifford B. Saper et al., *Integration of Sensory and Motor Function: The Association Areas of the Cerebral Cortex and the Cognitive Capabilities of the Brain*, in *PRINCIPLES OF NEURAL SCIENCE* 356-58 (Eric R. Kandel et al. eds., 4th ed. 2000) (stating that lesions in or damage to the frontal cortex is associated with deficits in "active maintenance of information relevant to an ongoing behavior," i.e., "working memory"; "damage to the frontal lobe [causes] difficulty performing tasks that involve planning"); see also Markku Linnoila & Dennis S. Charney, *The Neurobiology of Aggression*, in *NEUROBIOLOGY OF MENTAL ILLNESS* 855, 860 (1999) (discussing association between anterior frontal lobe injury and "impulsive, aggressive, and antisocial functions...[and] generally impaired impulse control").

not fully accountable for their acts,²⁰³ then consistency²⁰⁴ requires courts to exempt brain-damaged defendants from execution, too.

VI.C.2. Schizophrenia²⁰⁵

It probably is rare for jurors to mete out death sentences to defendants who are known to have dementia or demonstrable brain damage, so rules sparing such individuals might have little practical impact on capital punishment decisions. But in recent decades, psychiatrists have recognized that many death row inmates have mental conditions that are associated with impaired cognition and reasoning.²⁰⁶ A prime example is schizophrenia.²⁰⁷ A 1990 study found that one-fifth of homicide defendants may have this disorder.²⁰⁸ Estimates of the incidence of schizophrenia on death row vary widely, but published reports suggest rates of at least five percent, and perhaps much higher.²⁰⁹ With the nation's death row population currently standing at around 3700,²¹⁰ this means that 200 or more condemned U.S. prisoners may have schizophrenia.

Schizophrenia's best-known symptoms are delusions²¹¹ and hallucinations,²¹² and it is common for sufferers of the disorder to talk nonsense, to hold irrational but unshakable beliefs about reality, and to see or hear things that do not exist.²¹³

203. See *Atkins v. Virginia*, 536 U.S. 304, 318 (2002).

204. Although "attaining consistency" seems like a reasonable jurisprudential goal to a psychiatrist, the author recognizes that this probably is not an adequate legal basis for a constitutionally-based death penalty exemption such as the one created by *Atkins*. Although a logically adequate basis might be an Eighth Amendment-based justification—executing people with demonstrable brain damage would be "cruel and unusual punishment" given modern standards of decency—no state has yet legislated a death penalty exemption for persons with severe mental illnesses. An Equal Protection-based argument therefore offers the best approximation to a constitutional basis for consistent treatment of persons with equally disabling mental conditions. A full discussion lies beyond the scope of this article, but this matter is dealt with at length by Professor Slobogin's article in this volume. See generally Christopher Slobogin, *What Atkins Could Mean for People with Mental Illness*, 33 N.M. L. REV. 293 (2003).

205. Portions of this subsection are adapted from a recent article written by the author. See Douglas Mossman, *Unbuckling the "Chemical Straitjacket": The Legal Significance of Recent Advances in the Pharmacological Treatment of Psychosis*, 39 SAN DIEGO L. REV. 1033, 1048-59 (2002).

206. See, e.g., Richard M. Yarvis, *Axis I and Axis II Diagnostic Parameters of Homicide*, 18 BULL. AM. ACAD. PSYCHIATRY L. 249 (1990); see also Mark D. Cunningham & Mark P. Vigen, *Death Row Inmate Characteristics, Adjustment, and Confinement: A Critical Review of the Literature*, 20 BEHAV. SCI. L. 191 (2002).

207. See DSM-IV-TR, *supra* note 84, at 298 ("Schizophrenia is a disorder that lasts for at least 6 months and includes at least 1 month of active-phase symptoms (i.e., two [or more] of the following: delusions, hallucinations, disorganized speech, grossly disorganized or catatonic behavior, negative symptoms).") For descriptions and explanations of the symptoms, associated features, prevalence, course, and diagnostic criteria for schizophrenia, see *id.* at 298-313. For additional discussion of schizophrenia and its treatment directed toward a legal audience, see Mossman, *supra* note 205, §§ II-III.

208. See Yarvis, *supra* note 206, at 255.

209. See Cunningham & Vigen, *supra* note 206, at 193, 200.

210. Death Penalty Information Center, *Size of Death Row by Year*, available at <http://www.deathpenaltyinfo.org/DRowInfo.html#year> (last visited May 6, 2003).

211. A delusion is

[a] false belief based on incorrect inference about external reality that is firmly sustained despite what almost everyone else believes and despite what constitutes incontrovertible and obvious proof or evidence to the contrary. The belief is not ordinarily accepted by other members of the person's culture or subculture (e.g., it is not an article of religious faith).

DSM-IV-TR, *supra* note 84, at 821.

212. A hallucination is "[a] sensory perception that has the compelling sense of reality of a true perception but that occurs without external stimulation of the relevant sensory organ." *Id.* at 823.

213. *Id.*

Psychiatrists no longer think that schizophrenia is caused by traumatic experiences or failures to negotiate childhood phases of psychological development.²¹⁴ Instead, the symptoms of schizophrenia are believed to reflect disrupted brain circuitry²¹⁵ that produces abnormalities in information processing, filtering stimuli, attention, and working memory.²¹⁶ Over the last quarter century, brain imaging studies (e.g., CT and MRI scans²¹⁷) have shown that persons with schizophrenia have demonstrable decreases in brain matter,²¹⁸ particularly in areas that are responsible for attention, memory, expressing emotion, social affiliation, and integrating information.²¹⁹ Persons with schizophrenia cannot make normal associations among ideas and cannot distinguish between their own thoughts and those of others. They cannot suppress or filter inconsequential stimuli properly, so they have trouble focusing on what is important.²²⁰ Hallucinations occur when persons interpret their own thoughts as coming from outside themselves, while delusions arise from bad circuitry that makes bad connections between mental phenomena.²²¹

Persons with schizophrenia cannot help being susceptible to such symptoms, but these are often controllable with medication.²²² Less remediable, however, are disturbances in complex mental processes that neuroscientists call "cognition" and

214. Nancy C. Andreasen, *A Unitary Model of Schizophrenia: Bleuler's "Fragmented Phrene" as Schizencephaly*, 56 ARCHIVES GEN. PSYCHIATRY 781, 782 (1999).

