THE APPROPRIATE STANDARD OF PROOF FOR DETERMINING INTELLECTUAL DISABILITY IN CAPITAL CASES: HOW HIGH IS TOO HIGH?

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I. INTRODUCTION

For his role in the murder of Kathryn Stryker, Jerome Bowden was convicted in 1976, sentenced to death and scheduled to be executed by the state of Georgia on Monday June 18, 1986.[1] Eight hours before his execution, a stay was granted in order to allow for an evaluation of his mental competency.[2] Five days later he sat down with a psychologist hired by the Georgia Board of Pardons and Parole to undergo psychological testing, who determined his IQ was sixty-five.[3] The commonly accepted diagnosis of intellectual disability[4] includes an IQ score of below seventy, with a standard deviation of five points.[5] Hours after the evaluation, and shortly after the Board of Pardons and Parole read the psychologist's report, the Board of Pardons and Parole lifted the stay of execution. Less than twenty-four hours later, Jerome Bowden was executed in Georgia's electric chair.[6]

To say the execution of a man with a state-determined IQ of sixty-five is disturbing is an understatement. However, the details revealing how the criminal justice system dealt with an obviously intellectually disabled defendant are even more disturbing. An examination of those details highlights the myriad of failures in the system where an intellectually disabled criminal defendant faces capital

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[1] Associated Press, *Georgia Halts Execution for Mental Evaluation*, N.Y. TIMES, June 18, 1986, at A14.

[2] *Id*.

[3] Elliott Minor, *Mentally Retarded Man Dies in Ga. Electric Chair*, PHILA. INQUIRER, June 25, 1986, at A11; Associated Press, *Retarded Killer Dies in Georgia Chair*, CHI. TRIB., June 25, 1986, at 9.

[4] The term "mental retardation" is no longer used by the mental health profession, which instead uses "intellectual disability" to describe the same cognitive limitations. However, "mental retardation" is the term used by *Atkins v. Virginia* in establishing Eighth Amendment protection for the group of people suffering from this disability. *See* Atkins v. Virginia, 536 U.S. 304 (2002). Likewise, when discussing the appropriate standard of proof a capital defendant must meet when claiming this protection, which is the subject of this article, legislatures and courts continued to use the term "mental retardation."

However, on May 27, 2014, when the Supreme Court issued its opinion in *Hall v. Florida*, it specifically discontinued use of the term "mental retardation" and joined the mental health profession in using "intellectual disability" throughout the opinion. *See* Hall v. Florida, 134 S. Ct. 1986, 1990 (2014).

For clarity and consistency, I will use "intellectual disability" throughout, but the term "mental retardation" will remain extant in any quoted material.

[5] *Atkins*, 536 U.S. at 309 n.5 (2002).

[6] *Id*.; Associated Press, *Georgia Electrocutes Retarded Murderer*, SAN JOSE MERCURY NEWS, June 25, 1986, at 4A.

prosecution.

Jerome Bowden's background, as well as the circumstances surrounding his crime, clearly shows that the man was intellectually disabled. Jerome Bowden lived in Columbus, Georgia with family members. When he was fourteen, local officials determined that his IQ was fifty-nine.[7] Bowden's family had long known Jerome had limited mental abilities, and his mother had tried, and failed, to have him examined by a psychiatrist.[8] When Bowden was twenty-four, he met James Graves, who was sixteen years old.[9] In October of 1976, Graves and Bowden were hired by Kathryn Stryker to rake the leaves in her yard.[10] While raking leaves, Graves told Bowden that he had been inside Mrs. Stryker's home, had seen things he thought were valuable, and suggested that they burglarize the home together.[11]

On Monday, October 11, 1976 at 8:30 a.m. the two broke into Mrs. Stryker's home, finding both Mrs. Stryker and her bedridden mother in the house. The two men killed Mrs. Stryker that morning.[12] Her mother, beaten by the two men, died from her injuries several weeks later.[13] Graves and Bowden then stole items from the house, and took them next door to Graves's home.[14] Graves sold a television and old coins stolen from Mrs. Stryker, and the stolen jewelry was found hidden at Graves's house.[15] There was no evidence Bowden sold, disposed of, or kept anything from the robbery.

The police investigation led to Graves, who confessed and implicated Bowden.[16] Upon learning that the police were looking for him, Bowden turned himself in on October 15, 1976.[17] Bowden gave an oral confession to the detective in charge of the case while handcuffed, sitting in the backseat of the patrol car while parked outside of Graves's girlfriend's house.[18] At trial, Bowden testified that the detective told

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7 Associated Press, *supra* note 1.
8 *See* Bowden v. Francis, 733 F.2d 740, 743 (11th Cir. 1984).
9 *Id*.
10 *Id*.
11 Bowden v. State, 238 S.E.2d 905, 907 (Ga. 1977).
12 *Id*.
13 *Id*.
14 *Id*.
15 *Id*. at 908.
16 Bowden v. Francis, 733 F.2d 740, 744 (11th Cir. 1984).
17 *Id*.
18 Bowden v. State, 238 S.E.2d at 907.

Bowden he could get him out of the death penalty if he confessed.[19]

Bowden's lawyer filed a special pretrial plea of insanity and asked for the court to appoint a psychiatrist to evaluate Bowden.[20] Following a hearing, the trial court denied the motion, and refused to appoint a psychiatrist or conduct any evaluation.[21] As a result, Bowden's trial counsel withdrew the motion, thereby making any meaningful appellate review almost procedurally impossible.[22]

Bowden's trial took place on December 7, 1976—less than two months after the crime and seven weeks after his arrest.[23] He was convicted and sentenced to death.[24] James Graves, who planned the burglary and encouraged Bowden to participate, received a life sentence for his role.[25]

In the lead up to his scheduled execution, Bowden told an interviewer that "he was going off to live on a little cloud and hoped a guard who befriended him would live on a cloud near him someday."[26]

With Bowden's execution scheduled for June 18, 1986, the Board of Pardons and Parole issued a stay of execution to determine Bowden's mental status.[27] The Board directed Mr. Bowden be evaluated, and hired a psychologist to conduct the evaluation. As part of his evaluation, the psychologist administered Mr. Bowden an IQ test.[28] Mr. Bowden reported that he tried his hardest to do his best on the test.[29] His best effort on that test produced an IQ score of sixty-five.[30]

The IQ score of sixty-five was sufficient to assure the Board that Bowden "knew right from wrong at the time of the commission of the crime", leading the Board to lift its stay of execution the same day it learned of the test results.[31] The following morning, Bowden's

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19 *Id*. at 908.
20 *Francis*, 733 F.2d at 744.
21 *Id*.
22 *Id*.
23 *Id*.
24 *Id*.
25 Associated Press, *supra* note 1.
26 Joseph B. Frazier, *Too Retarded to Die for Crimes? Law Says No*, L.A. TIMES, April 17, 1988, at 22.
27 *Id*.
28 Minor, *supra* note 3.
29 *See* Amy Linn, *Justice and the Impaired A Question of Punishment Arises*, PHILA. INQUIRER, April 17, 1988, at A1; Frazier, *supra* note 26.
30 Atkins v. Virginia, 536 U.S. 304, 313 n.8 (2002).
31 Associated Press, *supra* note 3.

execution was carried out.[32] Given an opportunity to make a final statement, Bowden thanked "the people of this institution for taking such good care of me as they have."[33]

There was little doubt that Georgia had executed an intellectually disabled defendant,[34] and public opinion appeared to be squarely against it.[35] In 1986 there was no prohibition on executing the intellectually disabled, either from the legislature or the courts. However, the execution of Jerome Bowden prompted such public backlash that in 1988 Georgia became the first state in the nation[36] to outlaw the execution of the intellectually disabled by passing amendments to O.C.G.A. §17-7-131, which excluded any intellectually disabled criminal defendant from being sentenced to death.[37] Georgia's Supreme Court followed suit in 1989 by granting intellectually disabled

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[32] Associated Press, *supra* note 6.

[33] *See id.*; Associated Press, *Retarded Killer Executed in Georgia*, L.A. TIMES, June 25, 1986, at SD16.

[34] There are multiple levels of intellectual disability: Mild, Moderate, Severe and Profound. AM. PSYCHIATRIC ASS'N, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS 35 (5th ed. 2013) [hereinafter DSM-5].
In terms of capital punishment, it is only mildly intellectually disabled defendants who are generally at risk of conviction and execution. *See* Penry v. Lynaugh, 492 U.S. 302, 333 (1989). This is because the top of the IQ range for moderate intellectual disability is 55, far below the 70 threshold for mild intellectual disability. Defendants with that low of an IQ score are uniformly determined to be intellectually disabled and part of the class of people protected by *Atkins*. Consequently, when using the term intellectually disabled, this paper refers to the class of capital defendants who might be mildly intellectually disabled, as defined by the mental health profession.

[35] Virtually all of the press coverage described Jerome Bowden as "retarded", and the Atlanta Journal Constitution, Atlanta's major newspaper, referred to him as "retarded" in virtually every article they wrote about his case and execution. *See* Bill Montgomery, *Who Shall Die? The Death Penalty's Last Appal — Retarded Man's Execution Stirred Protest Worldwide — Case of Jerome Bowden Discomfits Conscience*, ATL. J. AND ATL. CONST., October 13, 1986, at A1.

[36] In 1988 there were 12 states which had abolished the Death Penalty: Alaska, Hawaii, Iowa, Maine, Massachusetts, Michigan, Minnesota, North Dakota, Rhode Island, Vermont, West Virginia and Wisconsin. *States With and Without the Death Penalty*, DEATH PENALTY INFO. CTR., http://www.deathpenaltyinfo.org/states-and-without-death-penalty (last visited Apr. 20, 2015).

[37] Associated Press, *Georgia to Bar Executions of Retarded Killers*, N.Y. TIMES, April 12, 1988, at A26; GA. CODE ANN. §71-7-131 (1952). Georgia, through this statute, required a defendant to prove his or her intellectual disability beyond a reasonable doubt in order to avoid a potential death sentence. Although it was the first state to prohibit the execution of the intellectually disabled, none of the other states that followed, both pre- and post-*Atkins* followed their lead and required proof beyond a reasonable doubt.

criminal defendants state constitutional protection against cruel and unusual punishment in the case of *Fleming v. Zant*.[38]

Other states soon moved in the same direction, with seventeen more states and the federal government passing legislation prohibiting the execution of the intellectually disabled between 1988 and 2002.[39]

In its 2002 ruling in *Atkins v. Virginia*, the United States Supreme Court determined that executing an intellectually disabled defendant violated the Eighth Amendment's ban on cruel and unusual punishment.[40] The Court did not establish any procedural requirements for the states to meet as they established procedures to meet this new constitutional requirement. As to the standard of proof, the only appropriate standard of proof for determining the intellectual disability of a capital defendant is proof to a preponderance of the evidence. The lack of standards or direction in *Atkins* has resulted in multiple states using unconstitutionally strict standards of proof.

Following *Atkins*, eight more states passed legislation prohibiting such executions to bring their state law into conformance with *Atkins*.[41] In addition, seven states established such prohibitions through state appellate court decisions between 1988 and 2005.[42]

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[38] *See* Fleming v. Zant, 386 S.E.2d 339 (Ga. 1989). It is worth noting that the Georgia Supreme Court, in *Fleming*, after establishing state constitutional protection for the intellectually disabled, also established procedures for those defendants who were under death sentence at the time of their decision to raise the issue. In so doing, the court placed the burden of proving intellectual disability on the defendant, and established the standard of proof as preponderance of the evidence, despite the state legislature having established the standard of proof as beyond a reasonable doubt just one year before.

[39] These states were Arizona, Arkansas, Colorado, Connecticut, Florida, Indiana, Kansas, Kentucky, Maryland, Missouri, New Mexico, Nebraska, New York, North Carolina, South Dakota, Tennessee, Washington. *State Statutes Prohibiting the Death Penalty for People with Mental Retardation*, DEATH PENALTY INFO. CTR., http://www.deathpenaltyinfo.org/state-statutes-prohibiting-death-penalty-people-mental-retardation [hereinafter *State Statutes*] (last visited Apr. 20, 2015).

[40] *See* Atkins v. Virginia, 536 U.S. 304 (2002).

[41] These states were California, Delaware, Idaho, Illinois, Louisiana Nevada, Utah, and Virginia. *States That Have Changed Their Statutes to Comply With the Supreme Court's Decision in* Atkins v. Virginia, DEATH PENALTY INFO. CTR., http://www.deathpenaltyinfo.org/states-have-changed-their-statutes-comply-supreme-courts-decision-atkins-v-virginia [hereinafter *States That Have Changed*] (last visited Apr. 20, 2015).

[42] *See* Alabama: Trawick v. State, 698 So. 2d 151 (Ala. Crim. App. 1995); Mississippi: Chase v. State, 873 So. 2d 1013 (Miss. 2004); Ohio: Ohio v. Lott, 779 N.E.2d 1011 (2002); Oklahoma: Murphy v. Oklahoma, 54 P.3d 556 (Okla. Crim. App. 2002); Pennsylvania: Commonwealth v. Miller, 888 A.2d 624 (Pa. 2005) and

Although it established the constitutional protection, the *Atkins* decision gave full authority to the states to choose the procedure to be used in determining whether a defendant was intellectually disabled and thus protected by the Eighth Amendment.[43] This has resulted in a wide variety of procedural schemes used in states across the nation to make this determination. One issue on which meaningful variation exists is the standard of proof[44] a capital defendant claiming intellectual disability must meet, and how that standard of proof interacts with the psychological diagnosis of intellectual disability as a fact to be proven. Of the eighteen states and federal government that had statutorily prohibited the execution of the intellectually disabled before *Atkins* in 2002, twelve chose preponderance of the evidence as the standard of proof,[45] while five chose clear and convincing,[46] and Kansas established no standard of proof. Only Georgia chose proof beyond a reasonable doubt.

Following *Atkins*, fifteen states established procedures to effect *Atkins'* prohibition on executing the intellectually disabled.[47] Of those

Commonwealth v. Sanchez, 36 A.3d 24 (Pa. 2011); South Carolina: Franklin v. Maynard, 588 S.E.2d 604 (S.C. 2003); Texas: *Ex Parte* Briseno, 135 S.W.3d 1 (Tex. Crim. App. 2004).

[43] *See Atkins*, 536 U.S. at 317 (1986) (quoting Ford v. Wainwright, 477 U.S. 399, 405, 416-417 (1986)).

[44] Of the 32 states (and the United States government) that currently have the death penalty, all but one place the burden of proving intellectual disability upon the defendant. That state is Kansas, which does not establish who has the burden of proof, nor the standard of proof required. KAN. STAT. ANN. § 21-4623.

[45] Arkansas (ARK. CODE ANN. § 5-4-618 (2014)); Connecticut (CONN. GEN. STAT. § 53a-46a(h) (2001)); Kentucky (KY. REV. STAT. § 532.140 (1990)); Maryland (MD. CODE, CRIM. LAW § 412 (1989)); Missouri (MO. REV. STAT. § 565.030 (1984)); Nebraska (NEB. REV. STAT. § 28-105.01 (1998)); New Mexico (N.M. STAT. § 21-20A-2.1 (1978)); New York (N.Y. CRIM. PROC. LAW § 400.27 (McKinney 1995)); South Dakota (S.D. CODIFIED LAWS § 23A-27A-26.1 (2000)); Tennessee (TENN. CODE § 39-13-203 (1993)); Washington (WASH. REV. CODE § 10.95.30 (1993); United States of America (18 U.S.C.§ 3596(c) (1994)).

[46] Arizona (ARIZ. REV. STAT. § 13-753 (2011)); Colorado (COLO. REV. STAT. § 18-1.3-1102 (2012)); Delaware (11 DEL. CODE § 4209(d)(3) (2013)); Florida (FLA. STAT. § 921.137 (2014)); North Carolina (N.C. GEN. STAT. ANN. § 15A-2005 (West 2001)).

[47] California (CAL. PENAL CODE § 1376 (2003)); Delaware (11 DEL. CODE tit. 11, § 4209 (2003)); Idaho (IDAHO CODE § 19-2515a (2003)); Illinois (725 ILL. COMP. STAT. 5/114-15 (2003)); Louisiana (LA. CODE CRIM. PROC. art. 905.5.1 (2003)); Nevada (NEV. REV. STAT. § 174.098 (2003)); Utah (UTAH CODE §77-15a-101 (2003));Virginia (VA. CODE § 19.2-264.3:1.1 (2003)). The appellate courts of Alabama (Morrow v. State, 928 So. 2d 315 (Ala. 2006)); Mississippi (Chase v. State, 873 So. 2d 1013 (Miss. 2004)); Ohio (State v. Lott, 97 Ohio St. 3d 303 (Ohio 2002)); Oklahoma (Murphy v. State, 54

fifteen post-*Atkins* states, all but one chose preponderance of the evidence as the appropriate standard of proof to be met.[48] Additionally, while Indiana had established by statute in 1994 that a capital defendant must prove intellectual disability by clear and convincing evidence, the post-*Atkins* Indiana Supreme Court found the 1994 statute demanding the defendant to prove his own intellectual disability to be unconstitutional, and established preponderance of the evidence as the proper standard.[49]

The end result is that today, of the thirty-three jurisdictions with the death penalty, twenty-two use preponderance of the evidence as the standard of proof for determining intellectual disability in a capital case, five use clear and convincing, five apply no particular standard of proof,[50] and one uses beyond a reasonable doubt.

