EVALUATING INTELLECTUAL DISABILITY: CLINICAL ASSESSMENTS IN *ATKINS* CASES

James W. Ellis * Caroline Everington ** Ann M. Delpha ***

$ABSTRACT^{\dagger}$

The intersection of intellectual disability and the death penalty is now clearly established. Both under the U.S. Supreme Court's constitutional decisions and under the terms of many state statutes, individual defendants who have that disability cannot be sentenced to death or executed. It now falls to trial, appellate, and post-conviction

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^{*} James W. Ellis is a Distinguished University Professor and Professor of Law at the University of New Mexico School of Law. He has served as President of the American Association on Mental Retardation (now the American Association on Intellectual and Developmental Disabilities), and as Law Reporter for the American Bar Association's Criminal Justice Mental Health Standards project. He has represented national disability organizations in a number of cases before the United States Supreme Court, and argued the case for the Petitioner in *Atkins v. Virginia*.

^{**} Caroline Everington, Ph.D., is Associate Dean and Professor of Special Education Emerita at Winthrop University. She is a Fellow of the American Association on Intellectual and Developmental Disabilities, and is a Past President of its Legal Process and Advocacy Division. For the past twenty-five years, she has served as a forensic expert in the diagnosis of intellectual disability, and has published articles on intellectual disability and the criminal justice system. She is also the author of the CAST-MR, an instrument designed to determine legal competency in people with intellectual disability.

^{***} Ann M. Delpha is a Visiting Assistant Professor at the University of New Mexico School of Law. A member of the Bar of the Supreme Court of the United States, she has served as co-counsel to national disability organizations in cases before that Court.

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[†] To increase the usefulness and readability of this Article for both legal and clinical readers, the authors have chosen to depart from the Bluebook's citation guidelines periodically. Specifically, the sequence of authorities, some abbreviations and shortened citations, and pinpoint page citations have been modified in some instances. All such deviations from customary citation rules have been adopted with the goal of making it easier for readers to find and use the cited sources.

courts to determine which individual criminal defendants are entitled to the law's protection.

This Article attempts to assist judges in performing that task. After a brief discussion of the Supreme Court's decisions in Atkins v. Virginia, Hall v. Florida, and Moore v. Texas, it analyzes the component parts and terminology of the clinical definition of intellectual disability. It then offers more detailed discussion of a number of the clinical issues that arise frequently in adjudicating these cases. For each of these issues, the Article's text and the accompanying notes attempt to provide judges with a thorough survey of the relevant clinical literature, and an explanation of the terminology used by clinical professionals. Our purpose is to help those judges to become more knowledgeable consumers of the clinical reports and expert testimony presented to them in individual cases, and to help them reach decisions that are consistent with what the clinical literature reveals about the nature of intellectual disability and best professional practices in the diagnostic process.

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I. INTRODUCTION

The Supreme Court's decision in *Atkins v. Virginia*¹ requires courts to make determinations about whether individual capital defendants have intellectual disability ("ID"), also known as mental retardation.² In a number of states, there are also statutory provisions protecting capital defendants with intellectual disability.³ Both trial courts in the first instance, and reviewing courts in appellate and post-conviction cases, must therefore address the task of weighing and assessing clinical evaluations and clinical testimony about a defendant's claim to *Atkins* relief. This Article seeks to offer some assistance to those courts in considering these cases.

There is a sense in which this subject is not unfamiliar territory for judges. The question of whether a criminal defendant might have a significant mental disability has long been a concern for criminal courts.⁴ On subjects as diverse as criminal responsibility,⁵ competence in

^{1. 536} U.S. 304 (2002). Background on the *Atkins* case can be found in THOMAS G. WALKER, ELIGIBLE FOR EXECUTION: THE STORY OF THE DARYL ATKINS CASE (2009).