215. *Id.*

216. *Id.* at 783-84.

217. For a wonderful, illustrated explanation of these and other brain imaging techniques, see Saper et al., *supra* note 202, at 366-79.

218. A recent meta-analysis of fifty-eight studies found that "cerebral volume was lower—and total ventricular volume was higher—in patients with schizophrenia than in comparison subjects." Ian C. Wright et al., *Meta-Analysis of Regional Brain Volumes in Schizophrenia*, 157 AM. J. PSYCHIATRY 16, 22 (2000). For a highly technical but authoritative summary of brain abnormalities ascertained in neuro-imaging studies, see Jeffrey A. Lieberman, *Schizophrenia: A Neurodegenerative Disorder*, 46 BIOLOGICAL PSYCHIATRY 729, 733-34 (1999).

219. Alan Breier et al., *Brain Morphology and Schizophrenia: An MRI Study of Limbic, Prefrontal Cortex and Caudate Structures*, 49 ARCHIVES GEN. PSYCHIATRY 921 (1992); Nancy Andreasen et al., *Structural Abnormality in the Frontal System in Schizophrenia: A Magnetic Resonance Imaging Study*, 43 ARCHIVES GEN. PSYCHIATRY 135 (1986); Hilleke E. Hulshoff Pol et al., *Volume Changes in Gray Matter in Patients with Schizophrenia*, 159 AM. J. PSYCHIATRY 244 (2002) ("smaller brains of patients with schizophrenia could be explained by smaller gray matter volumes," especially pre-frontal gray matter); Philip R. Szeszko et al., *Neuropsychological Correlates of Hippocampal Volumes in Patients Experiencing a First Episode of Schizophrenia*, 159 AM. J. PSYCHIATRY 217, 221 (2002) (suggesting a relationship between loss of tissue in a portion of the brain usually associated with memory functioning and executive functioning indicates a defect in linkage of brain regions); see also Christos Pantelis et al., *Neuroanatomical Abnormalities Before and After Onset of Psychosis: A Cross-sectional and Longitudinal MRI Comparison*, 361 LANCET 281 (2003) (demonstrating that in some brain regions, reductions or abnormalities in gray matter precede onset of psychosis, and that abnormalities in other regions appear in association with the onset of psychosis).

220. Andreasen, *supra* note 214, at 785.

221. *Id.*

222. One psychiatric practice guideline recommends, "with substantial confidence," the continual administration of anti-psychotic medication for the treatment of schizophrenia. See Marvin I. Herz et al., *Practice Guideline for the Treatment of Patients with Schizophrenia*, 154 AM. J. PSYCHIATRY 1, 2 (Apr. Supp. 1997) ("Antipsychotic medications are indicated for nearly all acute psychotic episodes in patients with schizophrenia....[P]sychiatrists should avoid withholding medications for [more than a period of several days]...as this may delay the patient's recovery and place the patient at risk of suicide and other dangerous behaviors."). For several years, courts have also recognized the central importance of antipsychotic medication in treating schizophrenia. See, e.g., *Rennie v. Klein*, 462 F. Supp. 1131, 1137-38 (D.N.J. 1978) ("[N]o other treatment modality has achieved equal success in the treatment of schizophrenics....[P]sychotropic drugs are widely accepted in present psychiatric practice....They are the treatment of choice for schizophrenics today."). For a summary of the role and benefits of antipsychotic medication in schizophrenia, see Mossman, *supra* note 205, at 1062-73.

which, even more than overtly crazy thinking, are now recognized to be central to the disorder.²²³ The extent and severity of these disturbances (reflected in lack of emotion, reduced speech, and lost ability to initiate purposeful activity), rather than delusions and hallucinations, are the best predictors of the long-term disability that often occurs in schizophrenia.²²⁴ On average, schizophrenic patients—in addition to having hallucinations, delusions, and disorganized thoughts—experience a reduction in cognitive performance equivalent to having an IQ score of 85.²²⁵ Depending on when the disorder takes hold, persons with schizophrenia often cannot complete school, hold jobs, or have normal social relationships.²²⁶

If the statistically defined limitations that comprise mental retardation are a barrier to the death penalty, then perhaps persons with schizophrenia—a disabling, biologically based disorder caused by disrupted brain circuits—should be spared as well. Lawyers for Jay D. Scott, an Ohio death row inmate, argued this very point in 2001 while *Atkins* was pending. An Ohio Supreme Court majority rejected this claim,²²⁷ and Scott was ultimately executed.²²⁸ But the defense's argument persuaded one dissenting justice, who protested,

I cannot get past one simple irrefutable fact: [Scott] has chronic, undifferentiated schizophrenia, a severe mental illness.... As a society, we have always treated those with mental illness differently from those without. In the interest of human dignity, we must continue to do so.... Executing [Scott] will be another assertion that taking the life of a person with mental illness is no different than taking the life of someone without mental illness.²²⁹

This clear categorical-exemption-for-mental-illness reasoning fits well within the majority's position in *Atkins*.²³⁰