Not until the Supreme Court decided *Hall v. Florida*[51] on May 27, 2014, the Supreme Court had not revisited any part of its decision in *Atkins* to leave the procedural structuring to the states. This unfettered freedom has resulted in the full spectrum of standards of proof being used across the states when determining whether a capital defendant is intellectually disabled. This in turn has consistently resulted in a disparity of treatment of potentially intellectually disabled capital defendants across the nation, despite the constitutional prohibition on executing the intellectually disabled.

In this paper I argue that the only appropriate standard of proof in determining whether a capital defendant is intellectually disabled is preponderance of the evidence. A review of *Atkins v. Virginia* and its reasoning, along with a review of other relevant Supreme Court precedent, as well as the manner in which the medical community defines and diagnosis intellectual disability all clearly indicate that any standard of proof more stringent than preponderance of the evidence carries a constitutionally unacceptable risk that an intellectually disable

P.3d 556 (Okla. 2002)); Pennsylvania (Commonwealth v. Sanchez, 36 A.3d 24 (Pa. 2011)); South Carolina (Franklin v. Maynard, 356 S.C. 276 (S.C. 2003)); Texas (*Ex parte* Briseno, 135 S.W.3d 1 (Tex. 2004)) decided the issue and established procedures for the trial courts to follow.

[48] Delaware's state legislature chose to require clear and convincing evidence.

[49] *See* Pruitt v. State, 834 N.E.2d 90, 103 (Ind. 2005).

[50] One explanation of this may simply be a lack of need. Those five states (Kansas, Montana, New Hampshire, Oregon and Wyoming) have combined to execute only six defendants since 1976, and thus it is possible they have not encountered a capital defendant claiming intellectual disability pretrial.

[51] Hall v. Florida, 134 S. Ct. 1986 (2014).

person will be executed.

Part II this article reviews *Atkins v. Virginia* and analyzes the decision. It first looks to the reasoning the Supreme Court used to determine that executing the intellectually disabled is cruel and unusual punishment. It then looks to the Court's reliance on *Ford v. Wainright* in declining to establish procedural guidelines for the implementation of the prescription.

Part III takes a comprehensive look at how intellectual disability is diagnosed, the nature of the information which is part of the diagnostic process, and the relative lack of certainty inherent in the process from start to finish. It also reviews the diagnostic process itself, and the fact that diagnosis requires the subjective analysis and judgment of the clinician doing the diagnostic analysis. Part III also reviews the difficulty jurors have in understanding mental health evidence and the meaning of intellectual disability itself. Finally, Part III reviews how the Supreme Court, in *Addington v. Texas*, considered the appropriate standard of proof when dealing with the imprecision of medical diagnoses.

Part IV then argues for a preponderance of the evidence standard as the appropriate standard of proof when determining whether a capital defendant is intellectually disabled and thus part of the protected class of defendants not eligible for the death penalty as outlined in *Atkins*. The section first reviews what the burden of proof is and how it interacts with a standard of proof. It next reviews the various standards of proof available. It also reviews how the standard of proof impacts the reliability of the trier of fact's determination of whether or not the capital defendant is intellectually disabled and thus entitled to the Eighth Amendment's protection. Next, Part IV reviews *Cooper v. Oklahoma*, wherein the United States Supreme Court established that requiring a capital defendant to prove his competency to stand trial by clear and convincing evidence was unconstitutionally strict. It then argues that the analysis in *Cooper* is directly applicable to the determination of intellectual disability in capital cases, especially considering the change in national consensus since *Atkins*. Finally, Part IV recognizes that the Indiana Supreme Court adopted this argument by invalidating Indiana's statutory scheme that required proof by clear and convincing evidence.

Part V analyzes the Supreme Court decision in *Hall v. Florida*. It considers whether the *Hall* decision is applicable to any other procedural aspect of the prosecution of capital cases where intellectual disability is at issue, and applies its reasoning to the determination of the appropriate

standard of proof when capital defendants raise intellectual disability.

Part VI concludes that the preponderance of the evidence standard is the only standard of proof that meets the constitutional mandate of *Atkins*, satisfies the Eighth Amendment prescription on cruel and unusual punishment, and satisfies the Due Process clause of the Fifth Amendment.

II. ATKINS v. VIRGINIA: RULE BUT NO PROCEDURE

In 1989 the United States Supreme Court, in *Penry v. Lynaugh*, rejected the argument that the Eighth Amendment prohibits executing an intellectually disabled defendant.[52] Thirteen years later, in 2002, the United States Supreme Court overruled this decision, in *Atkins v. Virginia*, holding that executing the intellectually disabled does in fact violate the Eighth Amendment's protection against cruel and unusual punishment.[53] The Court did so, in large part, on the basis of the perceived shift in approaches across the nation, wherein state legislatures were prohibiting the execution of the intellectually disabled in their states.[54] As the Supreme Court recognized, that shift in perception and the resulting change in law began in 1986 with Georgia's passage of O.C.G.A. §17-7-131(j).[55]

A. The Protected Class Includes All Intellectually disabled Defendants

Specifically, the *Atkins Court* found that since *Penry* in 1989, there had been a widespread shift in public opinion across the nation, but that "[it] is not so much the number of these States that is significant, but the consistency of the direction of change."[56] That direction was singularly towards a blanket prohibition on the execution of an intellectually disabled criminal defendant. At the time the *Atkins* Court reached this conclusion, there was legislation prohibiting such executions in eighteen states, along with the federal government.[57]

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[52] *See* Penry v. Lynaugh, 492 U.S. 302, 333 (1989).

[53] *See* Atkins v. Virginia, 536 U.S. 304 (2002). It's also worth noting that the *Atkins* Court cited Georgia's execution of Jerome Bowden in 1986 as the catalyst for the passage of GA. CODE ANN. §17-7-131(j) (2013), the first statute in the nation prohibiting the execution of a intellectually disabled defendant. *See Penry*, 492 U.S. at 313–14.

[54] *See Penry*, 492 U.S. at 314–15.

[55] *See id*. at 314 n.8.

[56] *See id*. at 315.

[57] *See id*. at 314–15; *State Statutes*, *supra* note 39.

Since the *Atkins* decision, the direction of change has remained consistent, as another eight states have passed laws prohibiting the execution of an intellectually disabled criminal defendant to fall into compliance with the decision.[58] There is no question where the country stands on the issue of executing the intellectually disabled: it stands squarely against it.

The *Atkins* Court did not simply extend this constitutional protection to the most severely intellectually disabled; instead, it extended it to all intellectually disabled defendants. The Court first noted that intellectual disability is classified across a range from mild to moderate to severe to profound intellectual disability.[59] Then, when identifying the precise constitutional protection, the Supreme Court commanded that the right to not be executed applied to the entire "range of intellectually disabled offenders about whom there is a national consensus."[60] Thus, a mildly intellectually disabled defendant benefits from the same protection as the profoundly intellectually disabled defendant, because the actions of the citizens and the states across the nation reflected that the nation's standards of decency had sufficiently evolved to demand that protection.

B. The *Atkins* Court Gave No Specific Direction On Procedure

In *Atkins*, though, the Court refrained from providing any guidance regarding what procedures should be used for determining which defendants are in fact intellectually disabled and thus entitled to this protection. Instead, it followed its approach to determining a defendant's insanity in *Ford v. Wainwright*, leaving "to the State[s] the task of developing appropriate ways to enforce the constitutional restriction upon [their] execution of sentences."[61] The Court's failure to outline a specific procedure or even to suggest appropriate parameters has allowed many state courts to refuse to revisit the procedures used to determine if a defendant is intellectually disabled, including the standard of proof the capital defendant must meet to prove his or her intellectual disability.[62]

Since Georgia passed the first law in the nation prohibiting the

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58 *See States That Have Changed*, *supra* note 41.
59 *See* Atkins v. Virginia, 536 U.S. 304, 309 n.3, 317 n.22 (2002).
60 *See id.* at 317.
61 *See id.* (quoting Ford v. Wainwright, 477 U.S. 399, 405, 416–17 (1986)).
62 *See, e.g.*, Stripling v. State, 711 S.E.2d 665, 668–69 (Ga. 2011).

execution of the intellectually disabled,[63] many states have adopted a wide variety of procedures for making this critical determination. These procedures have been created both by state legislatures and state courts, and have not yet been substantively reviewed by the Supreme Court to determine their fidelity to the constitution.

The *Atkins* Court, consistent with its approach in *Ford v. Wainwright*, concluded that the states were the appropriate party to establish the procedural mechanisms to enforce and protect the substantive constitutional right it had recognized.[64] In doing so, the Court expressly imposed upon the states an affirmative duty to "develop[ ] appropriate ways to enforce" the constitutional right of the intellectually disabled to not be executed.[65] Clearly, "appropriate" means a procedural scheme that sufficiently protects the constitutional right. Procedures that do not meet those criteria are thus unconstitutional if, "in their natural operation" they produce an unconstitutional result.[66]

This direction in *Atkins* is consistent with the Court's long-standing approach. In 1911, the Supreme Court addressed whether an Alabama state procedural rule, which created a presumption of guilt in certain contract-for-services cases, violated the Thirteenth Amendment prohibition on involuntary servitude.[67] The Court held that while states generally have the power to create procedures to implement their own laws, such procedures may not undermine federal constitutional rights: "[i]t is apparent that a constitutional prohibition cannot be transgressed indirectly by the creation of a statutory presumption any more than it can be violated by direct enactment."[68]

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[63] GA. CODE ANN. §17-7-131 (2013).

[64] *See Atkins*, 536 U.S. at 317.

[65] *See id*.

[66] *See* Baily v. Alabama, 219 U.S. 219, 239, 245 (1911).

[67] *See id*.

[68] *See id*. at 239. In *Speiser*, the Supreme Court again held that the United States Constitution places constraints on state procedural rules implicating federal constitutional rights. *See* Speiser v. Randall, 357 U.S. 513 (1958). The Court held that when federal constitutional rights are at issue the state has an affirmative obligation to "provide procedures which are adequate to safeguard against infringement of constitutionally protected rights." *See id*. at 521. More recently, this issue was at the forefront of the ruling in *Ford*. *See* Ford v. Wainwright, 477 U.S. 399 (1986). In that case, once the Court established that executing the legally insane violated the Eighth Amendment, then Florida's procedure had to be evaluated in light of its effectiveness in protecting that right. *See id*. As we know, the Court held that those state procedures were inadequate to protect against the improper execution of condemned inmates found

Atkins specifically left the procedures for complying with the constitutional prohibition on executing intellectually disabled defendants to the states. In doing so, the Court cited consistency with its approach in *Ford v. Wainwright*, where it found executing the insane violated the Eighth Amendment.[69] Unlike *Atkins*, in *Ford v. Wainwright*, the Court spent considerable time reviewing and analyzing the procedural mechanisms used to determine if the defendant, Mr. Ford, was insane. Re-stating that "death is different" the Court noted that "[i]n capital proceedings generally, this Court has demanded that fact-finding procedures aspire to a heightened standard of reliability."[70] This detailed review persuaded the Court that the process in place prevented Mr. Ford from presenting relevant evidence on the issue of his insanity and possible ineligibility from execution. This unconstitutionally limited the fact-finder's ability to consider his claims resulting in a potentially unreliable result. The Court found that "this most cursory form of procedural review fails to achieve even the minimal degree of reliability required for the protection of any constitutional interest."[71] While the *Ford* decision left the final determination of the procedural scheme sufficient to ensure compliance with the constitutional mandate to not execute those protected by the Eighth Amendment to the states, it explicitly outlined the line which the states could not cross: "the lodestar of any effort to devise a procedure must be the overriding dual imperative of providing redress for those with substantial claims and of encouraging accuracy in the fact-finding determination."[72]

It is through this lens that a state's procedural scheme to ensure compliance with *Atkins* must be viewed, thus raising the question: Do the state procedures reliably ensure that no intellectually disabled defendant will be executed? While virtually all current state procedures do allow for a full evidentiary hearing,[73] as discussed above, there is

to be insane. *See id*. at 416.

[69] *See Atkins*, 536 U.S. at 317.

[70] *Ford*, 477 U.S. at 411 (citing Spaziano v. Florida, 468 U.S. 447, 456 (1984)).

[71] *Id*. at 413.

[72] *See id*. at 417.

[73] Only Kansas (KAN. STAT. § 21-46230 (2014)), Montana (MONT. CODE § 46-18-301 (2014)), New Hampshire (N.H. REV. STAT. § 630:1 (2015)), Oregon (OR. REV. STAT. §§ 163.105, 163.150 (2014); Pratt v. Armenakis, 112 P.3d 371, 373 (Or. Ct. App. 2005)) and Wyoming (WYO. STAT. §§ 6-2-101, 6-2-102 (2010)) fail to establish what type of hearing is appropriate for determining whether a capital defendant is intellectually disabled. As discussed earlier, these states have very few executions and it is likely that the issue hasn't presented itself yet.

great disparity in the standard of proof required. Of the thirty-two states that currently have the death penalty, twenty-one states and the federal government use preponderance of the evidence as the requisite standard of proof.[74] Five states require clear and convincing evidence.[75] One requires proof beyond a reasonable doubt.[76] Five states have not established a standard of proof to determine this issue.[77]

Ford v. Wainright made clear that requiring a defendant to prove his or her intellectual disability to a standard of proof inconsistent with the imprecision inherent in the medical diagnosis at issue unconstitutionally reduces the reliability of the outcome.[78] Because there is not perfect accuracy in the process, the standard of proof must not be so high as to exclude every possibility but the most certain. While *Ford* dealt with insanity of a capital defendant, the type of evidence a court must consider in determining if a defendant is insane is similar in nature to the type of evidence a court must consider in determining if a defendant is intellectually disabled. As discussed below, the defining feature of the evidence supporting the two diagnoses is that it is imprecise, requiring interpretation of a wide variety of unquantifiable information by the diagnostician based upon their professional experience. In order to comply with the *Atkins* mandate,

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[74] Alabama (Morrow v. State, 928 So. 2d 315 (Ala. 2006)), Arkansas (ARK. CODE ANN. § 5-4-618 (2014)), California (CAL. PENAL CODE § 1376 (2003)), Idaho (IDAHO CODE § 19-2515a (2003)), Indiana (Pruitt v. State, 834 N.E.2d 90, 98 (Ind. 2005), Kentucky (KY. REV. STAT. § 532.140 (1990)), Louisiana (LA. CODE CRIM. PROC. art. 905.5.1 (2003)), Mississippi (Chase v. State, 873 So. 2d 1013 (Miss. 2004)), Missouri (MO. REV. STAT. § 565.030 (1984)), Nebraska (NEB. REV. STAT. § 28-105.01 (1998)), Nevada (NEV. REV. STAT. § 174.098 (2003)), Ohio (State v. Lott, 97 Ohio St. 3d 303 (Ohio 2002)), Oklahoma (Murphy v. State, 54 P.3d 556 (Okla. 2002)), Pennsylvania (Commonwealth v. Sanchez, 36 A.3d 24 (Pa. 2011)), South Carolina (Franklin v. Maynard, 356 S.C. 276 (S.C. 2003)), South Dakota (S.D. CODIFIED LAWS § 23A-27A-26.1 (2000)), Tennessee (TENN. CODE § 39-13-203 (1993)), Texas (*Ex parte* Briseno, 135 S.W.3d 1 (Tex. 2004)), Utah Utah (UTAH CODE §77-15a-101 (2003)), Virginia (VA. CODE § 19.2-264.3:1.1 (2003)), Washington (WASH. REV. CODE § 10.95.30 (1993)) and the United States of America (18 U.S.C. §3596(c) (1994)).

[75] Arizona (ARIZ. REV. STAT. § 13-753 (2011)); Colorado (COLO. REV. STAT. § 18-1.3-1102 (2012)); Delaware (11 DEL. CODE § 4209(d)(3) (2013)); Florida (FLA. STAT. § 921.137 (2014)); North Carolina (N.C. GEN. STAT. ANN. § 15A-2005 (West 2001)).

[76] Georgia (GA. CODE §17-7-131(c)(3) (2014)).