^{2.} Clinicians and other professionals in the field of mental disability now use the term "intellectual disability" in place of "mental retardation." While the terminology employed by many in the field has shifted to "intellectual disability," in large part due to the stigma attached to "mental retardation," this Article uses the two terms interchangeably as necessary for clarity when discussing historical context, and statutes and case law that use the older term. For a fuller discussion of the change in terminology, see *infra* Part III.A.

^{3.} Eighteen states and Congress had enacted such statutes prior to the *Atkins* decision. *See Atkins*, 536 U.S. at 313-15. Many (but not all) of the remaining states with capital punishment enacted statutes to implement the Supreme Court's decision. *See, e.g.*, CAL. PENAL CODE § 1376 (West 2011 & Supp. 2018) (enacted in 2003); *see also* James W. Ellis, *Mental Retardation and the Death Penalty: A Guide to State Legislative Issues*, 27 MENTAL & PHYSICAL DISABILITY LAW REPORTER 11, 11 (2003) [hereinafter Legislative Guide].

^{4.} See, e.g., HENRY WEIHOFEN, MENTAL DISORDER AS A CRIMINAL DEFENSE (1954); Barbara A. Weiner, *Mental Disability and the Criminal Law, in* THE MENTALLY DISABLED AND THE LAW 693, 693-801 (Samuel Jan Brakel et al. eds., 3d ed. 1985).

^{5.} See, e.g., Clark v. Arizona, 548 U.S. 735 (2006); see also MICHAEL L. PERLIN, THE

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various issues,⁶ and sentencing,⁷ courts have recognized the importance of determining whether a defendant is currently functioning with a mental disability, or may have been impaired by such a disability at the time of the offense with which he is charged.⁸ Although many of the best known cases have involved defendants with some form of mental illness,⁹ it is clear that courts and legislatures have long recognized the relevance of a defendant's intellectual disability in criminal cases.¹⁰

JURISPRUDENCE OF THE INSANITY DEFENSE (1994); DANIEL N. ROBINSON, WILD BEASTS & IDLE HUMOURS: THE INSANITY DEFENSE FROM ANTIQUITY TO THE PRESENT (1996).

^{6.} See, e.g., Indiana v. Edwards, 554 U.S. 164, 167, 170, 174-78 (2008) (competence for self-representation); Dusky v. United States, 362 U.S. 402 (1960) (per curiam) (same); Drope v. Missouri, 420 U.S. 162 (1975) (same); Cooper v. Oklahoma, 517 U.S. 348 (1996) (competence to stand trial); Panetti v. Quarterman, 551 U.S. 930 (2007) (competence to be executed). See generally NORMAN G. POYTHRESS ET AL., ADJUDICATIVE COMPETENCE: THE MACARTHUR STUDIES (2002); THOMAS GRISSO ET AL., EVALUATING COMPETENCIES: FORENSIC ASSESSMENTS AND INSTRUMENTS ch. 1-5 (2d ed. 2003) (discussing various criminal competencies including incompetence to stand trial; competence to waive rights to silence and legal counsel); MICHAEL L. PERLIN ET AL., COMPETENCE IN THE LAW: FROM LEGAL THEORY TO CLINICAL APPLICATION (2008); Richard J. Bonnie, *The Competence of Criminal Defendants: Beyond* Dusky *and* Drope, 47 U. MIAMI L. REV. 539 (1993); David Freedman, *When Is a Capitally Charged Defendant Incompetent to Stand Trial*?, 32 INT'L J. LAW & PSYCHIATRY 127 (2009); RONALD ROESCH & STEPHEN L. GOLDING, COMPETENCY TO STAND TRIAL (1980); MARK C. BARDWELL & BRUCE A. ARRIGO, CRIMINAL COMPETENCY ON TRIAL: THE CASE OF COLIN FERGUSON (2002).