223. DSM-IV-TR, *supra* note 84, at 301; see generally Stanley R. Kay & Lisa M. Murrill, *Predicting Outcome of Schizophrenia: Significance of Symptom Profiles and Outcome Dimensions*, 31 COMP. PSYCHIATRY 91, 97 (1990) (stating that thought disturbance predicts poor functional outcome); Tonmoy Sharma, *Cognitive Function in Schizophrenia: Deficits, Functional Consequences, and Future Treatment*, 26 PSYCHIATRIC CLINICS N. AM. 25, 36 (2003) ("In the past few decades, cognitive dysfunction has been recognized as a fundamental feature of schizophrenia and has been shown repeatedly to have a negative association with functional outcome."); Ronald Goldman, *Neuropsychological Dysfunction and Schizophrenia: Implications for Pharmacotherapy*, 18 DIRECTIONS IN PSYCHIATRY 35-47 (1998).

224. See *supra* note 223 and accompanying text.

225. Lieberman, *supra* note 218, at 733. In a comment crucial to this article's topic, DSM-IV-TR notes that differentiating "between Borderline Intellectual Functioning and Mental Retardation (an IQ of 70 or below) is especially difficult when the coexistence of certain mental disorders (e.g., Schizophrenia) is involved." DSM-IV-TR, *supra* note 84, at 740.

226. DSM-IV-TR, *supra* note 84, at 302.

227. *State v. Scott*, 748 N.E.2d 11 (Ohio 2001), *cert. denied*, 532 U.S. 1034 (2001).

228. Alan Johnson & Jon Craig, *Scott Executed*, COLUMBUS DISPATCH, June 15, 2001, at 1A; Associated Press, *Twice-Spared Killer Is Executed in Ohio*, N.Y. TIMES, June 15, 2001, at A34. Scott's execution generated international coverage and protests. See, e.g., *Mentally-ill Man Executed for Murder in Ohio*, AGENCE FR. PRESSE, June 15, 2001; Robert Tait, *Outrage as Ohio Executes Mentally Ill Man*, THE SCOTSMAN, June 16, 2001, at 14; *Sick Man Is Killed*, HERALD SUN (Melbourne), June 16, 2001, at 24; Audrey Gillan, *Schizophrenic Man Put to Death in Ohio*, THE GUARDIAN (London), June 16, 2001, at 16.

229. *Scott*, 748 N.E.2d at 19 (Pfeifer, J., dissenting).

230. Since the *Atkins* decision, at least one state supreme court has declined to extend the protections of *Atkins* to a person with psychotic symptoms. *State v. Weik*, 2002 S.C. LEXIS 159 (S.C. Sept. 3, 2002). Although the defendant "was 'hyper-religious,' heard voices, and suffered from paranoid beliefs involving the CIA and the Masons," *id.* at *4, the South Carolina Supreme Court stated summarily that, "while it violates the Eighth Amendment to impose a death sentence on a mentally retarded defendant, ... the imposition of such a sentence upon

VI.C.3. Attention-Deficit/Hyperactivity Disorder

Several other psychiatric conditions are legitimate candidates for exemptions following *Atkins*. Perhaps states should be barred from executing murderers with attention-deficit/hyperactivity disorder (ADHD). Although this condition has been the subject of much public controversy, most psychiatrists regard ADHD as a real disorder that can severely disrupt functioning in children and often persists into adulthood.²³¹ According to DSM-IV-TR, ADHD is "a persistent pattern of inattention and/or hyperactivity-impulsivity that is more frequent and severe than is typically observed in individuals at a comparable level of development," that begins in childhood, and that interferes "with developmentally appropriate social, academic, or occupational functioning."²³² Inattention may lead to the sufferer's "not following details or rules"; impulsiveness can lead to "difficulties in social, academic, or occupational settings...and to engagement in potentially dangerous activities without consideration of possible consequences."²³³ These types of problems lie behind much criminal behavior, and, not surprisingly, the incidence of ADHD is elevated in adult prison populations.²³⁴ As is the case for schizophrenia, brain imaging studies of individuals with ADHD consistently point to a biological basis for these problems, again suggesting abnormal development of neuronal circuitry.²³⁵

VI.C.4. Low CNS Serotonin Function

Another logical category for exemption is persons with low levels of the neurotransmitter serotonin.²³⁶ Since studies in the mid-1970s showed that suicide

a mentally ill person is not disproportionate." *Id.* at *4, *13. *Weik* simply cites previous precedent for support, without considering the specific reasoning in *Atkins* or types of data adduced in this article's text. *Id.* at *13 (citing *State v. Wilson*, 413 S.E.2d 19 (S.C. 1992)).

231. Christine Lehmann, *APA Tells Congress ADHD Is Serious but Treatable*, PSYCHIATRIC NEWS, Nov. 1, 2002, at 1, 30 (describing testimony of David Fassler, M.D., on behalf of the American Psychiatric Association and the American Academy of Child and Adolescent Psychiatry, and Richard Nakamura, Ph.D., acting director of the National Institute of Mental Health).

232. DSM-IV-TR, *supra* note 84, at 85.

233. *Id.* at 85-86.

234. Stephen Curran & Michael Fitzgerald, *Attention Deficit Hyperactivity Disorder in the Prison Population*, 156 AM. J. PSYCHIATRY 1664 (1999); Kirsten Rasmussen et al., *Attention Deficit Hyperactivity Disorder, Reading Disability, and Personality Disorders in a Prison Population*, 29 J. AM. ACAD. PSYCHIATRY L. 186 (2001).