[77] Kansas (KAN. STAT. § 21-46230 (2014)), Montana (MONT. CODE § 46-18-301 (2014)), New Hampshire (N.H. REV. STAT. § 630:1 (2015)), Oregon (OR. REV. STAT. §§ 163.105, 163.150 (2014); Pratt v. Armenakis, 112 P.3d 371, 373 (Or. Ct. App. 2005)) and Wyoming (WYO. STAT. §§ 6-2-101, 6-2-102 (2010)).

[78] *See* Ford v. Wainwright, 477 U.S. 399, 417 (1996).

and its reliance on the procedural deference afforded to the states by *Ford*, the standard of proof used in making the determination must ensure sufficient accuracy in the fact-finding process. Thus, in capital cases, the standard of proof is a critical component of ensuring a state's procedures satisfy the requirements of *Atkins*, because as *Ford* held, "[t]he stakes are high, and the 'evidence' will always be imprecise."[79]

III. THE DIAGNOSIS OF INTELLECTUAL DISABILITY IS A COMPLEX AND IMPERFECT PROCESSWITHOUT A HIGH DEGREE OF CERTAINTY

A. *Ford*'s analysis on determining insanity in a criminal defendant is connected to the same determination of intellectual disability by the imprecision present in both. Moreover, diagnosing intellectual disability is a complex process involving a variety of diagnostic tools and requiring data sufficient to find the existence of three major diagnostic criteria, none of which are easily determinable.[80] The Diagnosis Of Intellectual Disability Requires Concurrent And Significant Deficits In Two Main Areas: Intellectual Functioning And Adaptive Functioning

The *Atkins* Court summarized the then widely recognized definition of intellectual disability as "not only sub-average intellectual functioning, but also significant limitations in adaptive skills such as communication, self-care, and self-direction that became manifest before age eighteen."[81]

There are two standard medical definitions of intellectual disability. The American Association of Intellectual and Developmental Disabilities (AAIDD) defines it as "a disability characterized by significant limitations in both intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills."[82]

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[79] *See id*.

[80] DSM-5, *supra* note 34, at 33; *Definition of Intellectual Disability*, AM. ASS'N OF INTELLECTUAL AND DEVELOPMENTAL DISABILITIES, http://aaidd.org/intellectual-disability/definition (last viewed Apr. 20, 2015).

[81] Atkins v. Virginia, 536 U.S. 304, 318 (2012).

[82] The two major diagnostic publications title this criterion differently. The American Psychiatric Association (APA) refers to it as "adaptive functioning" in their publication, the DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS (DSM-V), while the American Association on Intellectual & Developmental Disabilities (AAIDD) refers to it as "adaptive behavior" in its manual, INTELLECTUAL DISABILITY: DEFINITION,

"This disability originates before the age of eighteen." [83]

Additionally, the American Psychiatric Association (APA) defines intellectual disability as:

> "[A] disorder with onset during the developmental period that includes both intellectual and adaptive functioning deficits in conceptual, social and practical domains. The following three criteria must be met:
>
> A. Deficits in intellectual functions, such as reasoning, problem solving, planning, abstract thinking, judgment, academic learning, and learning from experience, confirmed by both clinical assessment and individualized, standardized intelligence testing.
>
> B. Deficits in adaptive functioning that result in failure to meet development and socio-cultural standards for personal independence and social responsibility. Without ongoing support, the adaptive deficits limit functioning in one or more activities of daily life, such as communication, social participation, and independent living, across multiple environments, such as home, school, work and community.
>
> C. Onset of intellectual and adaptive deficits during the developmental period."[84]

While there are differences between the two definitions, they are not significant for the purposes of this article. Both definitions consider intellectual and adaptive functioning as concurrent criteria.

Since intellectual disability was first defined in 1959 as integrating sub-average intellectual functioning and deficits in adaptive functioning, the mental health profession and the courts have consistently treated IQ determination as the primary criterion for a finding of intellectual disability, and often as a gateway or hurdle to be cleared before there can be any consideration of adaptive functioning deficits.[85] This is generally seen as a result of the increased availability of intelligence tests first introduced in the United States by Henry

CLASSIFICATION, AND SYSTEMS OF SUPPORTS. *See* DSM-5, *supra* note 34; AM. ASS'N OF INTELLECTUAL AND DEVELOPMENTAL DISABILITIES, INTELLECTUAL DISABILITY: DEFINITION, CLASSIFICATION, AND SYSTEMS OF SUPPORTS (11th ed. 2010) [hereinafter AAIDD, INTELLECTUAL DISABILITY]. The terms refer to same criterion, and I will use "adaptive functioning" in this paper solely to avoid confusion.

[83] *Definition of Intellectual Disability*, *supra* note 80.

[84] DSM-5, *supra* note 34, at 33.

[85] *See* Nancy Haydt et al., *Advantages of DSM-5 in the Diagnosis of Intellectual Disability: Reduced Reliance on IQ Ceilings in* Atkins *(Death Penalty) Cases*, 82 UMKC L. REV. 359, 368–71 (2014).

Goddard and Lewis Terman, both of whom were strong proponents of the eugenics movement in the United States in the early part of the 20th century.[86] The increased access to valid intelligence testing meant that early researchers and diagnosticians relied heavily upon them when assessing intellectual disabilities. Despite the recognition in the 1950's that adaptive functioning was a critical component of intellectual disability, the reliance on IQ testing proved very hard for the profession to overcome.[87] Because expert testimony from members of the profession is the primary source of evidence for judges and juries determining if a criminal defendant has intellectual disability they have consistently suffered from the same bias.[88]

In 2002 the American Association on Mental Retardation (AAMR)[89] issued the 10th edition of its seminal manual on definitions and classification of intellectual disability.[90] Included was an updated definition of intellectual disability, which continued its progression, begun in 1992, away from primary reliance for the diagnosis of intellectual disability on IQ testing to equal reliance on both IQ testing and significant limitations in adaptive functioning.[91] This was a reflection of the general trend to move the field of intellectual disability beyond the singular reliance on IQ testing to include the equally important determination of adaptive functioning deficits.[92] In 2010 the organization released its most recent manual and the definition of intellectual disability remained substantively the same as in 2002, reinforcing the shift in focus from intellectual functioning to adaptive functioning.[93]

Most recently, in May of 2013 the 5th edition of the Diagnostic

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[86] *See id*. at 362–63.

[87] *See id*. at 363–65.

[88] *See id*. at 368–71.

[89] AAMR changed its name to the American Association of Intellectual and Developmental Disabilities (AAIDD). *About Us*, AM. ASS'N ON INTELLECTUAL DEVELOPMENTAL DISABILITIES, http://aaidd.org/about-aaidd (last visited on Apr. 20, 2015).

[90] AM. ASS'N ON MENTAL RETARDATION, MENTAL RETARDATION: DEFINITION, CLASSIFICATION, AND SYSTEMS OF SUPPORTS 5 (10th ed. 2002) [hereinafter AAMR, MENTAL].

[91] The new definition characterized intellectual disability 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 age 18." *Id*. at 1.

[92] *See* Haydt et al., *supra* note 85, at 364.

[93] *Definition of Intellectual Disability*, *supra* note 80.

and Statistical Manual of Mental Disorders (*DSM-V*) was released, and it also included a change in the definition of intellectual disability.[94] A diagnosis under the DSM-V requires finding three criteria:

> "A. Deficits in intellectual functions, such as reasoning, problem-solving, planning, abstract thinking, judgment, academic learning and learning from experience, and practical understanding confirmed by both clinical assessment and individualized, standardized intelligence testing;
>
> B. Deficits in adaptive functioning that result in failure to meet developmental and sociocultural standards for personal independence and social responsibility. Without ongoing support, the adaptive deficits limit functioning in one or more activities of daily life, such as communication, social participation, and independent living, and across multiple environments, such as home, school, work, and recreation;
>
> C. Onset of intellectual and adaptive deficits during the developmental period."[95]

Thus the current standard across the mental health profession clearly establishes that equal weight must be given to all three criteria: Intellectual Functioning, Adaptive Functioning, and Age of Onset.[96] The changes have been described as intending to provide for "greater flexibility in basing diagnoses on clinical judgment, with less emphasis on IQ scores, and IQ ceilings."[97] "The *DSM-V* links deficits in adaptive functioning with co-occurring deficits in intellectual functioning and requires a careful examination of adaptive functioning for reliable interpretation of IQ scores." [98]

Accordingly, a trier of fact, be it a judge or a jury, considering whether a capital defendant is intellectually disabled and thus protected by the Eighth Amendment, must give equal weight to all three criteria. That in turn requires a consideration of how data used by mental health professionals to reach a clinical diagnosis translates into a criminal courtroom, where non-mental health professionals are essentially required to make a clinical diagnosis of intellectual disability. Simply put, the nature of the information considered, and the evaluative process used by a diagnostician considering whether a defendant is intellectually disabled, does not naturally lend itself to application in a courtroom

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94 DSM-5, *supra* note 34, at 33.
95 *Id*.
96 *Id*.
97 Haydt et al., *supra* note 85, at 379.
98 *Id*.

accustomed to much more definitive evidence.

B. The Analysis And Measurement Of Intellectual Functioning Is Imprecise And Not Given To Definitive Quantification

The first criterion generally listed in the professional definitions of intellectual disability is sub-average intellectual functioning.[99] Today, intellectual functioning is generally determined by an IQ test, most commonly the Wechsler Adult Intelligence Scale test (WAIS), which produces a scaled numerical score measuring intelligence across a range of forty-five to one hundred fifty-five.[100] Although the WAIS produces a numerical score, suggesting clarity, in reality the measurement of intelligence and intellectual functioning is very difficult to quantify, numerically or otherwise.[101]

As discussed below, it is impossible to measure human intelligence to a high degree of certainty. The principal reason for this is that from its inception, the test is ultimately based upon the examiner's subjective interpretation of the observed behavior of the test subject. This means that, despite very clear guidelines on scoring each subsection of the WAIS, the results are subject to invalidating influence from a wide range of variables.[102] As the *DSM-V* puts it, "[c]linical training and judgment are required to interpret test results and assess intellectual capacity."[103] Because interpretation, formed by training and judgment, is the lynchpin of the final analysis, subjectivity is inherent in the testing process from data gathering through interpretation, thereby affecting the reliability of the results.

The measurement of intelligence began with Alfred Binet and Theodore Simon in France in 1905.[104] They were attempting to measure

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[99] *See* AAIDD, INTELLECTUAL DISABILITY, *supra* note 82; American Association on Mental Retardation, MENTAL RETARDATION: DEFINITION, CLASSIFICATION, AND SYSTEMS OF SUPPORTS (9th ed. 1992); DSM-V, *supra* note 83.

[100] *See* Atkins v. Virginia, 536 U.S. 304, 309 n.5 (2002); ELIZABETH O. LICHTENBERGER & ALAN S. KAUFMAN, ESSENTIALS OF WAIS-IV ASSESSMENT 20 (2d ed. 2013).

[101] It should be noted that the mental health profession recognizes that the tests used to attempt to accurately measure intellectual functioning are far from perfect. Since the first Weschler test was published in 1939, there have been 4 major revisions, coming roughly every 15–20 years. LICHTENBERGER & KAUFMAN, *supra* note 100, at 8.

[102] *See* DSM-5, *supra* note 34, at 37.

[103] *Id*.

[104] *See* Haydt et al., *supra* note 85, at 362.

the intelligence of school children in France in order to identify which children were likely to need help in school.[105] Their original test was academically focused, consisting generally of school-related tasks.[106] All subsequent intelligence testing has been based on Binet's work.[107]

Binet hypothesized that intelligence could be measured by a person's ability to do complex tasks as opposed to simple tasks, and that a person's intelligence develops positively from childhood through adulthood.[108] To confirm his theories, he developed an intelligence test which originally involved measuring ten mental faculties by giving the subject a series of tasks to complete.[109] Binet also theorized that when comparing the intellectual functioning of two or more people, the ability to do complex tasks would vary much more than simple tasks.[110] Consequently, he found it "necessary to begin with the most intellectual and complex processes, and it is only secondarily necessary to consider the simple and elementary processes."[111] He observed that it was possible to "determine" or measure the elementary processes much more precisely than the complex ones.[112] Imprecision has been part of the scientific method of measuring intellectual functioning since its very origin.

Further evidence of this fact was the testing methodology itself, as it involved observation and interpretation from the outset. Specifically, the method Binet developed involved not only the creation of thirty discrete cognitive tests, but required a partnership of testers to implement.[113] "One of them would talk with and question the examinee, while the other wrote the replies *and noted the salient behaviors*."[114] Thus, the "salient behaviors" are measured by observation of one of the testers, which naturally involves the subjectivity of the tester doing the

[105] *See id*.
[106] *See id*.
[107] *See id*.
[108] John D. Wasserman, *A History of Intelligence Assessment: The Unfinished Tapesty*, *in* CONTEMPORARY INTELLECTUAL ASSESSMENT: THEORIES, TESTS, AND ISSUES 14 (Dawn P. Flanagan & Patti L. Harrison eds., 3d ed. 2012).
[109] *Id*. The original ten faculties were: memory, imagery, imagination, attention, comprehension, suggestibility, aesthetic sentiment, moral sentiment, muscular strength/willpower, and motor ability/hand-eye coordination.
[110] *Id*.
[111] *Id*.
[112] *Id*.
[113] *Id*. at 15.
[114] *Id*. (emphasis added).

observing. That means that one observer is likely to note different salient facts and/or behaviors than another. This in turn means that the certainty of the test results is forever limited by the fact that an examiner must observe and interpret, through their own training and experience, the "salient behaviors."[115]

The test was imported to the United States and immediately served as the catalyst for the rapid development of intelligence testing through 1927.[116] As with Binet's original work in France, the Stanford-Binet test[117] was used primarily in an educational context to help classify students and thus develop appropriate and effective curriculum for their level of intelligence.[118] However, World War I produced the next great leap in the use of the test. Once war against Germany was declared on April 2, 1917, ten million men in the United States registered for the draft within a few months.[119] The need to classify such a large number of soldiers so as to most effectively assign them to roles within the military led to the development of large-scale group testing using the Stanford-Binet tests.[120] By the end of World War I, almost two million enlisted men and officers were given the test, and more than 83,500 enlisted men were given the traditional, individual test.[121] Not only did this development produce a large volume of data, but the sheer size of the project and number of subjects meant that the American public became much more comfortable with the use of intelligence testing, paving the way for the prevalent and common uses we know today.[122]

Beginning around 1960 David Weschler, a psychologist, modified the Stanford-Binet tests and developed an intelligence scale which used both verbal and nonverbal tests to measure the subject's relative intelligence.[123] Weschler, through his experience in the Army, recognized the severe limitations in the group tests developed at the

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[115] *Id*.
[116] *Id*. at 3.
[117] So named because Lewis S. Terman, the man in the United States who was the biggest proponent of the test upon its introduction in 1907, and who worked on all the major revisions and evolutions of the test, was a professor at Stanford University. *Id*. at 19–21.
[118] *Id*.
[119] *Id*. at 21.
[120] *Id*.
[121] *Id*.
[122] *Id*.
[123] *Id*. at 32.

beginning of World War I, and committed to developing a better and more individualized test.[124] Weschler's genius was not in his ability to divine a new testing methodology, but rather to take the work of others, and to streamline and organize them so as to be most effective and useful to a practicing psychologist.[125] He did not create any new testing or administration methodology, he simply made the tests easier to administer.

Over the next forty-five years, the tests and intelligence scales he developed dominated the intelligence testing field, and are still the primary intelligence testing tools used today.[126] Most importantly for the subject of this paper the administration of the Weschler intelligence tests still require the subjective observation and interpretation of the psychologist who is administering the test, and therefore continue to contain inherent imprecision in the collection of the data used to generate an IQ score. The mental health profession recognizes this inherent limitation of the testing methodology and goes to great extents to caution test examiners against the myriad of ways in which an examiner can alter the results of the test.[127]

While the WAIS-IV is the most widely used device used to test human intelligence, the science itself is far from settled. Even the most well-respected scholars and practitioners willingly recognize that "[t]here is plenty of theorizing and empirical work needed to understand even some of the most commonly measured and well-researched broad abilities."[128] These "abilities" are the fundamental pieces of current theories on what human intelligence is.