^{7.} See, e.g., Abdul-Kabir v. Quarterman, 550 U.S. 233 (2007); Brewer v. Quarterman, 550 U.S. 286 (2007); Tennard v. Dretke, 542 U.S. 274 (2004); Penry v. Johnson (*Penry II*), 532 U.S. 782 (2001).

^{8.} See ABA CRIMINAL JUSTICE MENTAL HEALTH STANDARDS (1988) [hereinafter ABA MENTAL HEALTH STANDARDS 1988, std. 7-X.Y]. The American Bar Association (ABA) draws distinctions regarding the difficulty of assessing mental condition among an individual's present condition, condition at the time of the crime, and predictions regarding future mental state. See id. std. 7-3.12 & commentary. Since intellectual disability is a disability that does not change substantially in an individual over time, these distinctions are less significant and less difficult than they are in cases involving mental illness. See discussion *infra* Parts IV.C and VII.B.

The ABA has recently adopted a revised set of Standards, ABA CRIMINAL JUSTICE MENTAL HEALTH STANDARDS (2016) [hereinafter ABA MENTAL HEALTH STANDARDS 2016, std. 7-X.Y]. Since the 2016 version of the Standards does not yet have accompanying Commentary, this Article will refer readers to both sets of Standards. None of the Standards cited here reflect substantive changes between the 1988 and 2016 versions. The comparable 2016 Standard on retrospective, current, and prospective mental condition is found at ABA MENTAL HEALTH STANDARDS 2016, std. 7-3.10(c).

^{9.} See, e.g., CHARLES E. ROSENBERG, THE TRIAL OF THE ASSASSIN GUITEAU 134 (1996); LINCOLN CAPLAN, THE INSANITY DEFENSE AND THE TRIAL OF JOHN W. HINCKLEY, JR. 45 (1984); RICHARD MORAN, KNOWING RIGHT FROM WRONG: THE INSANITY DEFENSE OF DANIEL MCNAUGHTAN 47 (1981).

^{10.} See, e.g., Richard J. Bonnie, The Competence of Criminal Defendants with Mental Retardation to Participate in Their Own Defense, 81 J. CRIM. L. & CRIMINOLOGY 419, 422-24 (1990); James W. Ellis & Ruth A. Luckasson, Mentally Retarded Criminal Defendants, 53 GEO. WASH. L. REV. 414 (1985) [hereinafter Ellis & Luckasson, Defendants]; THE CRIMINAL JUSTICE SYSTEM AND MENTAL RETARDATION: DEFENDANTS AND VICTIMS (Ronald W. Conley, Ruth Luckasson & George N. Bouthilet eds., 1992); JOHN PARRY, AM. BAR ASS'N, CRIMINAL MENTAL HEALTH AND DISABILITY LAW, EVIDENCE AND TESTIMONY: A COMPREHENSIVE REFERENCE

American courts have also had occasion to determine whether a particular individual has intellectual disability in a variety of civil settings, including special education,¹¹ Social Security disability claims,¹² discrimination cases under the Americans with Disabilities Act,¹³ and guardianship and residential placement.¹⁴ But with the United States Supreme Court's decision in *Atkins v. Virginia*, as well as the enactment of state and federal statutes precluding the death penalty for individuals who have intellectual disability (including both the statutes enacted prior to *Atkins* and legislation passed subsequently), the crucial importance of using clinical standards, particularly in death penalty cases, is clear.¹⁵

(The Social Security Administration recently revised its definition of intellectual disability, using the term "Intellectual Disorder." 20 C.F.R. pt. 404, subpt. P, app. 1, § 12.00(B)(4) (2018).) See *infra* Part III.A for a discussion of terminology changes.

13. Americans with Disabilities Act, 42 U.S.C.A. § 12101 & note on findings and purposes (West 2013); John W. Parry & Amy L. Allbright, *The ADA Amendments Act of 2008: Analysis & Commentary*, 32 MENTAL & PHYSICAL DISABILITY LAW REPORTER 695 (2008).