235. Jay N. Giedd et al., *Brain Imaging of Attention Deficit/Hyperactivity Disorder*, 931 ANNALS N.Y. ACAD. SCI. 33, 33 (2001) ("[I]maging studies of individuals with attention deficit/hyperactivity disorder (ADHD) consistently point to involvement of the frontal lobes, basal ganglia, corpus callosum, and cerebellum."); Judith L. Rapoport et al., *Imaging Normal and Abnormal Brain Development: New Perspectives for Child Psychiatry*, AUSTL. & N.Z. J. PSYCHIATRY 272, 272 (2001) ("[A]natomic brain magnetic resonance imaging (MRI) studies in ADHD" reveal "consistent, diagnostically specific patterns of brain abnormality..."); F. Xavier Castellanos et al., *Developmental Trajectories of Brain Volume Abnormalities in Children and Adolescents with Attention-Deficit/Hyperactivity Disorder*, 288 J.A.M.A. 1740, 1740 (2002) (MRI study showing that "patients with ADHD had significantly smaller brain volumes in all regions...[and in patterns,] suggesting that genetic and/or early environmental influences on brain development in ADHD are fixed, nonprogressive, and unrelated to stimulant treatment").

236. A neurotransmitter is a substance "released on excitation from the axon terminal of a presynaptic neuron of the central or peripheral nervous system [that] travel[s] across the synaptic cleft to either excite or inhibit the target cell. Among the many substances that have the properties of a neurotransmitter...[is] serotonin." DORLAND'S ILLUSTRATED MEDICAL DICTIONARY 1215 (29th ed. 2000) [hereinafter DORLAND'S].

victims had low levels of serotonin metabolites in the central nervous system (CNS),²³⁷ scientists have accumulated robust evidence linking low serotonin activity to impulsive behavior, alcohol abuse, and violence.²³⁸ By measuring and manipulating serotonin activity in many species—including fish,²³⁹ birds,²⁴⁰ rodents,²⁴¹ dogs,²⁴² and monkeys,²⁴³ as well as humans²⁴⁴—scientists have found that lowering brain serotonin increases aggression, particularly spontaneous, impulsive aggression. Many individuals naturally have low serotonin activity, and such persons often are depressed, less responsive to external social controls of their behavior, and especially prone to satisfying appetites for food, sex, and drugs without thinking about consequences.²⁴⁵

For a subset of heavy drinkers called “Type II” alcoholics, alcohol consumption is part of an overall pattern of impulsive, antisocial behavior. Studies of Type II alcoholics reveal a genetic predisposition linking violence, heavy drinking, and deficient serotonin functioning. For example, a series of Finnish studies found that among alcoholic men, those with low serotonin activity were particularly prone to violence.²⁴⁶ This may be because violence and heavy drinking both reflect a common source of poor impulse control—impaired CNS serotonin functioning.²⁴⁷ People with strong aggressive and antisocial tendencies are especially prone to

237. Kenneth G. Lloyd et al., *Serotonin and 5-Hydroxy-Indoleacetic Acid in Discrete Areas of the Brainstem of Suicide Victims and Control Patients*, 11 ADVANCES BIOCHEMICAL PSYCHOPHARMACOLOGY 387 (1974); Marie Åsberg et al., *5-HIAA in the Cerebrospinal Fluid: A Biochemical Suicide Predictor?*, 33 ARCHIVES GEN. PSYCHIATRY 1193 (1976). 5-hydroxyindoleacetic (5-HIAA) acid is a metabolite, or breakdown product, of the neurotransmitter serotonin. DORLAND'S, *supra* note 236, at 844. Serotonin activity in the central nervous system can therefore be assessed by measuring levels of 5-HIAA in the cerebrospinal fluid (CSF), “the fluid contained within the four ventricles of the brain, the subarachnoid space, and the central canal of the spinal cord.” *Id.* at 1018. CSF is obtained using a medical procedure called a “lumbar puncture,” or more colloquially, a “spinal tap,” in which a needle is inserted between the lower lumbar vertebrae and a small amount of fluid is withdrawn for analysis. *Id.* at 1495.

238. For recent discussions on the links between serotonin levels and these behaviors, see J.D. Higley, *Individual Differences in Alcohol-Induced Aggression: A Nonhuman-Primate Model*, 25 ALCOHOL RES. & HEALTH 12 (2001); and F. Gerard Moeller et al., *Psychiatric Aspects of Impulsivity*, 158 AM. J. PSYCHIATRY 1783 (2001).

239. See J.R. Hsueh et al., *Effect of Exogenous Tryptophan on Cannibalism, Survival and Growth in Juvenile Grouper, Epinephelus coioides*, 218 AQUACULTURE 251, 251 (2003) (“[C]annibalism among juvenile groupers could be mitigated by the oral administration of” tryptophan, a biochemical precursor of serotonin.).

240. T.S. Sperry et al., *Effects of Acute Treatment with 8-OH-DPAT and Fluoxetine on Aggressive Behaviour in Male Song Sparrows (Melospiza melodia morphna)*, 15 J. NEUROENDOCRINOLOGY 150 (2003) (noting that a bird's behavior can be altered by administration of drugs that affect serotonin levels).

241. Craig F. Ferris et al., *Vasopressin/Serotonin Interactions in the Anterior Hypothalamus Control Aggressive Behavior in Golden Hamsters*, 17 J. NEUROSCIENCE 4331 (1997).

242. Ilana R. Reisner et al., *Comparison of Cerebrospinal Fluid Monoamine Metabolite Levels in Dominant-aggressive and Non-aggressive Dogs*, 714 BRAIN RES. 57 (1996).

243. J.D. Higley et al., *A Nonhuman Primate Model of Type II Alcoholism? Part 2. Diminished Social Competence and Excessive Aggression Correlates with Low Cerebrospinal Fluid 5-Hydroxyindoleacetic Acid Concentrations*, 20 ALCOHOLISM: CLINICAL & EXPERIMENTAL RES. 643 (1996).