Beyond the relative immaturity of the theories of human intelligence, the mental health profession recognizes the limited ability of the various intelligence tests to provide a high degree of certainty in their results. This can be seen most easily right in the *DSM-V* where the diagnostic features of intellectual disability are found. In that section, the manual lists a non-exhaustive list of "factors that may affect test scores."[129] This partial list includes the "Flynn effect", where overly high scores occur due to the use of out-of-date test norms. It includes

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[124] *Id*. at 32–33.
[125] *Id*. at 34.
[126] Atkins v. Virginia, 536 U.S. 304, 309 n.5.
[127] LICHTENBERGER & KAUFMAN, *supra* note100, at 53–215.
[128] Timothy Z. Keith, *Cattell-Horn-Carroll Abilities And Cognitive Tests: What We've Learned From 20 Years Of Research*, 47 PSYCHOL. SCHS. 635, 645 (2010).
[129] DSM-5, *supra* note 34, at 37.

invalid scores occurring from the use of shortened or "brief" IQ tests, or the use of a group test. Also mentioned is the fact that a high discrepancy between individual subtest IQ scores may invalidate the overall score. The tests also must be normed to the subject's individual socio-economic background and native language or the scores may be affected. Finally, co-concurring disorders that affect the subject's ability to communicate, and their sensory or motor skills function could affect their ability to complete the tasks and thus affect or invalidate the score.[130]

The industry recognizes that IQ testing is a process severely vulnerable to influence and error. This recognition can be seen in the multiple "handbooks" published yearly, which provide mental health professionals assistance in using the WAIS-IV. These handbooks utilize the most current research to help practitioners avoid mistakes that could affect the result of the test.[131] One of the most respected practical handbooks for mental health professionals includes sections addressing "Testing of Intelligence: Pro and Con," "Reliability and Validity," "Assets and Limitations", and "Cautions and Guidelines in Administration," as applied specifically to the WAIS-IV.[132]

Another well-regarded guide to practical use of the WAIS-IV gives thanks for the increased ease of administration compared to the WAIS-III:

> "[E]xperienced Weschler test users will breathe a sigh of relief that they no longer have to try to hide Object Assembly pieces behind a shield while trying to pick up dropped pieces off the floor as they get them out of the box. Experienced examiners also will be able to stop sweating because they cannot find number two of the five Picture Arrangement cards. Generally, the WAIS-IV materials allow an efficient, user-friendly test administration, if examiners are well-rehearsed."[133]

The instructions include information on what materials are appropriate to have on the table, and admonitions that allowing the subject to see materials other than those necessary for the immediate

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[130] *Id*.

[131] *See, e.g.*, LICHTENBERGER & KAUFMAN, *supra* note 100; WAIS-IV CLINICAL USE AND INTERPRETATION: SCIENTIST-PRACTITIONER PERSPECTIVES (Lawrence G. Weiss et al. eds., 2010); GARY GROTH-MANAT, HANDBOOK OF PSYCHOLOGICAL ASSESSMENT (5th ed. 2009); JEROME SATTLER & JOSEPH RYAN, ASSESSMENT WITH THE WAIS-IV (2009).

[132] GROTH-MANAT, *supra* note 131, at ch. 5.

[133] LICHTENBERER & KAUFMAN, *supra* note 100, at 54.

task at hand "may be distracting or cause anxiety."[134]

There are copious instructions on the importance of the examiner establishing and maintaining good rapport with the subject, because "a comfortable interpersonal situation for the examinee is key to obtaining the best possible administration."[135] It is easy to imagine that one examiner's definition of a "comfortable" interpersonal environment could vary distinctly from that of another examiner. It is equally obvious that there must be recognition when an examiner comes from a different cultural background than the examinee and how those differences might affect the gathered data.

The examiner is likewise strongly advised to "adhere to the standardized language given in the *Manual*. However, small talk and reassuring statements are also needed throughout the testing process to promote a comfortable testing environment."[136] What is "small talk"? How "reassuring" should any statements be? Does "throughout" mean from beginning to end, or just when needed?

Examiners must also "be vigilant in watching the examinee's level of fatigue, anxiety and cooperation" because "[i]f anything, such as loss of motivation, tiredness, or nervousness, appears to be impinging on the examinee's performance, you should try to insert more casual conversation between the subtests or provide more supportive statements."[137] How vigilant? What level of fatigue, anxiety or cooperation requires intervention, or even invalidates the test? How hard should an examiner "try" to insert casual conversation or supportive statements? How much "more" casual should the conversation be, or how much more supportive should the examiner be before becoming too casual or too supportive?

The list of instructions relating to the administration of the exam goes on and on. Implicit in these instructions of course is that failing to follow them will affect the validity of the responses from the subject, and thus the results, i.e. the IQ score. This is not to disparage the value of the test, or to devalue the practitioner's guides, as they clearly seek to improve the standardization of the administration of the test, and thus to improve the accuracy and consistency of the results. However, because the test involves asking one imperfect human being to do a series of

[134] *Id*.
[135] *Id*. at 54–55.
[136] *Id*. at 55.
[137] *Id*.

tasks, and requires another imperfect human being to provide a standard and consistent physical and emotional environment in which to administer the test, imperfection is inevitable. Or, as Mahatma Gandhi reminds us "[m]easures must always in a progressive society be held superior to men, who are after all imperfect instruments, working for their fulfillment."[138]

The above paragraphs briefly summarize the instructions, cautions and admonitions relating to the administration of the test. Practitioner's guides go much further and include similar instructions across the spectrum of steps in using the WAIS-IV to determine someone's IQ, including preparation,[139] methodology of recording the subject's responses,[140] asking questions of the subject at improper times,[141] assigning accurate point values,[142] and a reminder that the time limits on certain portions are "guideline[s]" and "should not be used rigidly" and the instructor "may" give more time, encourage a response, or move on the next item,[143] and scoring,[144] among many others.

The existence of these, and other instructions, in all of the guides that practitioners rely on in administering the WAIS-IV and other intelligence tests reflect the profession's recognition of the imprecision inherent in the process of attempting to measure and quantify a person's intellectual functioning.[145] Nevertheless, this imprecise process is but one of several which the trier of fact, unlearned in this area, must decipher in deciding whether a capital defendant is intellectually

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[138] THE MIND OF MAHATMA GANDHI 224 (R. K Prabhu & U. R. Rao eds. 1960).

[139] *See, e.g.*, WAIS-IV CLINICAL USE AND INTERPRETATION, *supra* note 131, at 26.

[140] "Neglecting to record the examinee's response verbatim is one of the most common recording errors committed on the Wechsler intelligence scales." *See id.*

[141] *See id.*

[142] "One of the most prevalent scoring errors is assigning inaccurate point valued to responses on the Verbal Comprehension subtests." *See id.*

[143] *Id.* at 28.

[144] *Id.* at 28–29.

[145] Indeed, the *Atkins* Court recognized that neither the American Association on Intellectual & Developmental Disabilities manual (AAIDD manual), nor the American Psychological Association (APA) clinical definition set a rigid IQ cutoff for diagnosing intellectual disability. *See* Atkins v. Virginia, 536 U.S. 304, 308 n.3 (2002). Instead, the Court explained that the accepted view in the mental health profession is that "[i]t is estimated that between 1 and 3 percent of the population has an IQ between 70 and 75 or lower, which is typically considered the cutoff IQ score for the intellectual function prong of the intellectual disability definition." *Id.* at 309 n.5 (citing 2 KAPLAN & SADOCK'S COMPREHENSIVE TEXTBOOK OF PSYCHIATRY 2952 (Benjamin J. Sadock & Virginia A. Sadock eds., 7th ed. 2000)).

disabled.

C. The Analysis And Measurement Of Adaptive Functioning Are Even More Imprecise Than Intellectual Functioning

The *DSM-V* establishes adaptive functioning, the 2nd criterion in a diagnosis of intellectual disability as follows:

> "Deficits in adaptive functioning that result in failure to meet developmental and socio-cultural standards for personal independence and social responsibility. Without ongoing support, the adaptive deficits limit functioning in one or more activities of daily life, such as communication, social participation, and independent living, across multiple environments, such as home, school, work, and community."[146]

The *DSM-V*[147] categorizes adaptive functioning into three "domains."[148] The first is the *conceptual (academic) domain*, and "involves competence in memory, language, reading, writing, math reasoning, acquisition of practical knowledge, problem solving, and judgment in novel situations, among others."[149] The second is the *social domain*, and "involves awareness of others' thoughts, feelings, and experiences; empathy; interpersonal communication skills; friendship abilities; and social judgment, among others."[150] The third is the *practical domain* and "involves learning and self-management across life settings, including personal care, job responsibilities, money management, recreation, self-management of behavior, and school and work task organization, among others."[151] Such skills are crucial to a person's ability to live independently and function within the boundaries of social norms.[152]

Adaptive functioning essentially refers to "how well a person meets community standards of personal independence and social responsibility, in comparison to others of similar age and sociocultural

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[146] DSM-5, *supra* note 34, at 33.

[147] Previous iterations of the DSM consisted of ten specific areas of adaptive behavior: communication, self-care, social, community-sue, self-direction, health and safety, functional academics, home living, leisure, and work. *See* Patti L. Harrison & Tracy L. Boney, *Best Practices in the Assessment of Adaptive Behavior*, *in* BEST PRACTICES IN SCHOOL PSYCHOLOGY IV 1167 (Alex Thomas & Jeff Grimes eds., 2002).

[148] DSM-5, *supra* note 34, at 37.

[149] *Id*.

[150] *Id*.

[151] *Id*.

[152] *Id*.

background."[153]

Deficits in adaptive functioning are of equal importance in diagnosing intellectual disability with intellectual functioning and the age of onset.[154] While intellectual functioning, through IQ scores, was long the main consideration in assessing intellectual disability, in 2013 the *DSM-V* finalized the consistent movement in the profession towards a focus on adaptive functioning when diagnosing intellectual disability.[155] The degree of change is best reflected in the change in basis for classifying the severity of intellectual disability.[156] Instead of using an IQ score to determine whether a person's intellectual disability is mild, moderate, severe, or profound, severity is now determined based solely upon a consideration of adaptive functioning across the three domains.[157]

This is a case of coming full circle, as the concurrent presence of deficits in intellectual functioning and adaptive functioning have unequivocally been defining characteristics of intellectual disability since Alfred Binet first developed his thesis in the 19th century.[158] Even before Binet began his research and there was no concept of measuring intelligence in any meaningful way. In the 19th century, intellectual disability was recognized primarily through a person's inability to successfully engage in community living.[159] Even then, observers focused on a number of factors including "awareness and understanding of surrounding, ability to engage in regular economic and social life, dependence on others, the ability to maintain one's basic health and safety, and individual responsibility."[160]

Although adaptive functioning is of equal importance with intellectual functioning in diagnosing intellectual disability, assessing adaptive functioning is even more difficult to measure or quantify because it "is a far more complex and varied criterion than intellectual functioning."[161] Current methods of assessing adaptive functioning

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[153] *Id*. at 37.
[154] *Id*. at 37–38.
[155] *Id*.
[156] *Id*. at 34–36 tbl.1.
[157] *Id*.
[158] CONTEMPORARY INTELLECTUAL ASSESSMENT: THEORIES, TESTS AND ISSUES 14 (Dawn P. Flanagan & Patti L. Harrison eds., 2012).
[159] MENTAL RETARDATION: DETERMINING ELIGIBILITY FOR SOCIAL SECURITY BENEFITS 141 (Daniel J. Reschly et al. eds., 2002).
[160] *Id*.
[161] *See* Kate Janse Van Rensburg, *The DSM-V and Its Potential Effects on* Atkins v.

involve essentially two components: use of a standardized, norm-referenced adaptive behavior rating scale, and observation of the adaptive functioning of the subject in the appropriate environment.[162] Each suffers from inherent problems limiting their accuracy and reliability, particularly when attempting to assess the adaptive functioning of an incarcerated subject.

1. *Psychometric Tools For Measuring Adaptive Functioning Are Simply Not That Reliable*

Binet's work and the subsequent improvements in standardized intelligence tests in the early 20th century led to a focus on intellectual functioning at the expense of adaptive functioning in diagnosing intellectual disability. However the mental health profession soon recognized the limitations of IQ testing and moved consistently towards a concurrent model where adaptive functioning was considered symbiotically with intellectual functioning before making a diagnosis.[163]

The first instrument developed to assess adaptive functioning was published in 1936, the Vineland Social Maturity Scale.[164] The test organized the construct, which was labeled "social competence,"[165] into six domains: self-help (general, dressing and eating); self-direction; communication; socialization; motor; and work.[166] This conceptualization of assessing social behavior continues to define adaptive functioning and its assessment tools today, and "social competence" is now known as "adaptive functioning."[167]

In 1996, Division 33[168] of the American Psychiatric Association (APA), for the first time in the profession, formally prescribed that clinicians should rely on standardized measures of adaptive functioning as part of the intellectual disability diagnostic process.[169] This stands in

Virginia, 3 MENTAL HEALTH L. POL'Y J. 61, 66 (2013); *see also* MENTAL RETARDATION, *supra* note 159, at 145.

[162] *See* Harrison & Boney, *supra* note 147, at 1175–76.

[163] AAIDD, INTELLECTUAL DISABILITY, *supra* note 82, at 27.

[164] Marc J. Tassé, *Adaptive Behavior Assessment and the Diagnosis of Mental Retardation in Capital Cases*, 16 APPLIED NEUROPSYCHOLOGY 114, 116 (2009).

[165] The author, Edgar Doll, defined social competence as "the functional ability of the human organism for exercising personal independence and social responsibility." *Id*.

[166] *Id*.

[167] *Id*.

[168] *See Division 33*, AM. PSYCHOLOGICAL ASS'N, http://www.apa.org/divisions/div33/homepage.html (last visited on April 1, 2014).

[169] *Id*.

stark contrast to the use of standardized measures of intellectual functioning, which was first used at the turn of the 20th century.[170] This quickly became the standard in the profession, with the AAIDD adopting the position as well.[171] Adopting tools using standardized scales was certainly a step forward in the effort to more accurately establish adaptive functioning deficits when diagnosing intellectual disability, but limitations in the testing instruments themselves limit their value and leave the resulting diagnosis far short of certainty.[172]

Specifically, the existing scales lack many of the elements of adaptive functioning that relate to the adult social adaptive skills or higher interpersonal skills that are found in mildly intellectually disabled adults.[173] This means that, while assisting the diagnostician, "[t]he use of a standardized adaptive [functioning] scale is often insufficient to capture all aspects of an individual's adaptive [functioning]."[174]

As discussed above, even with the existence of psychometric tools (tests) used to measure intellectual functioning, the clinical judgment of the diagnostician is still a critical component of the evaluation, in administration, observation and scoring of the tests.[175] Consequently, even while tests used to measure intellectual functioning are significantly more developed than those used to measure adaptive functioning, they are rife with subjectivity.[176] Assessment of adaptive functioning is no different, "using both clinical evaluation and individualized, culturally appropriate, psychometrically sound measures."[177] Again, the diagnostician is a critical component of the evaluation process, thereby reducing the certainty of evaluation.