14. See, e.g., Dorothy Squatrito Millar & Adelle Renzaglia, Factors Affecting Guardianship Practices for Young Adults with Disabilities, 68 EXCEPTIONAL CHILDREN 465 (2002). For a fuller discussion of the role of intellectual disabilities in a variety of legal contexts, see BRUCE DENNIS SALES ET AL., AM. BAR ASS'N, DISABLED PERSONS AND THE LAW: STATE LEGISLATIVE ISSUES (1982).

15. See Caroline Everington & J. Gregory Olley, *Implications of Atkins v. Virginia: Issues in Defining and Diagnosing Mental Retardation*, 8 J. FORENSIC PSYCHOLOGY PRACTICE, no. 1, 2008, at 1, 4-5 [hereinafter Everington & Olley, *Defining and Diagnosing*] ("Certainly, there is no assessment situation where the stakes are higher.").

Viewed another way, the stakes in an *Atkins* case are not only high but also asymmetrical: an incorrect or questionable determination that a defendant does *not* have intellectual disability can result in his execution, but an incorrect or questionable determination that he *does* have the disability is still likely to result in his lifelong imprisonment. From that perspective, the consequence of an *Atkins* determination is dramatically different from that of an acquittal on

MANUAL FOR LAWYERS, JUDGES AND CRIMINAL JUSTICE PROFESSIONALS 309-11 (2009) [hereinafter PARRY, ABA REFERENCE MANUAL] (intellectual disability in incompetency cases).

^{11.} See 20 U.S.C. § 1401(3)(A)(i) (2012) (specifically including "intellectual disabilities" within the definition of "child with a disability" in the Individuals with Disabilities Education Act ("IDEA")); see, e.g., Timothy W. v. Rochester, N.H., Sch. Dist., 875 F.2d 954, 961, 972-73 (1st Cir. 1989) (child with multiple handicaps, including intellectual disability, meets statutory definition of handicapped child); Parks v. Pavkovic, 753 F.2d 1397, 1406 (7th Cir. 1985) ("In light of the close connection between mental retardation and special educational need, it comes as no surprise that developmental disability, far from being an exempted category, is an important subcategory of the handicaps covered by the Act."). Indeed, much of the impetus for the enactment of the Education for All Handicapped Children Act (now IDEA) in 1975 can be traced to judicial rejection of the then-common practice of excluding or segregating children with intellectual disability. *See* LAURA ROTHSTEIN & SCOTT F. JOHNSON, SPECIAL EDUCATION LAW 12 (5th ed. 2013) (citing cases such as Penn. Ass'n for Retarded Children v. Pennsylvania, 334 F. Supp. 1257 (E.D. Pa. 1971)).

^{12.} See, e.g., Sullivan v. Zebley, 493 U.S. 521, 524-26, 540 (1990) (discussing definition of 'mental retardation' for purposes of Social Security disability claims); Walker v. Massanari, 149 F. Supp. 2d 843 (S.D. Iowa 2001) (discussing evaluation of IQ testing in the context of a Social Security disability claim); NATIONAL RESEARCH COUNCIL, MENTAL RETARDATION: DETERMINING ELIGIBILITY FOR SOCIAL SECURITY BENEFITS (Daniel J. Reschly et al. eds., 2002).

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The purpose of this Article is to assist the courts in assessing the evaluations performed by intellectual disability professionals, and to assist those clinicians in preparing evaluation reports that will be of value to the courts. Toward that end, we will attempt to offer courts and practitioners the benefit of the most current scholarship in the field of intellectual disability,¹⁶ and to indicate the areas where there is consensus among scholars and clinicians, as well as those issues on which there is uncertainty or disagreement.