244. F. Gerard Moeller et al., *Tryptophan Depletion and Aggressive Responding in Healthy Males*, 126 PSYCHOPHARMACOLOGY 97 (1996).

245. Robert O. Pihl & Jordan B. Peterson, *Alcohol, Serotonin and Aggression*, 17 ALCOHOL HEALTH RES. WORLD 113 (1993); Linnoila & Charney, *supra* note 202, at 860-64 (summarizing studies in humans and animals).

246. Matti Virkkunen et al., *CSF Biochemistries, Glucose Metabolism, and Diurnal Activity Rhythms in Alcoholic, Violent Offenders, Fire Setters, and Healthy Volunteers*, 51 ARCHIVES GEN. PSYCHIATRY 20 (1994); Jaakko Lappalainen et al., *Linkage of Antisocial Alcoholism to the Serotonin 5-HT1B Receptor Gene in 2 Populations*, 55 ARCHIVES GEN. PSYCHIATRY 989 (1998) (showing linkage between antisocial alcoholism and genes for serotonin autoreceptors in two distinct ethnic populations: Finnish and a Southwestern American Indian Tribe).

247. Higley et al., *supra* note 243, at 17.

becoming aggressive when they drink.²⁴⁸ Biology confirms what criminologists have long known: many acts of criminal violence occur when perpetrators are intoxicated,²⁴⁹ and a large number of criminals who end up on death row were intoxicated at the time of their offenses.²⁵⁰

Low serotonin activity is not itself a psychiatric diagnosis. Persons diagnosed with a broad variety of conditions—including depression, alcohol dependence, and antisocial personality disorder—may have low serotonin activity. What unites these persons is the biological status of their nervous system, which can be objectively and scientifically assessed by measuring a metabolite of serotonin in spinal fluid.²⁵¹ Strong biological evidence links low serotonin to impulsiveness and to being less responsive to social cues that inhibit appetites and aggression. This means that people with low serotonin activity are at a physiological disadvantage when it comes to obeying the law's dictates. If mental retardation renders a murderer not culpable enough to suffer the death penalty, then why shouldn't low serotonin?

VI.C.5. Other Psychiatric Disorders

Brain damage, schizophrenia, ADHD, and low brain serotonin are just a few of the psychiatric conditions that are associated with impairment of—as the key wording in *Atkins* put it—“capacities to understand and process information, to communicate, to abstract from mistakes and learn from experience, to engage in logical reasoning, to control impulses, and to understand the reactions of others.”²⁵² A slew of other psychiatric disorders, some of which are common among homicide defendants, produce many of the same limitations. Examples include manic-depression,²⁵³ pervasive developmental disorders,²⁵⁴ intermittent explosive

248. See generally F. Gerard Moeller & Donald M. Dougherty, *Antisocial Personality Disorder, Alcohol, and Aggression*, 25 ALCOHOL RES. HEALTH 5, 8-9 (2001) (citing and summarizing studies that show a correlation between people with aggressive and antisocial tendencies and their tendency to be more prone to aggression when they drink).

249. See, e.g., Susan E. Martin et al., *Self-Reported Alcohol Use and Abuse by Arrestees in the 1998 Arrestee Drug Abuse Monitoring Program*, 25 ALCOHOL RES. HEALTH 72, 78 (2001).

250. See generally Cunningham & Vigen, *supra* note 206, at 193.

251. For an explanation, see Higley et al., *supra* note 243.

252. *Atkins*, 536 U.S. at 318.

253. Manic-depressive illness is the older but still-used term for what DSM-IV-TR calls “bipolar disorders.” DSM-IV-TR, *supra* note 84, at 382-401. Bipolar disorders are characterized by episodes of mania, which are distinct period[s] during which there is an abnormally and persistently elevated, expansive, or irritable mood...accompanied by...additional symptoms...includ[ing] inflated self-esteem or grandiosity, decreased need for sleep, pressure of speech, flight of ideas, distractibility, increased involvement in goal-directed activities or psychomotor agitation, and excessive involvement in pleasurable activities with a high potential for painful consequences.

Id. at 357. This disorder correlates with occurrences of “[c]hild abuse, spouse abuse, or other violent behavior...during severe Manic Episodes or during those with psychotic features.” *Id.* at 384. There is also strong evidence that Bipolar I Disorder is genetic. *Id.* at 386 (“Twin and adoption studies provide strong evidence of a genetic influence for Bipolar I Disorder.”).

254. See DSM-IV-TR, *supra* note 84, at 69-84. DSM-IV-TR states, “Pervasive Development Disorders are characterized by severe and pervasive impairment in several areas of development: reciprocal social interaction skills, communication skills, or the presence of stereotyped behavior, interests, and activities.” *Id.* at 69. The disorders sometimes occur in the context of “chromosomal abnormalities, congenital infections, [or] structural abnormalities of the central nervous system.” *Id.* at 69-70. In an Ohio case, the presence of a pervasive developmental disorder was the basis for a trial court judge’s decision to set aside a jury’s recommendation of the death penalty. *State v. Fuller*, 2002 Ohio 4110 (Ohio Ct. App. Aug. 12, 2002) (unpublished table decision).

disorder,²⁵⁵ antisocial personality disorder,²⁵⁶ and posttraumatic stress disorder.²⁵⁷ By making execution of persons with one psychiatric diagnosis "cruel and unusual punishment," *Atkins* has opened a psychiatric can of worms. In coming years, attorneys representing capital defendants will increasingly ask mental health experts to present courts with the burgeoning evidence of the biological bases for numerous other mental disorders. Confronted with such evidence, courts will have no choice but to examine several psychiatric conditions that may be at least as disabling as mental retardation. Courts must now decide whether these conditions, either by virtue of those conditions' "definition" or the conditions' brain-based relationship²⁵⁸

(affirming conviction and life sentence and mentioning author as expert witness); Janice Morse, *Court Affirms 2 Butler Cases; Orders 1 Resentence*, CINCIN. ENQ., Aug. 13, 2002, at 3B (stating, defendant's "mental conditions [were] among the factors that influenced [judge's] decision to spare Mr. Fuller's life").