2. *Acquiring The Necessary Observational Data Is Equally Imprecise*

The second critical prong of assessing adaptive functioning focuses on the subject's ability to successfully complete the daily tasks required of a person living in the community.[178] The assessment

[170] *See supa* Part III(a).
[171] Tassé, *supra* note 164, at 116.
[172] *Id*.
[173] *Id*.
[174] *Id*.
[175] *See supra* Part III(a).
[176] *Id*.
[177] DSM-5, *supra* note 34, at 37.
[178] Tassé, *supra* note 164, at 116–18.

requires the acquisition and analysis of observational data on this issue. However, gathering this data has three primary additional problems, all of which serve to make the assessment of adaptive functioning even less certain than assessment of intellectual functioning.[179]

First, assessment of adaptive functioning involves observation and analysis of "how well a person meets community standards of personal independence and social responsibility, in comparison to others of similar age and sociocultural background."[180] More specifically, the tripartite definition of adaptive functioning requires consideration of adaptive behavior found across three equally valued domains: conceptual, social and practical.[181] Many psychologists rely solely on practical adaptive behavior in their analysis, and ignore the other two domains.[182] This means that if the subject can drive a car, pay for a meal, or hold a job, a psychologist focusing solely on the practical domain may not find adaptive functioning deficits. However, deficits in the social and/or conceptual domains may exist and go unnoticed, despite their equal value in the diagnostic process. Deficits in conceptual skills are, of the three, most easily discovered by the application of standardized assessments.[183] Social skills deficits can manifest often in high degrees of gullibility and credulity by the subject.[184] Those skills, like practical skills, are best assessed through observation, either by the diagnostician, or other people who have had the opportunity to observe the subject in the appropriate setting and to the appropriate degree.[185]

By definition such analysis demands observation of the subject in the general community so as to observe their ability to engage in the variety of behaviors that someone living in community does daily, such as make and/or eat a meal, choose appropriate clothing and dress, respond to casual social encounters, mail a letter and the like.[186]

For capital defendants, the vast majority, if not all of the mental health assessments will take place while the subject (the defendant) is

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[179] *Id*. at 114.
[180] DSM-5, *supra* note 34, at 37.
[181] *Id*. at 34–36.
[182] Caroline Everington & J. Gregory Olley, *Implications of* Atkins v. Virginia*: Issues in Defining and Diagnosing Mental Retardation*, 8 J. OF FORENSIC PSYCHOL. PRAC. 1, 8 (2008).
[183] *Id*.
[184] *Id*.
[185] Tassé, *supra* note 164, at 116.
[186] DSM-5, *supra* note 34, at 34–36.

incarcerated. Thus, the environment in which the subject will be observed is the jail or prison environment, not the "free world."[187] A prison or jail is an incredibly structured and artificial environment offering severely limited opportunity for an inmate to engage in many activities that in fact define adaptive behavior.[188] This inability to observe and assess the incarcerated subject in the general community environment significantly lowers the reliability or value of any conclusions resulting from such limited adaptive functioning assessment.[189]

Second, assessment of adaptive functioning requires the acquisition of additional source information beyond what the subject may provide verbally, or the diagnostician may observe.[190] This data includes observations from a wide variety of people who encountered the subject in the past, including parents, other caregivers, spouses, siblings, other family members, teachers, co-workers, job supervisors, roommates, classmates, neighbors, coaches or any other competent adult, "who may have had multiple opportunities over an extended period of time to observe the individual in his everyday functioning in one or more contexts (e.g. home, leisure, school, work, community).[191] It would also include reporting data from sources such as school records, employment records, medical records, and social security administration records.[192]

Making a determination on any limitations in adaptive functioning then involves the gathering of information about the subjects "life skills" by a qualified clinician. This can come from direct observation of the subject if the subject is still within the developmental period[193] or over the age of eighteen.[194] However, if the subject is outside the development period, which in the criminal justice setting is most often the case, then any determination of adaptive functioning in the past must necessarily be retrospective and involve gathering historical data. This means that the diagnostician must find people who

[187] *See The Correctional Officers Guide to Prison Slang*, AM. FED'N OF STATE, CNTY AND MUN. EMPS. LOCAL 3963, http://afscmelocal3963.tripod.com/f_y_i_.htm (last viewed Apr. 20, 2015).
[188] Tassé, *supra* note 161, at 119.
[189] *Id*. at 116–18.
[190] DSM-5, *supra* note 34, at 37; Harrison & Boney, *supra* note 147, at 1171.
[191] Harrison & Boney, *supra* note 147, 1173; Tassé, *supra* note 164, at 119.
[192] Tassé, *supra* note 164, at 118.
[193] DSM-5, *supra* note 34, at 33;
[194] AAID, INTELLECTUAL DISABILITY, *supra* note 83, at 85.

observed the subject during the development period (or before the age of eighteen) in the relevant environment and over an appropriate time period.[195]

This will necessarily involve relying on the memories of family members and others who observed the subject during the relevant time period. The relevant time period can, or course, vary, but an example illustrates the problem.

Imagine that the "development period" begins at age four and ends at age twenty.[196] Imagine then a capital defendant who is thirty years old and facing a capital prosecution where his or her attorneys are seeking an assessment of intellectual disability. In this scenario, the assessing psychologist would need to gather observations of the defendant's adaptive skills behavior during the developmental period. Naturally, current observations of the defendant by the assessing psychologist would be clinically useless because they come outside the developmental period. The psychologist would then have to find people who observed the defendant during the developmental period, between ages four and twenty. Those people would then be relying on memories between ten and twenty-six years old.

Simply put, the human memory is not reliable. Consistently since the 1930's, research has shown that human memory is not a snap-shot or tape-recording.[197] Instead it is an active process, far from accurate, and influenced by emotion, time, and what is termed "distortion."[198] "Distortion" describes the process by which people actively alter their memories as they recount them over time. Specifically, when people were asked to remember a specific event multiple times, their retelling of the event changed in three ways: it assimilated (became more consistent with the person's cultural expectations); it leveled (the retelling became shorter each time as the person omitted what he/she deemed less relevant information); and it

[195] Everington & Olley, *supra* note 182, at 9.

[196] Neither the AAIDD manual nor the DSM-V define the age of onset for the developmental period. It of course requires the ability for a non-disabled person to engage in the adaptive skills across the three domains, so choosing age 4 seems not too far off. Additionally, while the AAIDD manual defines the end of the developmental period as age 18, the DSM-V does not, so age 20 seems a fair compromise for purposes of this discussion.

[197] John Crane & Jette Hannibal, *Key Study: Bartlett (1932): The War of the Ghosts*, IN THINKING, http://www.thinkib.net/psychology/page/8195/bartlett-1932 (last viewed April 2, 2014).

[198] *Id*.

sharpened (the subject adjusted the order of the story to make more sense of it in terms familiar to their culture).[199] In short, the older the memories, the less reliable they are as the person's life experiences continually influence and alter the memory.

Consequently, assessing adaptive functioning is far from accurate. Proper assessment requires the use of both psychometric tools and observation of adaptive skills. The psychometric tools are relatively new, extremely vulnerable to errors in administration, analysis and scoring. It is temporally impossible to currently observe the relevant adaptive skills of capital defendants who require reliance on non-professional historians whose reporting is subject to the vagaries of the human memory. As leading researchers put it, "[a]daptive-behavior assessment, even using the best instruments available, only has mediocre reliability as well as weak content of judgment validity."[200]

D. The Analysis Of Both Intellectual And Adaptive Functioning Relies Heavily On The Clinical Experience And Interpretative Judgment Of The Diagnostician, Further Reducing The Level Of Certainty A Judge Or Jury Can Reach In Making The Determination

Having reviewed how intellectual and adaptive functioning are measured and analyzed by mental health professionals, it is even more clear that no determination of intellectual disability can be made to a high degree of certainty. It begins with the fact that the data available to a diagnostician is imprecise at the outset. As discussed above, the psychometric tools available are imperfect, and the data gathering is even less precise.

As discussed above, intellectual functioning is measured most often by administering the WAIS testing protocol to produce an IQ score. This test involves specifically asking the subject to perform certain tasks, and requires the examiner to both accurately identify any factors present in the subject that might influence the results, and for the examiner to ensure he or she does not influence the test as well.[201]

Because the subject is a human being and not a robot, each brings his or her own life experiences and motivations to the testing

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[199] *Id*.

[200] *What is Mental Retardation?: Ideas for an Evolving Disability in the 21st Century* 275 (Harvey N. Switzky & Stephen Greenspan eds. 2006).

[201] MENTAL RETARDATION, *supra* note 201, at 101–05.

room.[202] These include the subject's physical and emotional health in the moment, his or her motivation regarding the testing, and a litany of socio-cultural considerations.[203] Each of those factors must be actively recognized and effectively considered by the diagnostician in selecting, administering and scoring the test.[204] More clearly:

> "Psychological examiners are responsible for ensuring that examinees are sufficiently healthy, motivated, and cooperative and that they have the requisite skills and abilities to participate in the assessment before attesting to the validity of test results. When examinees' mental or physical health or their effort or requisite skill levels are such that the validity of the test results are threatened, examiners have an obligation to select more appropriate assessment procedures or make known their reservations about the validity of the test results. Diagnoses should be deferred whenever test results are considered insufficiently valid to contribute meaningfully to such important decisions."[205]

The results are equally vulnerable to invalidating influence by the examiner.[206] Thus, the examiner must have: first, the requisite training, both with the test itself and the type of subject being tested; second, the ability to communicate effectively with the individual subject so as to establish the necessary rapport; no socio-cultural bias towards the subject which might prevent the examiner from working as objectively as possible with the subject; third, the ability to administer the test properly in a standardized manner; and fourth, the ability to manage the subject's behavior.[207]

The same principle holds true for the assessment of adaptive functioning. The assessment of adaptive behavior is more complex than the assessment of intellectual functioning because it requires consideration of "not only general competencies across relevant domains but also the level, quality, and fluency of those behaviors."[208] This complexity means that "[a] high level of training is necessary in order to capture and distinguish the level, quality, and pattern of adaptive behaviors displayed by a given subject."[209]

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[202] *Id*. at 101.
[203] *Id*. at 102 tbl 3-2.
[204] *Id*. at 103.
[205] *Id*. at 103–04.
[206] *Id*. at 102 tbl 3-2, 104–05.
[207] *Id*. at 102 tbl 3-2.
[208] *Id*. at 155.
[209] *Id*.

It is clear that the clinical experience and interpretive judgment of the diagnostician are integral to the ultimate diagnosis.[210] No two diagnosticians are the same. Every diagnostician brings his or her own unique individual life experiences, education and training to the work. The interpretive judgment and clinical experience of a diagnostician are subjective, and thus will vary between individual mental health professionals who review the same data.

This means the overall process of mental illness diagnosis contains inherent imprecision from data collection to analysis, which directly affect the certainty of the result. As the National Academy of Sciences puts it:

> "Determining whether a person has mental retardation involves complex decisions that integrate information on current intellectual functioning and adaptive behavior. Information about each of these core dimensions is always incomplete and dependent on imperfect measures of the underlying constructs. Judgment is therefore necessary when making decisions about how best to assess intellectual and adaptive functioning and in interpreting the results."[211]

The Supreme Court has previously recognized these "subtleties and nuances" inherent within the diagnosis of mental illness and that they "render certainties virtually beyond reach in most situations."[212] This is because the diagnosis of mental illness is "to a large extent based on medical 'impressions' drawn from subjective analysis and filtered through the experience of the diagnostician."[213] The Court goes on to state that "[t]his process often makes it very difficult for the expert physician to offer definite conclusions about any particular patient."[214]

E. Studies Indicate Jurors Have Significant Difficulty Understanding And Applying The Diagnostic Criteria For Intellectual Disability

Accurately diagnosing mental health disorders and intellectual disability is a problem for juries, despite the competence the jury system

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[210] Wasserman, *supra* note 108, at 15.

[211] MENTAL RETARDATION, *supra* note 159, at 208.

[212] Addington v. Texas, 441 U.S. 418, 430 (1979).

[213] *Id*.

[214] *Id*.; *see also* Ake v. Oklahoma, 470 U.S. 68, 81 (1985) ("Psychiatry is not. . . an exact science, and psychiatrists disagree widely and frequently on what constitutes mental illness, on the appropriate diagnosis to be attached to given behavior and symptoms, on cure and treatment, and on likelihood of future dangerousness.").

brings to the determination of responsibility in our criminal justice system. It is well established that the American jury system is seen as the greatest in the world because it encapsulates the concept that every citizen accused of a crime by his or her government has the constitutional right to be judged by his or her peers.[215] The right to trial by jury had been a critical part of colonial America, an invaluable tool in fighting against British injustice in the lead-up to the American Revolution, and consequently the "most consistent point of agreement between the Federalists and Anti-Federalists" at the Constitutional Convention.[216] Its enshrinement in the Sixth Amendment was merely the codification of this closely held belief that freedom meant the ability to have your fate decided by your fellow citizens rather than the government.

However, in colonial America and through the early 20th Century juries were not comprised of average citizens. Instead, jury duty was restricted to property owners, and thus consisted generally of the more educated strata of society.[217] Consequently, the founders of our country did not find it necessary to consider the ability of the average citizen to understand complex technical and scientific testimony and then apply it in the fulfillment of their duty to seek justice in the trial for which he or she sat as a juror. Such testimony, delivered by expert professionals in the relevant field, is present in many trials today, both civil and criminal.[218] The result is that the average juror today must be able to attain temporary expertise in order to reach a decision. Determining whether or not a capital defendant is intellectually disabled is, of course, a prime example of this situation.

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[215] U.S. CONST. amend. VI. ("In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, *by an impartial jury* of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the Assistance of Counsel for his defence."). (emphasis added)

[216] *See* Albert W. Alschuler & Andrew G. Deiss, *A Brief History of Criminal Jury in the United States*, 61 U. CHI. L. REV. 867, 871 (1994).

[217] *See id*.

[218] Charles R. Richey, *Proposals to Eliminate the Prejudicial Effect of the Use of the Word "Expert" Under the Federal Rules of Evidence in Civil and Criminal Jury Trials*, 154 F.R.D. 537, 540 (1994) (detailing the rise in expert testimony); Samuel R. Gross, *Expert Evidence*, 1991 WIS. L. REV. 1113, 1119 (1991) (discussing empirical research showing the likelihood that an expert will testify in a jury case was 86% over a year period in California).

As discussed above, the nature of mental health assessment is such that the resulting diagnosis is far from certain. Nevertheless, it is precisely that diagnosis which acts as the touchstone for any jury decision on intellectual disability. It is not surprising then that studies have shown that capital jurors, in post-verdict interviews, show a shocking degree of misunderstanding of the medical evidence of intellectual disability introduced at the trial.[219] There is data showing that jurors struggle to resolve conflicts between their anecdotal understanding of a person who suffers from intellectual disability and the legal or clinical definitions of intellectual disability.[220]

A 2008 study analyzed the juror decision-making process in a capital case where the defendant raised the issue of intellectual disability, thus requiring the jurors to determine if the defendant was in fact intellectually disabled.[221] In examining jurors' perceptions of defendants with intellectual disability, the authors posed open-ended questions designed to gather information about the potential impact of a variety of factors. These questions produced data showing that capital jurors considering whether a defendant was intellectually disabled exhibited critical deficiencies in a variety of areas.

Among the jurors in the study there was prevalent misunderstanding of what intellectual disability was. Some jurors dismissed intellectual disability once they were convinced the defendant "knew right from wrong." [222] Some jurors found the defendant wasn't "retarded enough" for it to have had a relevant effect on his behavior.[223] Other jurors found the defendant's inappropriate behavior at trial to be an aggravating factor because they showed "the man just wasn't right."[224]

There was also a disconnect between the diagnosis of intellectual disability and the jurors' perception of the defendant's actual abilities. Some jurors found any attempt to cover up the act to completely discount a diagnosis of intellectual disability because to them it indicated the defendant was acting deliberately and intentionally, "it

[219] Marla Sandys et al., *Taking Account of the "Diminished Capacities of the Retarded": Are Capital Jurors Up to the Task?*, 57 DEPAUL L. REV. 679 (2007–2008).
[220] *Id*.
[221] *Id*.
[222] *Id*. at 691–92.
[223] *Id*. at 692.
[224] *Id*. at 693.

showed some rationale."[225] One juror found the defendant's ability to write letters to his girlfriend from jail using words that the juror, a teacher, wasn't familiar with, showed "[t]hat man was smart. He knew what he was doing."[226] Overall, many jurors discounted expert testimony, instead crediting their own observations of the defendant to reach the conclusion that the defendant was faking intellectual disability in an attempt to avoid punishment.[227]

The study also revealed that jurors routinely relied upon personal experiences, their own and those of other jurors, to interpret the defendant's behaviors. This included relying on the anecdotal experience of a juror who was a school teacher who expressed strong opinions believing that IQ scores could be inaccurate simply because of poor question design or structure.[228] This study clearly shows how difficult making a determination of intellectual disability is, due to the lack of precision in the science, combined with jurors' personal experiences and thoughts on intellectual disability in a criminal prosecution context. When such imprecision is endemic, a lower standard of proof is warranted, not a higher one

F. The Imprecise Nature of Medical Diagnosis Must be Considered When Establishing a Constitutional Standard of Proof

In *Addington v. Texas*, the Supreme Court addressed a Texas statute that required the state to prove mental illness beyond a reasonable doubt in order to civilly commit a citizen. The state complained the burden was too high, and the Court agreed. In reaching its decision the Court discussed at length the lack of certainty present in medical diagnosis of mental illness, noting "[t]he subtleties and nuances of psychiatric diagnosis render certainties virtually beyond reach in most situations."[229] The Court compared the certainty required to medically diagnose against the certainty required in a court to reach a fact-finding:

> "The reasonable-doubt standard of criminal law functions in its realm because there the standard is addressed to specific, knowable facts. Psychiatric diagnosis, in contrast, is to a large extent based on medical "impressions" drawn from subjective analysis and filtered through the experience of the diagnostician.

[225] *Id*.
[226] *Id*.
[227] *Id*. at 694.
[228] *Id*.
[229] Addington v. Texas, 441 U.S. 418, 430 (1979).