II. THE SUPREME COURT'S DECISIONS IN ATKINS, HALL, AND MOORE

The United States Supreme Court first addressed the constitutionality of imposing the death penalty on individuals with intellectual disability in the 1989 case of *Penry v. Lynaugh (Penry I)*.¹⁷ In that case the Court, over the dissent of four Justices, held that the Eighth Amendment's prohibition on cruel and unusual punishment did not preclude imposition of the death penalty on an individual who had mental retardation.¹⁸ The Court observed that since only two states and Congress had then passed legislation protecting defendants with mental retardation, "*at present* there is insufficient evidence of a national consensus against executing mentally retarded people convicted of capital offenses for us to conclude that it is categorically prohibited by the Eighth Amendment."¹⁹

During the following thirteen years, a number of additional states passed such legislation.²⁰ When the Court revisited the constitutional issue in *Atkins*, it concluded that these enactments provided "powerful evidence that today our society views mentally retarded offenders as categorically less culpable than the average criminal."²¹

grounds of insanity, since the latter reduces the criminal justice system's options to either releasing the acquittee or seeking some form of civil commitment. *See* ABA MENTAL HEALTH STANDARDS 1988, *supra* note 8, stds. 7-7.1 to -7.11, (criteria and procedures for commitment of insanity acquittees); ABA MENTAL HEALTH STANDARDS 2016, *supra* note 8, stds. 7-7.1 to -7.12 (same); James W. Ellis, *The Consequences of the Insanity Defense: Proposals to Reform Post-Acquittal Commitment Laws*, 35 CATH. U. L. REV. 961 (1986).

^{16.} See Moore v. Texas, 137 S. Ct. 1039, 1049 (2017) ("[B]eing informed by the medical community does not demand adherence to everything stated in the latest medical guide. But neither does our precedent license disregard of current medical standards.").

^{17. 492} U.S. 302 (1989). Background on the *Penry* case can be found in Jordan M. Steiker, Penry v. Lynaugh: *The Hazards of Predicting the Future*, *in* DEATH PENALTY STORIES 277 (John H. Blume & Jordan M. Steiker eds., 2009).

^{18.} Penry I, 492 U.S. at 340, 350.

^{19.} Id. at 335 (emphasis added).

^{20.} See Atkins v. Virginia, 536 U.S. 304, 314-16 (2002).

^{21.} *Id.* The Court also observed that "[t]he evidence carries even greater force when it is noted that the legislatures that have addressed the issue have voted overwhelmingly in favor of the

While the existence of a national consensus against the practice of executing defendants with mental retardation would have been sufficient to support a prohibition under the Eighth Amendment, the Justices went on to analyze for themselves the relevant evidence regarding the characteristics of individuals with mental retardation.²² The Court observed that "[o]ur independent evaluation of the issue reveals no reason to disagree with the judgment of the legislatures that have recently addressed the matter and concluded that death is not a suitable punishment for a mentally retarded criminal."²³ Justice Stevens's majority opinion began by noting the difference between the mens rea required for conviction and the higher level of culpability necessary for the imposition of the death penalty:

Mentally retarded persons frequently know the difference between right and wrong and are competent to stand trial. Because of their impairments, however, by definition they have diminished capacities to understand and process information, to communicate, to abstract from mistakes and learn from experience, to engage in logical reasoning, to control impulses, and to understand the reactions of others.²⁴

The Court then compared these common characteristics of defendants with mental retardation to the constitutionally permissible justifications for imposing the death penalty, namely retribution and deterrence.²⁵ The majority opinion noted, "[u]nless the imposition of the death penalty on a mentally retarded person measurably contributes to one or both of these goals, it is nothing more than the purposeless and needless imposition of pain and suffering, and hence an unconstitutional punishment."²⁶

The decision then discussed the justifications based on retributive theories:

With respect to retribution—the interest in seeing that the offender gets his "just deserts"—the severity of the appropriate punishment necessarily depends on the culpability of the offender.... If the culpability of the average murderer is insufficient to justify the most extreme sanction available to the State, the lesser culpability of the

prohibition." Id. at 316.