255. See DSM-IV-TR, *supra* note 84, at 663-64. Persons with intermittent explosive disorder experience discrete episodes of failure to resist aggressive impulses that result in serious assaultive acts or destruction of property.... The degree of aggressiveness expressed during an episode is grossly out of proportion to any provocation or precipitating psychosocial stressor.... The disorder may result in... hospitalizations (e.g., because of injuries incurred in fights or accidents),... incarcerations, or other legal problems.

Id.

256. Persons with antisocial personality disorder display "a pervasive pattern of disregard for, and violation of, the rights of others... and may repeatedly get into fights or commit acts of physical assault." *Id.* at 701-02. The disorder "is more common among the first-degree biological relatives or those with the disorder than among the general population." *Id.* at 704.

257. Persons with posttraumatic stress disorder (PTSD) develop "characteristic symptoms following exposure to an extreme traumatic stressor" to which they respond with "intense fear, helplessness, or horror." *Id.* at 463. The symptoms include "persistent reexperiencing of the traumatic event,... persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness,... and persistent symptoms of increased arousal." *Id.* In extreme cases of PTSD, sufferers may experience auditory hallucinations and paranoid thinking. They may also have the following symptoms: "self-destructive and impulsive behavior;... hostility;... feeling constantly threatened...." *Id.* at 465. "[S]everal lines of data have converged to reveal specific neurobiological alterations in" PTSD. These include "short-term memory deficits" reflecting limbic dysfunction, limbic abnormalities displayed in MRI studies, "reduce[d] hippocampal volumes," and functional brain imaging studies showing "excessive amygdala activation... in response to trauma-related stimuli." Jeffrey David Lewine et al., *Abnormal Stimulus-Response Intensity Functions in Posttraumatic Stress Disorder: An Electrophysiological Investigation*, 159 AM. J. PSYCHIATRY 1689, 1689 (2002) (finding that brain activity differed from normal response in fifty-eight percent of subjects with PTSD). "The development of PTSD symptoms after traumatic injury is associated with a more fragmented pattern of... REM sleep, the sleep stage most specifically associated with dreaming." Thomas A. Mellman et al., *REM Sleep and the Early Development of Posttraumatic Stress Disorder*, 159 AM. J. PSYCHIATRY 1696, 1696 (2002) (discussing the importance of sleep in consolidating and processing of memory and distressing emotions). For a discussion of persons' genetic vulnerability to developing PTSD, see Murray B. Stein et al., *Genetic and Environmental Influences on Trauma Exposure and Posttraumatic Stress Disorder Symptoms: A Twin Study*, 159 AM. J. PSYCHIATRY 1675, 1675-76 (2002) (citing and summarizing findings from studies on genetic vulnerability to develop PTSD).

258. Recognizing that the subject is controversial and deserves far more discussion, I offer just a short comment on this section's emphasis on the "brain-based" aspects of psychiatric conditions. Why are brain abnormalities, and explanations based on them, potentially exculpatory? The reason is that, unlike actions or one's "character," abnormal patterns of brain functioning are physical states. We hold rational agents responsible for their actions because we regard actions as a *prima facie* reflection of a person's willingness to follow rules, and because we believe that most adults have "the general capacity to grasp and be guided by good reason in particular legal contexts." Stephen J. Morse, *Crazy Reasons*, 10 J. CONTEMP. LEGAL ISSUES 189, 192 (1999) [hereinafter Morse, *Crazy Reasons*]. Since Aristotle, philosophers have "thought that because human beings have the capacity to shape their character they can fairly be held responsible for being the kind of persons they are." MICHAEL S. MOORE, *LAW AND PSYCHIATRY: RETHINKING THE RELATIONSHIP* 110 (1984). Both actions and character are explained by individuals' mental states (their beliefs, desires, or dispositions), rather than as physical properties.

By contrast, we do not hold people responsible for certain physical attributes that they cannot help having (e.g., being short, bald, or ugly) because these attributes are not actions or things that stem from actions and

to impaired mental functioning, should confer upon their sufferers the protections equal to those that *Atkins* has given to persons with mental retardation.

VI.D. *The Diagnosis-Implies-Excuse Mistake*

Atkins obligates courts both to decide whether several mental conditions should mitigate death sentences and to perpetuate the mistaken claim that it is a mentally disabled person's *diagnosis* that provides the reason for our (often correct) impulse to hold him less than fully responsible. In expressing his reluctant agreement with Justice Scalia's position in *Atkins*, Professor Bersoff notes,

IQ, after all, is not the factor that render the imposition of the death penalty against those with mental retardation unjust. Rather, IQ is a proxy, and an imperfect one at that, for a combination of factors, such as maturity, judgment, and the capability of assessing the consequences of one's conduct, that determine the relative culpability of a mentally retarded killer.... Culpability, not, IQ, should be the benchmark."²⁵⁹