> This process often makes it very difficult for the expert physician to offer definite conclusions about any particular patient. Within the medical discipline, the traditional standard for "fact-finding" is a 'reasonable medical certainty.'"[230]

The analysis of the difficulty of translating medical certainty to legal certainty naturally applies equally to a medical diagnosis of intellectual disability. In *Addington*, the issue was whether a citizen was sufficiently mentally ill so as to justify civil commitment to an institution. As the Court noted, "[i]f a trained psychiatrist has difficulty with the categorical 'beyond a reasonable doubt' standard, the untrained lay juror-or indeed even a trained judge-who is required to rely upon expert opinion could be forced by the criminal law standard of proof to reject" the psychiatrists opinion because it is simply not sufficiently certain.[231] Such adherence to the legal standard of proof would ensure legal compliance, but considering the rights of the intellectually disabled, that strict legal compliance "would be purchased at a high price."[232]

Thus lies the problem in forcing the body tasked with making the legal determination of whether a capital defendant is intellectually disabled to use the strictest standard of proof available, beyond a reasonable doubt. Requiring that level of certainty as to the imprecise nature of adaptive functioning investigation and analysis effectively asks the impossible. When relying on the circumstantial evidence from the memories of family members, grade school teachers, and social service employees, it is virtually impossible to "exclude every reasonable hypothesis" of non-intellectual disability. As the Court said in *Ford*, "[t]he minimum assurance that the life-and-death guess will be a truly informed guess requires respect for the basic ingredient of due process, namely, an opportunity to be allowed to substantiate a claim before it is rejected." [233]

Just as having a bright-line IQ score requirement prevents the fact-finder from considering the necessary corollary evidence of adaptive functioning, so does requiring the defendant prove significant adaptive functioning limitations beyond a reasonable doubt prevent the fact-finder from recognizing the imprecision inherent in the process and

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[230] *Id*.
[231] *Id*.
[232] *Id*.
[233] Ford v. Wainwright, 477 U.S. 399, 414 (1986) (quoting Solesbee v. Balkcom, 339 U.S. 9, 23 (1950) (Frankfurter, J., dissenting)).

considering that evidence for its true value. The existence and degree of adaptive functioning limitations are not easily quantifiable. They cannot be distilled into a score or a number. There is no bright line to draw. Requiring proof of both intellectual functioning and adaptive functioning limitations by anything more than preponderance of the evidence asks more than the science allows. To do so would be an unconstitutional burden, would prevent courts and juries from reaching a conclusion commensurate with the diagnostic methods of the mental health profession, and thus violate *Atkins*' prohibition on executing the intellectually disabled.

Simply put, a statutory scheme that requires a capital defendant prove his or her intellectual disability by proof greater than preponderance does not sufficiently guarantee that no intellectually disabled defendant will be executed and thus would constitute a substantive violation of *Atkins*. Instead, it makes it more likely than not that an intellectually disabled defendant will face execution.

IV. SO WHAT STANDARD OF PROOF PROPERLY ALLOCATES THE RISK OF ERROR AND REFLECTS THE SERIOUSNESS OF THE DETERMINATION?

Having now identified the nature of the type of evidence that is available to a judge or jury attempting to determine whether a capital defendant is in fact intellectually disabled, it is clear that the evidence is not certain or specific. Instead, as shown above, it is uncertain in definition and in practice. Therefore, in determining the appropriate standard of proof for this determination, it is valuable to understand the nature of both the burden and standard of proof, and interplay between them.

A. A Brief Review Of The Purpose And Nature Of Standards Of Proof

First, we should define the terms. *Burden of proof* is generally considered a burden of persuasion.[234] That is, "the obligation which rests on one of the parties to an action to persuade the trier of the facts, generally the jury, of the truth of a proposition which he has affirmatively asserted by the pleadings."[235] *Standard of proof* is "the degree of certainty by which the fact-finder must be persuaded . . . to

[234] Dir., Office of Workers' Comp. Programs, Dept. of Labor v. Maher Terminals, Inc., 512 U.S. 267, 275–76 (1994).
[235] *Id*. at 275.

find in favor of the party bearing the burden of persuasion. In other words, the term 'standard of proof' specifies how difficult it will be for the party bearing the burden of persuasion to convince the jury of the facts in its favor."[236] It is axiomatic that the burden of proving a capital defendant is intellectually disabled should fall to the defendant, because the defendant is the party most likely to be in possession of the evidence of intellectual disability. This article focuses only on the standard of proof.

There are various standards of proof, and the choice has import for two main reasons. First, the standard of proof allocates the risk of an erroneous decision to the two parties.[237] This is because it is impossible to achieve certainty in litigation, so there will always be the possibility of error.[238] Because there is always the risk of error, each side assumes some portion of that risk.[239] A less stringent standard of proof assigns the risk of error more equally between the parties.[240] Whereas a more stringent standard assigns more risk to the party bearing the burden of proof.[241] "The more stringent the burden of proof a party must bear, the more that party bears the risk of an erroneous decision."[242] In criminal prosecutions, our society has long held the belief that when allocating the risk of an erroneous decision, "[w]e believe that it is better for ten guilty people to be set free than for one innocent man to be unjustly imprisoned."[243]

In the context of a determination as to whether a capital defendant is intellectually disabled, with the defendant bearing the burden of proof, a less stringent standard of proof would *reduce* the risk that an actually intellectually disabled defendant would be found **not** to be intellectually disabled and thus eligible for execution. Conversely, a more stringent standard of proof for the defendant would *increase* the risk, making it more likely an intellectually disabled defendant would

[236] Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 2238, 2245 n.4 (2011).
[237] *In re* Winship, 397 U.S. 358, 370–71 (1969) (Harlan, J., concurring).
[238] John Kaplan, *Decision Theory And The Factfinding Process*, 20 STAN. L. REV. 1065, 1075–76 (1968).
[239] *Winship*, 397 U.S. at 370.
[240] *Id*. at 371 (quoting Addington v. Texas, 441 U.S. 418, 423 (1979)).
[241] *Id*.
[242] Cooper v. Oklahoma, 517 U.S. 348, 363 (1996) (quoting Cruzan v. Dir., Mo. Dep't. of Health, 497 U.S. 261, 283 (1990)).
[243] Furman v. Georgia, 408 U.S. 238, 367 n.158 (1972) (Marshall, J., concurring) (quoting William O. Douglas, *Foreword* to JUDGE JEROME FRANK & BARBARA FRANK, NOT GUILTY 11–12 (1957)).

erroneously be found **not** to be intellectually disabled and eligible for execution.

Second, the standard of proof "indicate[s] the relative importance attached to the ultimate decision."[244] The Supreme Court has routinely recognized that when fundamental rights, including a citizen's liberty, are at stake, a more stringent standard of proof is required.[245] Thus, in the criminal prosecution context, when the government has the burden of proof, and recognizing there is always a risk of error, "our society imposes almost the entire risk of error upon itself."[246] It must be remembered that when deciding whether a capital defendant falls within *Atkins'* protection, the **defendant**, not the government, bears the burden of proof. Thus, the defendant will bear, at the least, an equal share of the risk of an erroneous decision, and maybe a much greater share, depending on the standard of proof applied to the decision.[247]

There are three primary standards of proof used in adversarial litigation in the United States: preponderance of the evidence; clear and convincing evidence; and beyond a reasonable doubt.[248]

Preponderance of the evidence, used in most civil litigation where only money or property is at stake, is regularly considered more likely than not and shares the risk of error "in roughly equal fashion."[249] *Beyond a reasonable doubt* is the most stringent standard and is constitutionally required for a criminal conviction.[250] *Clear and convincing evidence* is the standard falling intermediately between preponderance and beyond a reasonable doubt, and is often described as requiring proof greater than preponderance, but less than reasonable doubt.[251]

B. Any Standard Of Proof Greater Than Preponderance Of The Evidence Does Not Sufficiently Ensure Compliance With *Atkins*, And Violates Due Process

Atkins specifically left the procedures for complying with the

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[244] *Addington*, 441 U.S. at 423.
[245] *Id*. at 424.
[246] *Id*.
[247] *In re* Winship, 397 U.S. 358, 365 (1969).
[248] *Addington*, 441 U.S. at 423.
[249] *Id*.
[250] *Winship*, 397 U.S. at 364.
[251] David L. Schwartz & Christopher B. Seaman, *Standards of Proof in Civil Litigation: An Experiment From Patent Law*, HAR. J.L. & TECH. 429, 436 (2013).

constitutional prohibition on executing intellectually disabled defendants to the states.[252] In so doing, the Court cited consistency with its approach in *Ford v. Wainwright*, where it found executing the insane violated the Eighth Amendment.[253]

Unlike in *Atkins*, in *Ford v. Wainwright*, the Court spent considerable time reviewing and analyzing the procedural mechanisms used to determine if Mr. Ford was insane. Re-stating that "death is different" the Court noted that "[i]n capital proceedings generally, this Court has demanded that fact-finding procedures aspire to a heightened standard of reliability."[254]

This detailed review of the procedural path of Mr. Ford's case yielded the conclusion that the process prevented Mr. Ford from presenting relevant evidence on the issue of his insanity, and possible ineligibility from execution, and thus unconstitutionally limited the fact-finder's ability to consider his claims so as to produce a reliable result. The Court found that "this most cursory form of procedural review fails to achieve even the minimal degree of reliability required for the protection of any constitutional interest."[255] While the *Ford* decision left the states with the final determination of the procedural scheme sufficient to ensure compliance with the constitutional mandate to not execute those protected by the Eighth Amendment, it clearly outlined the line which the states could **not** cross: "the lodestar of any effort to devise a procedure must be the overriding dual imperative of providing redress for those with substantial claims and of encouraging accuracy in the fact-finding determination."[256]

It is through this lens that each state's procedural scheme to ensure compliance with *Atkins* must be viewed, thus raising the question: Does the state's procedure reliably ensure that no intellectually disabled defendant will be executed?

While the various procedures currently in use across the nation generally allow for an evidentiary hearing on the issue, requiring a defendant to prove his or her intellectual disability by either clear and convincing evidence or beyond a reasonable doubt reduces the reliability of the outcome because the nature of the medical diagnosis of

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[252] Atkins v. Virginia, 536 U.S. 304, 317 (2002).
[253] *Id*.
[254] Ford v. Wainwright, 477 U.S. 399, 411 (1986) (citing Spaziano v. Florida, 468 U.S. 447, 456 (1984)).
[255] *Id*. at 413.
[256] *Id*. at 417.

intellectual disability involves less than precise determinations. Because there is not perfect accuracy in the process, the standard of proof must not be so high as to exclude every possibility but the most certain.

Put in the traditional manner by trial judges across the nation when instructing jurors on what circumstantial evidence qualifies as proof beyond a reasonable doubt, a defendant seeking to prove his or her intellectual disability must then provide evidence to the same degree of certainty which a juror would require before making a decision in his or her own most personal matters.[257] This is too high a burden for the type of determination required and the severity of the impact of that determination. As *Ford* held, "[t]he stakes are high, and the 'evidence' will always be imprecise."[258]

When a state imposes a burden of proof and establishes the standard of proof required to meet that burden, those procedural rules must satisfy the requirements of procedural due process.[259] Analysis of the reasonable doubt standard of proof has been unequivocally categorized by the Supreme Court as a due process issue.[260] When there is a federal constitutional right protecting a certain class of defendants from execution, the State is required to adopt procedures which sufficiently protect that right.[261] As the Court in *Ford v. Wainwright*

[257] One long-standing pattern jury instruction in states with the death penalty instructs jurors that proof beyond a reasonable doubt is "proof so convincing that you would be willing to rely and act on it without hesitation in the most important of your personal affairs. "the proven facts must exclude every other reasonable hypothesis except the guilt of the accused." *See: Eleventh Circuit Pattern Jury Instructions (Criminal Cases)*, JUDICIAL COUNCIL OF THE ELEVENTH CIRCUIT, http://www.ca11.uscourts.gov/sites/default/files/courtdocs/clk/FormCriminalPatternJury Instruction.pdf (last viewed Apr. 20, 2015); 1-1 ARKANSAS MODEL JURY INSTRUCTIONS (2012), *available at* http://www.lexisnexis.com/hottopics/arcrimji/; COLORADO SUPREME COURT COMMITTEE ON CRIMINAL JURY INSTRUCTIONS (2014), *available at* https://www.courts.state.co.us/Courts/Supreme_Court/Committees/Committee.cfm?Co mmittee_ID=9; SIXTH CIRCUIT CRIMINAL PATTERN JURY INSTRUCTIONS (2014), http://www.ca6.uscourts.gov/internet/crim_jury_insts/pdf/07_Chapter_ 1.pdf; NEBRASKA CRIMINAL JURY INSTRUCTIONS (2d ed. 2014); 2 OHIO JURY INSTRUCTIONS 207.13, (2014); 1 PENNSYLVANIA SUGGESTED STANDARD CRIMINAL JURY INSTRUCTIONS § 7.01, (2d ed. 2010); MODEL CRIMINAL JURY INSTRUCTIONS FOR THE DISTRICT COURTS OF THE EIGHTH CIRCUIT, (2013), *available at* http://juryinstructions.ca8.uscourts.gov/crim_manual_2013_redo.pdf.

[258] *Ford*, 477 U.S. at 417.

[259] Medina v. California, 505 U.S. 437, 446–48 (1992).

[260] Sandstrom v. Montana, 442 U.S. 510, 520 (1979) (citing *In re* Winship, 397 U.S. 358, 364 (1970)).

[261] Panetti v. Quarterman, 551 U.S. 930, 948–49 (2007).

said:

> "Although the condemned prisoner does not enjoy the same presumptions accorded a defendant who has yet to be convicted or sentenced, he has not lost the protection of the Constitution altogether; if the Constitution renders the fact or timing of his execution contingent upon establishment of a further fact, then that fact must be determined with the high regard for truth that befits a decision affecting the life or death of a human being."[262]

Atkins clearly established that an intellectually disabled defendant could not be executed under protection of the Eighth Amendment. This then made the execution of a defendant contingent upon the establishment of the fact of the defendant's intellectual disability. Following, the process through which that fact is established in the courts must then satisfy the Due Process requirements of the Fourteenth Amendment. The process includes, naturally, what standard of proof the defendant is held to when seeking to prove the fact of his or her intellectual disability.

C. *Cooper v. Oklahoma* Gives Insight And Direction

The last significant United States Supreme Court case to consider the standard of proof in the context of mental health limitations impacting constitutional rights was *Cooper v. Oklahoma*.[263] In *Cooper*, the Court considered an Oklahoma statute which presumed a defendant was competent unless that defendant proved by clear and convincing evidence that he or she was incompetent to stand trial.[264] The Court considered the question of whether that standard, which made it more likely than not that an incompetent defendant may face a capital charge, violated that defendant's due process rights under the Fourteenth Amendment.[265]

The analysis by the Court in *Cooper* is directly applicable to an analysis of any state procedural scheme designed to satisfy *Atkins'* prohibition on executing the intellectually disabled. This is clear by asking the same question asked in *Cooper*: Does the application of a particular standard of proof make it more likely than not that an intellectually disabled defendant will be sentenced to execution? As discussed above, the answer to that question is clearly yes. As such, the

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[262] *Ford*, 477 U.S. at 411–12 (1980).
[263] Cooper v. Oklahoma, 517 U.S. 348 (1996).
[264] *Id*.
[265] *Id*. at 350.

Cooper analysis will define whether such a procedure, with such a result, will violate a defendant's due process rights. In reviewing the *Cooper* Court's analysis, the parallels between the Oklahoma statute and the statutes used by the states requiring a standard of proof higher than preponderance are undeniable.

As discussed above,[266] of the thirty-two states with the death penalty, there are currently six states that require proof of intellectual disability to a standard greater than preponderance. Georgia remains, as ever, the only state that requires proof beyond a reasonable doubt.[267] Arizona, Colorado, Delaware, Florida and North Carolina all require clear and convincing evidence.[268]

The *Cooper* Court began by reiterating that, like execution of the intellectually disabled, "[c]ompetenc[y] to stand trial is rudimentary, for upon it depends the main part of those rights deemed essential to a fair trial, including the right to effective assistance of counsel, the rights to summon, to confront, and to cross-examine witnesses, and the right to testify on one's own behalf or to remain silent without penalty for doing so."[269] The Court next recognized that the test for competency was well established.[270] Similarly, the test for intellectual disability is well established, and the definitions used by the six states in question are consistent with the definition used by the mental health profession and other states.[271] The Court next recognized that it has consistently held it

[266] *See infra* Part I.

[267] GA. CODE ANN. § 2117-7-131(c)(3) (2014).

[268] Arizona (ARIZ. REV. STAT. § 13-753 (2011)); Colorado (COLO. REV. STAT. § 18-1.3-1102 (2012)); Delaware (11 DEL. CODE § 4209(d)(3) (2013)); Florida (FLA. STAT. § 921.137 (2014)); North Carolina (N.C. GEN. STAT. ANN. § 15A-2005 (West 2001))

[269] Cooper v. Oklahoma, 517 U.S. 348 354 (1996) (quoting Riggins v. Nevada, 504 U.S. 127, 139–40 (1992) (opinion concurring in judgment)).

[270] *Id*.

[271] For Georgia, GA. CODE ANN. §17-7-311(a)(3) (2014) defines intellectually disabled as "having significantly subaverage general intellectual functioning resulting in or associated with impairments in adaptive behavior which manifested during the developmental period."

The American Association on Mental Retardation (AAMR) defines intellectual disability as: "*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 before age 18." AAMR, *supra* note 99, at 5.

For Arizona, ARIZ. REV. STAT. §13-753(K)(3) (2011) defines "Intellectual Disability" as "a condition based on a mental deficit that involves significantly subaverage general

appropriate to place the burden of proving incompetency upon the defendant.[272] Similarly, the Court has long held it appropriate that the burden of proving mental incapacity of any sort falls properly upon the defendant.[273] Thus, the predicate factors the *Cooper* Court considered when addressing the proper standard of proof applied to a defendant claiming incompetency fall the same way for a defendant claiming intellectual disability. As such, the analysis in *Cooper* regarding the proper standard of proof to be applied to a defendant seeking to prove

intellectual functioning, existing concurrently with significant impairment in adaptive behavior, where the onset of the foregoing conditions occurred before the defendant reached the age of eighteen.";

For Colorado, COLO. REV. STAT. § 18-1.3-1101 (2014) defines an intellectually disabled defendant as "any defendant with significantly subaverage general intellectual functioning existing concurrently with substantial deficits in adaptive behavior and manifested and documented during the developmental period. The requirement for documentation may be excused by the court upon a finding that extraordinary circumstances exist.";

For Delaware, 11 DEL. CODE §4209(d)(3)(d)(2-3) (2013) states "[s]erious intellectual developmental disorder" "means that an individual has significantly subaverage intellectual functioning that exists concurrently with substantial deficits in adaptive behavior and both the significantly subaverage intellectual functioning and the deficits in adaptive behavior were manifested before the individual became 18 years of age; and 'Significantly subaverage intellectual functioning' means an intelligent quotient of 70 or below obtained by assessment with 1 or more of the standardized, individually administered general intelligence tests developed for the purpose of assessing intellectual functioning.";

For Florida, FLA. STAT. ANN. §393.063(21)(a-b) (2013) states that " 'Intellectual disability' means significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior which manifests before the age of 18 and can reasonably be expected to continue indefinitely. For the purposes of this definition, the term:(a) "Adaptive behavior" means the effectiveness or degree with which an individual meets the standards of personal independence and social responsibility expected of his or her age, cultural group, and community; (b) "Significantly subaverage general intellectual functioning" means performance that is two or more standard deviations from the mean score on a standardized intelligence test specified in the rules of the agency.";

For North Carolina, N.C. GEN. STAT. §15A-2005(a)(1)(a-c) (2014) defines intellectual disability as a "Significantly subaverage general intellectual functioning, existing concurrently with significant limitations in adaptive functioning, both of which were manifested before the age of 18; b. Significant limitations in adaptive functioning. - Significant limitations in two or more of the following adaptive skill areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure skills and work skills; c. Significantly subaverage general intellectual functioning. - An intelligence quotient of 70 or below."

[272] *Cooper*, 517 U.S. at 355.

[273] Medina v. California, 505 U.S. 437, 446–48.

his or her constitutional exclusion from jeopardy (either being tried at all or being executed) applies with similar focus and clarity to an analysis of any state's approach to implementing *Atkins'* prohibition on the execution of the intellectually disabled.

Once the *Cooper* Court established the parameters of their review, they next looked to the history books to determine if Oklahoma's rule had historical support. The Court found that courts have consistently used the standard of preponderance of the evidence when determining the mental capacity or fitness of a criminal defendant, beginning in the late 18th century.[274]

Having established that there was no historical support for a heightened standard of proof such as the one imposed by Oklahoma, the Court then considered contemporary practice in order to see how other states approached the issue. In so doing, the Court initially surveyed all fifty states and the federal courts, and found that only four others used the clear and convincing standard, while some placed no burden on the defendant at all.[275] The Court found that disparity instructive and that it affirmed their "conclusion that the heightened standard offends a principle of justice that is deeply 'rooted in the traditions and conscience of our people.'"[276]

As noted above, Georgia stands alone among the states that execute criminal defendants while requiring they prove intellectual disability beyond a reasonable doubt. There are five other states that require proof by clear and convincing evidence. This is one more than the four which, as a group, was found unpersuasive in *Cooper*. There is a very clear similarity in the contemporary practices across the nation when comparing approaches to determining competency in 1996 (when *Cooper* was decided) and current approaches to determining intellectual disability. Thus, when applying the *Cooper* historical analysis to any single state's approach, the conclusion should be the same: a standard of proof greater than preponderance offends the prohibition on executing the intellectually disabled, a principle of justice that is deeply rooted in our nation's conscience.

Having established both the fundamental nature of the issue at hand as well as the historical procedural treatment of that issue by the Court, the *Cooper* Court moved on to evaluate the relative assignation of

[274] *Cooper*, 517 U.S. at 356–60.
[275] *Id*. at 360–61.
[276] *Id*. at 362 (quoting *Medina*, 505 U.S. at 445).

risk associated with various standards of proof, and how that allocation interacted with the protection of the constitutional rights at issue.

The *Cooper* Court reiterated that within the due process context, the purpose of a standard of proof is to "instruct the fact-finder concerning the degree of confidence our society thinks he should have in the correctness of factual conclusions for a particular type of adjudication."[277] The Court also noted that determining the standard of proof to be used involves the assignation of risk among the parties. Specifically, the "more stringent the burden of proof a party must bear, the more that party bears the risk of an erroneous decision" [278] and thus "[a] heightened standard does not decrease the risk of error, but simply reallocates that risk between the parties."[279] The Court then considered risk allocation and the proper standard of proof when dealing with a fundamental right of a defendant:

> "A heightened standard does not decrease the risk of error, but simply reallocates that risk between the parties. . . . In cases in which competence is at issue, we perceive no sound basis for allocating to the criminal defendant the large share of the risk which accompanies a clear and convincing evidence standard. We assume that questions of competence will arise in a range of cases including not only those in which one side will prevail with relative ease, but also those in which it is more likely than not that the defendant is incompetent but the evidence is insufficiently strong to satisfy a clear and convincing standard. While important state interests are unquestionably at stake, in these latter cases the defendant's fundamental right to be tried only while competent outweighs the State's interest in the efficient operation of its criminal justice system."[280]

In a capital case, the risk to the defendant is the risk of imposition of a death sentence for someone who is constitutionally protected from execution. For the state, the risk is that a defendant who might have been eligible to be executed will instead spend the rest of his or her life in prison. In *Cooper* of course, the Court was considering the Oklahoma statute regarding competency to stand trial, where the potential erroneous decision would produce a lesser harm than a death sentence.

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[277] *Id*. (quoting *In re Winship*, 397 U.S. 358, 370 (1970) (Harlan, J., concurring)).
[278] *Id*. at 362–63 (quoting Cruzan v. Dir., Mo. Dep't. of Health, 497 U.S. 261, 283 (1990)).
[279] *Id*. at 366.
[280] *Id*.

In analyzing the risk allocation between the defendant and the state, the *Cooper* Court noted that the "inexactness and uncertainty" present in competency hearings make it difficult, but not impossible, to determine if a defendant is malingering or is in fact incompetent.[281] Nevertheless, the Court made the presumption "that it is unusual for even the most artful malingerer to feign incompetence successfully for a period of time."[282] That is even truer when dealing with intellectual disability. As discussed above, intellectual disability can only be present when adaptive functioning deficits present and manifest themselves before the defendant reaches the age of eighteen. No adaptive deficits present before age eighteen means there can be no diagnosis of intellectual disability. Because adaptive deficits must occur prior to age eighteen, and be proven by documentation or observation, no malingering defendant can go back in time and recreate adaptive deficits that did not exist previously, so concerns about malingering are misplaced within the context of intellectual disability.

Despite these concerns, as the *Cooper* Court points out, concerns with malingering are not new. In fact, these concerns existed throughout the eighteenth and nineteenth centuries, yet courts have steadfastly refused to impose a higher standard of proof as a response.[283] Instead, "while the difficulty of ascertaining where the truth lies may make it appropriate to place the burden of proof on the proponent of an issue, it does not justify the additional onus of an especially high standard of proof."[284]

Ultimately the *Cooper* Court concluded that when considering the appropriate standard of proof to apply, it was only appropriate to note that competency concerns would arise in a range of cases from easy cases where one side has an easy task to prove their claim, as well as the more difficult cases where "it is more likely than not that the defendant is incompetent but the evidence is insufficiently strong to satisfy a clear and convincing standard.[285] In such cases, where it is likely to produce the wrong result, the "defendant's fundamental right to be tried only while competent outweighs the State's interest in the efficient operation of its criminal justice system."[286] More particularly to the sentencing

[281] *Id*. at 365.
[282] *Id*.
[283] *Id*. at 365–66.
[284] *Id*. at 366.
[285] *Id*. at 366–67.
[286] *Id*.

context, "it is far worse to sentence one guilty only of manslaughter as a murderer than to sentence a murderer for the lesser crime of manslaughter."[287] Under *Cooper*, the right to be competent when standing trial is so fundamental that a procedural mechanism which requires a defendant to prove incompetency by clear and convincing evidence is deemed to offend due process because it is too strict. Similarly any procedural scheme requiring a capital defendant to prove intellectual disability to a standard greater than preponderance is likewise offensive.

Perhaps no clearer parallel can be drawn between *Cooper* and an analysis of intellectual disability in capital cases than removing the legalese from the holding and replacing "Oklahoma" with "a state", "trial" with "death" and "incompetent" with "intellectually disabled": "Because [a state]'s procedural rule allows the State to put to [death] a defendant who is more likely than not [intellectually disabled], the rule is incompatible with the dictates of due process."[288]

D. Indiana Has Applied *Cooper's* Analysis To The Determination Of Intellectual disability In Capital Cases

The Indiana Supreme Court considered the appropriate standard of proof on this issue when reviewing the state statute regarding the execution of intellectually disabled defendants. In so doing, they looked to *Cooper v. Oklahoma* for guidance.

In 1994 Indiana statutorily prohibited the execution of intellectually disabled defendants.[289] The state placed the burden of proof upon the defendant, and required the defendant to prove his or her intellectual disability by clear and convincing evidence.[290]

In June 2001, Tommy Pruitt was stopped by a Morgan County Deputy Sheriff for erratic driving.[291] Pruitt got out of his car with a handgun and exchanged fire with the deputy.[292] Both Pruitt and the deputy were shot multiple times.[293] Pruitt survived, the deputy did not.[294] Pruitt was charged with capital murder and went to trial in

[287] Mullaney v. Wilbur, 421 U.S. 684, 703–04 (1975) (paraphrasing Justice Harlan's *Winship* concurrence).
[288] *Id*. at 369.
[289] IND. CODE § 35-36-9-6 (2007).
[290] IND. CODE § 35-36-9-4 (2007).
[291] Pruitt v. State, 834 N.E.2d 90, 98 (Ind. 2005).
[292] *Id*.
[293] *Id*.
[294] *Id*.

2003.[295] He was convicted at trial and at sentencing presented evidence that he was intellectually disabled and thus protected from execution by the Eighth Amendment.[296] The jury found that Mr. Pruitt did not prove by clear and convincing evidence that he was intellectually disabled, that the aggravating circumstances outweighed the mitigating circumstances, and recommended a sentence of death.[297] The trial court followed that recommendation and sentenced Pruitt to death.[298] On direct appeal, Mr. Pruitt challenged the standard of proof in the Indiana statute, alleging that it violated the proscription on executing the intellectually disabled as delineated in *Atkins*[299]

In 1998, in *Rogers v. State*, the Indiana Supreme Court considered the constitutionality of the Indiana statutory requirement that a capital defendant prove his or her intellectual disability by clear and convincing evidence, and found that the standard did not violate the Eighth Amendment prohibition on cruel and unusual punishment. The court at that time based its decision squarely on *Penry v. Lynaugh*, which had expressly held that the Eighth Amendment did not prohibit the execution of the intellectually disabled.[300] The court, relying on *Penry*, found that requiring a capital defendant to prove his or her intellectual disability by clear and convincing evidence did not offend a "fundamental principle" of the sort discussed in *Cooper v. Oklahoma*.[301]

However, when Mr. Pruitt raised the issue again in his case, it was after *Atkins* and the Indiana Supreme Court felt "that the reasoning we followed in *Rogers* must be revisited in light of *Atkins*."[302] The court then went on to apply *Cooper's* analysis of competency directly to intellectual disability.[303]

They looked first at whether *Atkins*' prohibition on the execution of the intellectually disabled could be characterized as "fundamental" so as to determine whether the procedure for determining intellectual disability implicated a "fundamental principle."[304] The court found that *Atkins* was clear that executing the intellectually disabled violated the

[295] *Id*.
[296] Pruitt v. Wilson, No. 3:09cv38oRLM, 2012 WL 4513961, at *2 (N.D.Ind. (2012)).
[297] *Id*. at *3.
[298] *Id*.
[299] Pruitt v. State, 834 N.E.2d 90, 101 (Ind. 2005).
[300] *Id*.
[301] *Id*.
[302] *Id*.
[303] *Id*. at 101–03.
[304] *Id*. at 101.

Eighth Amendment, and the Supreme Court "has identified that right as grounded in a fundamental principle of justice."[305]

Next the court, following *Cooper's* approach, looked at the historical and contemporary approaches by states in establishing the standard of proof for capital defendants raising intellectual disability.[306] The *Pruitt* court found the fact that "only a relatively small number of jurisdictions follow Indiana in requiring clear and convincing evidence or an even higher standard" again correlated positively with *Cooper's* findings.[307]

Pruitt then examined the fundamental fairness of requiring proof by clear and convincing evidence, noting that *Cooper* emphasized the fact that "the 'more stringent the burden of proof a party must bear, the more that party bears the risk of an erroneous decision.'"[308] While recognizing that unlike an incompetent defendant, an intellectually disabled defendant might not *per se* be unable to participate in his or her defense and thus be denied a right to a fair trial.[309] However, the court recognized that while the right to a fair trial is important, so is the right to not be executed under the Eighth Amendment.[310] Consequently, "[m]entally retarded defendants in the aggregate face a special risk of wrongful execution."[311]

Finally, the *Pruitt* court sought to balance the interests of the state and the defendant. The state argued that a malingering defendant successfully avoiding the death penalty was a substantial injury to the state.[312] The court, however, found that requiring clear and convincing evidence to prove intellectual disability creates a risk that an intellectually disabled defendant will be executed.[313] The court then found the right of an intellectually disabled defendant to not be executed outweighed the state's interest in justice, and that clear and convincing evidence was too stringent an evidentiary standard put that right at constitutionally unacceptable risk.

It is worth noting that the Indiana Supreme Court reached this

[305] *Id*.
[306] *Id*. at 101–02.
[307] *Id*. at 102.
[308] *Id*. (quoting Cooper v. Oklahoma, 517 U.S. 348 (1996)).
[309] *Id*.
[310] *Id*.
[311] *Id*. at 103.
[312] *Id*.
[313] *Id*.

conclusion without considering the nature of the evidence necessary to prove intellectual disability, as this article has done. Therefore, *Pruitt* strengthens the argument that the standard of proof capable of giving appropriate deference to an intellectually disabled defendant's Eighth Amendment right is preponderance of the evidence.

V. HALL V. FLORIDA: GUIDANCE AT LONG LAST

It has been thirteen years since *Atkins* was decided, two more than the eleven years separating the *Penry v. Lynaugh* and *Atkins* decisions. As discussed in detail above, states have taken a variety of approaches to implementing *Atkins'* mandate, and many defendants have contested the constitutionality of many of those approaches, yet the Supreme Court has consistently declined to give guidance on this issue.

However, on October 21, 2013 the Court surprised many by granting certiorari in the case of *Hall v. Florida*.[314] The question presented in *Hall* was "[w]hether the Florida scheme for identifying intellectually disabled defendants in capital cases violates *Atkins v. Virginia*."[315] Florida's statute defines intellectual disability as "significantly sub-average general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the period from conception to age eighteen."[316] The statute then defines "significantly sub-average general intellectual functioning" as "performance that is two or more standard deviations from the mean score on a standardized intelligence test."[317] The Court explains that the mean IQ test score is one hundred and the standard deviation is approximately fifteen points.[318] Thus, any score within two standard deviations of the mean, or approximately seventy (thirty points below one hundred) would seemingly qualify under Florida's statute. However, the Florida Supreme Court interpreted the statute to exclude any defendant with an IQ score above seventy from consideration as intellectually disabled, even if the score was within the normal standard of deviation.[319] It was that interpretation, a bright-line IQ score cutoff that was at issue in *Hall v. Florida*.

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[314] *See* Hall v. Florida, 134 S. Ct. 1986, 1990 (2014).

[315] *Id.*; QPReport, SUPREME COURT OF THE UNITED STATES, http://www.supremecourt.gov/qp/12-10882qp.pdf (last viewed Apr. 20, 2015).