In a series of superb articles,²⁶⁰ Professor Stephen Morse has articulated what roles he believes mental health professionals and psychiatric diagnosis should and should not play in deciding whether agents possess "sufficient capacity for rationality to be responsible."²⁶¹ Professor Morse argues that when the law requires a decision whether a defendant lacks sufficient rationality to be fully responsible, what the factfinder most needs is "a detailed, descriptive account of the agent's reasons for action in the context in question. These data may be obtained from family, friends, co-workers, observers, and mental health professionals."²⁶² Although all these observers may have information relevant to the factfinder's decision, what mental health professionals add, beyond being "trained, efficient observers,"²⁶³ is their scientific knowledge about the characteristics of people similar to the individual in question.²⁶⁴ Yet the decision whether someone's capacity for rationality is sufficient to hold him responsible ultimately is "a common sense inference," so that "the final judgment must be about the specific individual who is the potential subject of special mental health law treatment."²⁶⁵

could not possibly reflect or be explained by a person's mental states. We do not hold people responsible for being mentally retarded because we regard this attribute, like physical attributes, as neither a mental state nor a property that reflects morally defective mental states (e.g., "not trying hard enough"). Similarly, defects in brain structure and abnormal patterns of neuronal functioning strike me as potentially guilt-mitigating insofar as we regard them as not reflecting or stemming from a defendant's blameworthy actions.

259. Bersoff, *supra* note 157, at 568.

260. See Morse, *Crazy Reasons*, *supra* note 258; Stephen J. Morse, *Crazy Behavior, Morals, and Science: An Analysis of Mental Health Law*, 51 S. CAL. L. REV. 527 (1978) [hereinafter Morse, *Crazy Behavior*]; Stephen J. Morse, *Failed Explanations and Criminal Responsibility: Experts and the Unconscious*, 68 VA. L. REV. 971 (1982) [hereinafter Morse, *Failed Explanations*]; Stephen J. Morse, *Uncontrollable Urges and Irrational People*, 88 VA. L. REV. 1025 (2002).

261. Morse, *Crazy Reasons*, *supra* note 258, at 218.

262. *Id.* at 217.

263. *Id.*

264. *Id.* at 219.

265. *Id.*

Although Professor Morse has long believed that psychiatric diagnoses should play little or no role in legal proceedings,²⁶⁶ diagnosis is the vehicle mental health professionals use to decide what sort of problem a person has and what types of characteristics are displayed by other individuals who are similar to the person in question. Professor Morse questions "whether a diagnosis produces value added beyond the information conveyed by the behavioral criteria that define the diagnostic category."²⁶⁷ A reasonable response is that—to the extent that diagnostic schemes are valid and that an individual's diagnosis has been properly rendered—a diagnosis invokes the consensus of mental health professionals,²⁶⁸ not just the opinion of the expert who happens to be testifying. Testifying experts can rely on, and convey to factfinders, what psychiatry knows about individuals with the diagnosis. Experts can use diagnoses to show that a particular defendant indeed shares psychological features (symptoms and behaviors) with others who receive the diagnosis, and that the defendant's future clinical characteristics can be expected to follow a particular pattern.²⁶⁹ Identifying a set of symptoms and behaviors with a diagnosis (especially when scientific evidence links biology to patterns of thought and behavior) may serve the additional, important purpose of helping jurors and judges consider other explanations for a defendant's behavior besides such common-but-psychologically-naïve explanations as being the result of sheer evil, carelessness, faking, or not trying hard enough.

But if Professor Morse undervalues the contribution of psychiatric diagnoses to legal proceedings, the *Atkins* decision proves he is correct about the potential problems that relying on diagnoses can cause in mental health adjudications:

[D]iagnoses...tend to encourage the mistaken impression that the conduct of crazy people is just a mechanism, rather than action for reasons. Diagnoses tend to encourage question-begging about the foundational, nonresponsibility criterion that authorizes special mental health treatment. Diagnoses are therefore prejudicial and misleading. In addition, there is often dispute about the appropriate diagnosis, if any, which wastes time and distracts the factfinder from the essential question....²⁷⁰

266. *Id.* See also Morse, *Crazy Behavior*, *supra* note 260, at 604-15; Morse, *Failed Explanations*, *supra* note 260, at 1059-70.

267. Morse, *Crazy Reasons*, *supra* note 258, at 219.

268. "DSM-IV was a team effort. More than 1000 people (and numerous professional organizations) have helped us in the preparation of this document." DSM-IV-TR, *supra* note 84, at xix. See also *id.* at xxiii-xxiv (describing the process by which the manual was created).

269. Notwithstanding the cautions discussed in section V, *supra*, the diagnostic manual notes the potentially valid uses of diagnoses in adjudicatory proceedings:

[W]hen the presence of a mental disorder is the predicate for a subsequent legal determination (e.g., involuntary civil commitment), the use of an established system of diagnosis enhances the value and reliability of the determination. By providing a compendium based on a review of the pertinent clinical and research literature, DSM-IV may facilitate the legal decision makers' understanding of the relevant characteristics of mental disorders. The literature related to diagnoses also serves as a check on ungrounded speculation about mental disorders and about the functioning of a particular individual. Finally, diagnostic information regarding longitudinal course may improve decision making when the legal issue concerns an individual's mental functioning at a past or future point in time.

DSM-IV-TR, *supra* note 84, at xxxiii.

270. Morse, *Crazy Reasons*, *supra* note 258, at 220.

The essential question is what a particular defendant deserves. This moral determination may be informed by knowledge of the defendant's psychiatric diagnosis, but is logically independent of that diagnosis. Psychiatric diagnoses may summarize patterns of conduct, but the moral qualities of a particular act—and the appropriate legal response to that particular act—are not within the province of psychiatrists' special knowledge.

VII. CONCLUSION

Increased knowledge about the biological underpinnings of mental illness may well help convince courts that sufferers of several mental disorders deserve the same constitutional protections that *Atkins* confers upon defendants with mental retardation. Given the high rate of serious mental illness among homicide defendants, granting psychiatric exemptions could leave very few individuals eligible for the death penalty.