[316] FLA. STAT. ANN. § 921.137(1) (2013).

[317] *Id.*

[318] *Hall*, 134 S. Ct. at 1994 (2014).

[319] *See* Cherry v. State, 959 So. 2d 702, 712–13 (Fla. 2007) (per curiam).

This was the first time since *Atkins* that the Court considered any of the procedural mechanisms that were developed in the wake of *Atkins*. While the portion of Florida's procedural scheme at issue was its use of a "bright line" IQ score rule to determine eligibility for capital punishment, that rule only exists because of the unlimited authority the *Atkins* Court gave the states to fashion their own procedural mechanism to effect the mandate of *Atkins*.

On May 27, 2014 the Supreme Court issued its opinion in *Hall v. Florida*, finding the Florida statute, as interpreted by the Florida Supreme Court, violated the Eighth Amendment ban on cruel and unusual punishment and was thus unconstitutional and invalid.[320] The manner in which the Court analyzed Florida's statute and the authority it relied on strongly suggest that as the Court considers additional issues surrounding intellectually disabled capital defendants, it would follow the same analytic framework as it did in *Hall*. Because its analysis in *Hall* parallels the analysis in this paper, it seems likely that when the Court considers the standard of proof required of capital defendants who raise intellectual disability, it would reach similar conclusions to those reached in *Hall*.

The Supreme Court began its opinion by revisiting the Eighth Amendment's ban on cruel and unusual punishment, which *Atkins* specifically applied to an intellectually disabled criminal defendant.[321] The Court reiterated that executing an intellectually disabled defendant has no legitimate penalogical purpose because it does not meet any of the three principal rationales for punishment: rehabilitation, deterrence, or retribution.[322] The Court went on to remind us that intellectually disabled defendants face a heightened risk of wrongful execution because they are more likely to make a false confession, are poor witnesses for themselves, and are less able to meaningfully assist their attorney.[323]

The Court then felt it proper to define intellectual disability clearly before considering the Florida procedural scheme in question and whether that definition of intellectual disability contained in Florida's scheme violates the Eighth Amendment.[324] Notably, the Court stated unequivocally that "it is proper to consider the psychiatric and

[320] *Hall*, 134 S. Ct. 1986, 2001 (2014).
[321] Atkins v. Virginia, 536 U.S. 304, 321 (2002).
[322] *Hall*, 134 S. Ct. at 1992.
[323] *Id*. at 1993.
[324] *Id*.

professional studies that elaborate on the purpose and meaning of IQ scores to determine how the scores relate to the holding of *Atkins*."[325] Because the dissent in *Hall* complained about the Court abdicating its judgment to the mental health profession, it seems likely the majority felt it necessary to make it clear that the Court would ultimately make its own independent determination as to the constitutional validity of the Florida statute. The Court also clearly acknowledged that experts in the relevant fields serve a valuable purpose, and referring to the non-legal experts in intellectual disability "in turn leads to a better understanding of how the legislative policies of various states, and the holdings of state courts, implement the *Atkins* rule."[326]

The *Hall* opinion is notable in relation to this paper in three ways. First, *Hall* appears to suggest that the Supreme Court has developed a structural approach to analyzing the efficacy of a legislative plan to implementing the *Atkins* holding. Second, the Court looked to the mental health profession for their expert analysis of the intellectual disability issue in *Hall*, namely the purpose and meaning of IQ scores and how they relate to the holding in *Atkins*. This is important because the Court looked to the mental health profession, as they did in *Atkins*, to inform the Court's general knowledge of the issue. However, in *Hall* the Court also looked to the mental health profession and applied the profession's expertise to Mr. Hall's individual situation, the Florida statute in question, and the Florida Supreme Court's interpretation of that statute. Finally, in reviewing the published studies and scholarship from the mental health profession, the Court agreed with the professional consensus that determining intellectual disability is an imprecise endeavor, and that uncertainty is inherent in the testing process. While the *Hall* decision does not consider which standards of proof satisfy *Atkins*, review of these notable elements of the *Hall* opinion shows a favorable comparison to the analysis offered in this paper as to which standards of proof satisfy *Atkins* and which do not.

A. *Hall v. Florida* Provides A Structure To Review Legislative Schemes For *Atkins* Compliance

Before engaging in any detailed analysis of the nature of IQ scores, how they are determined, and how they interact with the holding of *Atkins*, the Supreme Court first outlined the analytical process it

[325] *Id*.
[326] *Id*.

would use in reviewing Florida's statute. Because this was the first time since *Atkins* itself that the Court has reviewed a procedural scheme created by a state in an attempt to implement the *Atkins* holding, the delineation of a procedure for that review is valuable in seeking to apply the decision in *Hall* to other issues and other procedural schemes.

First, the Court identified the specific issue relating to executing the intellectually disabled. Second, the Court looked to the published studies and scholarship of the mental health profession for its analysis of that issue, with an eye toward best determining how it relates to the holding of *Atkins*. Third, the Court looked at the legislative policies established by the state or states and how they address that issue in implementing *Atkins*' prohibition. Fourth, the Court then "express[ed] its own independent determination reached in light of the instruction found in those sources and authorities."[327]

If one were to follow this structure when considering the appropriate standard of proof for capital defendants raising intellectual disability, one would reach the same conclusions as this paper does: that any standard of proof more stringent than preponderance of the evidence creates an unacceptably high risk that an intellectually disabled defendant will face execution.

First, the specific issue is to determine what standard of proof will satisfy the *Atkins* proscription on executing the intellectually disabled. Second, this paper has spent considerable time reviewing the studies, scholarship, testing methods and literature found in the mental health profession's review of intellectual disability. The clear conclusion is that determining intellectual disability in a clinical setting is inherently imprecise, and would be even more so in a legal setting. Consequently, when considering how that scientific fact applies to the *Atkins* holding, it is clear that a standard of proof that does consider the nature of the determination and the inherent imprecision in the testing process is a standard of proof that is too high. It is a standard of proof that asks more than the intellectually disabled defendant will be able to provide, and thus creates an unconstitutional risk that he or she will face execution in violation of the Eighth Amendment. Third, in looking at the state legislative procedures to see how they address this concern, it is equally clear that any state that requires proof by clear and convincing evidence or beyond a reasonable doubt has created a procedural scheme that does not properly implement the *Atkins* holding. Finally, having

[327] *Id*.

reviewed the views of the mental health profession and considered the statutes in question, the Supreme Court, in making its own independent determination on the issue, is likely to reach the same conclusion as the mental health profession and find any standard of proof greater than preponderance of the evidence to be too stringent.

B. *Hall v. Florida* Looks To The Mental Health Profession For Their Expert Analysis

After establishing a framework approach to reviewing legislative attempts to implement the holding in *Atkins*, the Supreme Court in *Hall v. Florida* established that when considering intellectual disability, it is "proper"[328] to seek out the mental health profession's view of the issue:

> "That this Court, state courts, and state legislatures consult and are informed by the work of medical experts in determining intellectual disability is unsurprising. Those professionals use their learning and skills to study and consider the consequences of the classification schemes they devise in the diagnosis of persons with mental or psychiatric disorders or disabilities. Society relies upon medical and professional expertise to define and explain how to diagnose the mental condition at issue."[329]

Specifically, the Court looked to experts such as the APA,[330] the AAIDD[331] and one of the early Weschler texts, which identified the need for a standard error of measurement in the scoring and evaluation of each IQ test administered.[332] These are the same expert sources that this paper has considered, for the same reasons, because "[i]n determining who qualifies as intellectually disabled, it is proper to consult the medical community's opinions."[333]

C. *Hall v. Florida* Adopts the Mental Health Profession's Position That Determining Intellectual Disability is Inherently Uncertain and Imprecise

Once the *Hall* Court determined that the mental health profession was the appropriate place to look for guidance when considering intellectual disability, it outlined the relevant findings and conclusions. While the issue in *Hall* was Florida's use of a bright-line

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[328] *Id*.
[329] *Id*.
[330] *Id*. at 1994.
[331] *Id*. at 1995.
[332] *Id*.
[333] *Id*.

IQ cutoff for determining intellectual disability, the Court's analysis corresponds with the conclusions of this paper: Not only is determining intellectual disability uncertain and imprecise, but intellectual functioning and adaptive functioning are concurrent criteria in the determination.

The Court reaffirmed its holding from *Atkins*: "[i]n the context of a formal assessment, '[t]he existence of concurrent deficits in intellectual and adaptive functioning has long been the defining characteristic of intellectual disability.'"[334] After reviewing the relevant mental health profession research and writings on the subject, the Court concluded that Florida's fixed IQ cutoff is inconsistent with the scientific practice in two ways. First, having a fixed IQ cutoff makes the IQ score the single criteria for determining intellectual disability, and thus prevents consideration of other evidence that mental health professionals require prior to reaching a decision on intellectual disability.[335] This ignores the consensus among the relevant medical and scientific communities that intellectual functioning is a concurrent criterion along with adaptive functioning.

The Court found that "[f]or professionals to diagnose—and for the law then to determine—whether an intellectual disability exists once the SEM applies and the individual's IQ score is seventy-five or below the inquiry would consider factors indicating whether the person had deficits in adaptive functioning."[336] "It is not sound to view a single factor as dispositive of a conjunctive and interrelated assessment."[337] This misuse of an IQ score "bars consideration of evidence that must be considered in determining whether a defendant in a capital case has intellectual disability."[338] Specifically, it "bars an essential part of a sentencing court's inquiry into adaptive functioning."[339]

Second, the Florida procedure refuses to recognize that "the score is, on its own terms, imprecise,"[340] and "is an approximation, not a final and infallible assessment of intellectual functioning."[341] The Court reviews the mental health profession's understanding and use of IQ

[334] *Id*. at 1994.
[335] *Id*.
[336] *Id*. at 1996.
[337] *Id*. at 2001.
[338] *Id*.
[339] *Id*.
[340] *Id*. at 1995.
[341] *Id*. at 2000.

testing, concluding that any use of an IQ test score must consider the margin of error inherent in the test itself.[342] This is critical because the scientific community is clear that an IQ test is an attempt to quantify intelligence and produces a numerical score. But it is just that – an attempt. The resulting score is far from perfect.

While the *Hall* decision focuses on Florida's misunderstanding of the nature of the IQ test in conjunction with determining intellectual disability, the Court's finding that IQ tests are imprecise has a direct effect on any broader review of intellectual disability in a legal setting. As discussed in section III, although adaptive functioning is of equal importance with intellectual functioning in diagnosing mental retardation, assessing adaptive functioning is even more difficult to measure or quantify because it "is a far more complex and varied criterion than intellectual functioning."[343] This is largely because the data upon which a determination of adaptive functioning in capital cases is inherently ephemeral.[344]

Assessment of adaptive functioning requires observation and analysis of "how well a person meets community standards of personal independence and social responsibility, in comparison to others of similar age and socio-cultural background."[345] The tripartite definition of adaptive functioning requires considering adaptive behavior across three concurrent domains: conceptual, social, and practical.[346] As discussed above in section III(C)(ii), this analysis requires the gathering information through observation of the subject while he or she is interacting with society. Difficult enough in simple clinical cases, this process is manifestly more difficult in capital cases.

Because deficits in adaptive functioning relevant to intellectual disability must manifest outside the development period, and given that most capital defendants are older than eighteen and thus generally outside the development period, evidence of adaptive functioning is not contemporary, but instead historical. Thus, evidence of adaptive functioning requires reliance upon the historical record regarding the defendant, adding the potential for staleness of the information.[347]

While some observations of the defendant during the relevant

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[342] *Id*.
[343] Rensburg, *supra* notw 161, at 66; MENTAL RETARDATION, *supra* note 159, at 145.
[344] *See supra* Part III(C)(ii).
[345] *DSM-5*, *supra* note 34, at 37.
[346] *Id*. at 34–36.
[347] Everington & Olley, *supra* note 182, at 9.

years may be recorded or memorialized, many of them will instead be gathered anew from friends, family, coworkers and others who came into contact with the defendant during that time period. As such, those observations will be subject to the effect that the passage of time has on human memory.[348] This further reduces accuracy, and correspondingly, relevance to the inquiry.

Beyond the accuracy of the data used to determine adaptive functioning, adaptive functioning tests are much, much newer than intellectual functioning tests and thus are much less precise. Just as intellectual functioning testing evolved and improved since Binet designed the first test, so too do the attempts to measure adaptive functioning continue to evolve. However, while Binet's first test was used in 1905[349] the first adaptive functioning test was published in 1936.[350] Moreover, throughout the majority of the 20th century the mental health profession focused on intellectual functioning as the primary factor in determining intellectual disability, and thus put corresponding focus on tests designed to measure and quantify intelligence.[351] Consequently, tests designed to measure adaptive functioning were both newer and subject to much less rigorous use and review.

Hall holds that any statute that ignores the inherent imprecision in IQ testing violates the Eighth Amendment by not sufficiently ensuring that no intellectually disabled defendant will be executed. Adaptive functioning is a concurrent criterion for the diagnosis of intellectual disability, of equal importance as intellectual functioning. When considering the Court's analysis in *Hall*, it stands to reason that the same analysis applies to the determination of adaptive functioning. It is clear that the determination of adaptive functioning is even less precise than the determination of intellectual functioning. Thus, any statute which ignores this inherent imprecision in determining adaptive functioning will likewise provide insufficient protection to the intellectually disabled, and likewise fall afoul of the Eighth Amendment.

As discussed above, requiring a capital defendant to provide proof beyond a reasonable doubt ignores the inherent imprecision in determination of intellectual disability, present in the determination of intellectual functioning, but even more so to the determination of

[348] Crane & Hannibal, *supra* note 197.
[349] Haydt et al. *supra* note 85, at 362.
[350] Tassé, *supra* note 164.
[351] *See supra* Part III(A).

adaptive functioning. Only a standard of proof that considers and allows for the imprecision and uncertainty in the process will sufficiently protect the intellectually disabled in accordance with the holding in *Atkins*. As the Court in *Hall* held, "[a] State that ignores the inherent imprecision of these tests risks executing a person who suffers from intellectual disability."[352]

IV. CONCLUSION

The Supreme Court must provide more direction to states regarding the parameters of any procedural schemes created to implement *Atkins*' ban on the execution of the intellectually disabled. Thirteen years after *Atkins*, *Hall v. Florida* is a welcome first step. Included in any future consideration of what procedural scheme is *Atkins*-compliant must be an analysis of the appropriate standard of proof a capital defendant must satisfy when attempting to prove he or she is intellectually disabled and thus ineligible for execution. The nature of the evidence required to prove intellectual disability in a courtroom is not the clear, concrete type of evidence traditionally found in criminal trials.

The science surrounding the diagnosis of intellectual disability has been well established since *Atkins* and has now been reaffirmed in *Hall*. It is clear that the diagnosis depends upon naturally imprecise information, subject to interpretation by experts, based on their education and professional experience. It is not quantifiable, despite any efforts to make it so. It is, by nature, unquantifiable. As such, when determining whether a capital defendant is intellectually disabled, and thus to determine if that defendant will live or die, the procedural crucible in which the decision will be made must be one that gives society sufficient confidence in the reliability of the determination.

The vast majority of states have determined that such reliability can come only when the standard of proof to be met is by a preponderance of the evidence. Few states contend that clear and convincing evidence is sufficient. Only Georgia insists that the accused must satisfy the highest burden of proof that exists, proof beyond a reasonable doubt, when considering the imprecise nature of whether a person is intellectually disabled and thus eligible to be executed.

This wide disparity exists because the Supreme Court has declined to establish procedural guidelines for the states to effectuate

[352] Hall v. Florida, 134 S. Ct. 1986, 2001 (2014).

their mandate in *Atkins*. Despite the growing disparity since this passing of the buck, the Court repeatedly refused to reconsider the manner in which states implement the *Atkins'* mandate until it accepted review in *Hall v. Florida*. In *Hall*, the Court found Florida's refusal to consider the inherent imprecision in IQ testing was unconstitutional, and that in so doing, it unconstitutionally prevented a trier of fact from considering other evidence, namely evidence of adaptive functioning, which was required prior to making a determination on intellectual disability.

Hall makes it clear that a statute that ignores the inherent imprecision in IQ testing unconstitutionally prevents consideration of adaptive functioning. Similarly a statute that requires proof of intellectual disability beyond a reasonable doubt prevents a trier of fact from properly considering the available evidence. The scientific community unanimously agrees that any consideration of evidence of intellectual disability must allow for the imprecision in the diagnostic process. This is the only way to provide sufficient confidence that the Eighth Amendment's prohibition on executing an intellectually disabled defendant is honored. Only proof of a preponderance of the evidence sufficiently allows for consideration of that imprecision. Anything greater poses an unconstitutional risk that we will execute an intellectually disabled person.