To death penalty opponents, such a development might seem desirable. U.S. law now regards execution as a special punishment that only the most blameworthy killers deserve. Yet, a high proportion of the murderers who become death row inmates have serious mental impairments. By focusing their arguments against executing persons who are psychiatrically impaired, capital punishment's opponents have an opportunity to use psychiatry to virtually abolish the death penalty. The moral basis for doing this is nicely summarized by psychologists Mark D. Cunningham and Mark P. Vigen, who, after reviewing studies describing the mental problems of death row inmates, write,

it is disturbing that so many inmates on death row are so obviously damaged—developmentally, intellectually, educationally, neurologically, and psychologically. To the extent that the death penalty is intended to punish those murderers who are most morally culpable, there would seem to be some miscarriage of that intent when it is visited upon individuals who are manifestly damaged, deficient, or disturbed in their psychological development and functioning.²⁷¹

By creating an exemption for one group of persons who are "manifestly... deficient," *Atkins* seems like the beginning of a solution to the moral problem that Cunningham and Vigen describe. But death penalty opponents and advocates for the mental disabled should realize that *Atkins* carries the potential for creating other difficulties. The decision demeans persons with mental retardation by saying that solely by virtue of this condition, they lack the moral capacity to be fully culpable. It creates a national legal precedent for using psychiatric categories to single out a group of citizens for different legal treatment. It fails to recognize that psychiatric diagnoses are created for clinical purposes (chiefly, to guide treatment) and are often redefined as treatments, and scientific findings reveal the errors of older categorizations. Finally, *Atkins* tells mental health professionals that despite any "cautionary statements," courts will use their classification schemes to solve legal

271. Cunningham & Vigen, *supra* note 206, at 207.

and social problems that lie far beyond the purpose and intent of psychiatric diagnosis.

For several years, the U.S. Supreme Court has responded to grave flaws in the nation's administration of the death penalty with a series of procedural and substantive requirements that give mental health professionals big parts in the capital punishment process. With *Atkins*, the courtroom roles of psychiatrists and psychologists will now enlarge. In treatment settings, the mental health clinician often attempts to remove impediments to self-understanding and thereby enable people to function better. But mental health experts do not come to court with the purpose of promoting self-understanding, and neither their diagnostic classifications nor their therapeutic skills will "cure" the fundamental social and economic disparities that make even capital punishment's supporters uncomfortable.²⁷²

Given what psychiatrists and psychologists now know about the sources and behavioral consequences of mental disorders, it only makes sense for courts to request their insights. As Professor Gary B. Melton and his colleagues point out, "mental health professionals *do* have access to a body of specialized knowledge (i.e., knowledge commonly unshared by the lay public) that may assist legal factfinders in making informed judgments."²⁷³ It is hard to think of a situation in which courts have greater need for mental health professionals' observations, formulations, and opinions than when a jury decides whether a mentally impaired defendant deserves execution. But giving psychiatric diagnosis a determinative role in capital sentencing distorts the legitimate role of mental health experts in assisting the factfinder.²⁷⁴ In the long run, *Atkins* may compound problems in the administration of the death penalty if it convinces courts, juries, and legislatures that an accurate medical diagnosis will assure the fairness of—or, worse yet, is an

272. See, e.g., George H. Ryan, Executive Order Creating the Governor's Commission on Capital Punishment (May 4, 2000), available at http://www.idoc.il.us/ccp/ccp/executive_order.html (last visited Sept. 19, 2002) (expressing support for the death penalty in principle, but establishing a commission to study and recommend safeguards in capital punishment because "the number of death sentences and criminal convictions being vacated or overturned has raised serious concerns with respect to the process by which the death penalty is imposed"). On January 31, 2000, "prompted by serious questions about the operation of capital punishment in Illinois," Governor Ryan issued a moratorium on administering the death penalty. REPORT OF THE GOVERNOR'S COMMISSION ON CAPITAL PUNISHMENT 1 (Apr. 15, 2002). The Commission offered eighty-five recommendations concerning the death penalty's administration in Illinois. On January 11, 2003, just before leaving office, Governor Ryan issued a blanket commutation for all 167 death row inmates in the state. Jodi Wilgoren, *Citing Issue of Fairness, Governor Clears Out Death Row in Illinois*, N.Y. TIMES, Jan. 12, 2003, at 1. See also Dennis O'Brien & David Nitkin, *Glendening Halts Executions; Md. Governor Is Second to Impose Moratorium; Racial, Geographic Inequality Seen; UM Study to Be Reviewed by Next General Assembly*, BALT. SUN, May 10, 2002, at 1A (stating that Maryland Governor, who also supports the death penalty in principle, halted executions in that state pending results of a University of Maryland study of racial disparities in death penalty sentencing).

273. GARY B. MELTON ET AL., PSYCHOLOGICAL EVALUATIONS FOR THE COURTS: A HANDBOOK FOR MENTAL HEALTH PROFESSIONALS AND LAWYERS 19 (2d ed. 1997).

274. FED. R. EVID. 702 states,

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

(emphasis added).

acceptable substitute for—a moral judgment about the defendant.²⁷⁵ However *Atkins* affects determinations about who will be executed, it perpetuates the fantasy that “getting psychiatric help” makes death sentences fairer and more palatable.

275. As Professor Morse noted several years ago, “overreliance on experts promotes the mistaken and responsibility-abdicating view that these hard moral questions (i.e., whether and in what way to treat mentally ill persons differently) are scientific ones. . . .” Stephen J. Morse, *Law and Mental Health Professionals: The Limits of Expertise*, 9 PROF. PSYCHOL. 389 (1978).