^{22.} See id. at 317-21.

^{23.} Id. at 321 (internal quotation omitted).

^{24.} Id. at 318.

^{25.} *Id.* at 318-21; *id.* at 321 ("We are not persuaded that the execution of mentally retarded criminals will measurably advance the deterrent or the retributive purpose of the death penalty.").

^{26.} Id. at 319 (internal quotation omitted).

mentally retarded offender surely does not merit that form of retribution.²⁷

Similarly, regarding deterrence, the Court found that attributes of the disability of mental retardation made that theory of limited applicability:

The theory of deterrence in capital sentencing is predicated upon the notion that the increased severity of the punishment will inhibit criminal actors from carrying out murderous conduct. Yet it is the same cognitive and behavioral impairments that make these defendants less morally culpable—for example, the diminished ability to understand and process information, to learn from experience, to engage in logical reasoning, or to control impulses—that also make it less likely that they can process the information of the possibility of execution as a penalty and, as a result, control their conduct based upon that information.²⁸

After reviewing each of these considerations, the Court held that "[c]onstruing and applying the Eighth Amendment in the light of our 'evolving standards of decency,' we therefore conclude such punishment is excessive and that the Constitution places a substantive restriction on the State's power to take the life of a mentally retarded offender."²⁹

Having established that restriction as a principle of constitutional law, the Court declined to simultaneously dictate precise procedures for its implementation.³⁰ As it had done earlier regarding the issue of a capital defendant's competence to be executed, the Court initially left to the states "the task of developing appropriate ways to enforce the constitutional restriction upon [their] execution of sentences."³¹ In response, courts were either guided by legislative enactments in their states,³² or fashioned procedures on their own.³³ Since the "*substantive* restriction on the State's power to take the life of a mentally retarded offender"³⁴ is now dictated by the Constitution, the States face more challenges to their ability to restrict a defendant's access to *Atkins* relief

^{27.} Id.

^{28.} Id. at 320.

^{29.} Id. at 321 (internal quotation omitted).

^{30.} See id. at 317.

^{31.} *Id.* at 317 (quoting Ford v. Wainwright, 477 U.S. 399, 405, 416-17 (1986)). For a fuller discussion of the procedural options available to the states, see generally *Legislative Guide*, *supra* note 3.

^{32.} See, e.g., CAL. PENAL CODE § 1376 (West 2011) (establishing procedures for assessing *Atkins* defenses in new cases).

^{33.} See, e.g., In re Hawthorne, 105 P.3d 552 (Cal. 2005) (establishing procedures for assessing *Atkins* claims in post-conviction cases).

^{34.} Atkins, 536 U.S. at 321 (emphasis added) (internal quotation omitted).

than was true when the prohibition on executing individuals with mental retardation was a discretionary state policy.³⁵

A. Hall v. Florida

The first such challenge to be addressed by the Supreme Court came a dozen years after *Atkins* in the case of *Hall v. Florida*.³⁶ In that case, the Court found that Florida's refusal to consider the standard error of measurement in determining a defendant's intellectual functioning was unconstitutional under *Atkins*.³⁷ In resolving that question, the Court shed some useful light on its own understanding of *Atkins*.

In Atkins, the Court had said "we leave to the State[s] the task of developing appropriate ways to enforce the constitutional restriction upon [their] execution of sentences."³⁸ However, questions about the precise extent of the latitude granted to states by that passage led to differing interpretations of it, and Hall was the Court's first statement addressing that issue. Some believed that the discretion left to the states was limitless, and that states could fashion any procedures and any definition of intellectual disability that they wanted.³⁹ In rejecting Florida's effective narrowing of the group of defendants protected by Atkins, the Hall opinion made clear that the Atkins decision's deference to the states has important substantive limits.⁴⁰ Although the Court noted that "the States play a critical role in advancing protections and providing the Court with information that contributes to an understanding of how intellectual disability should be measured and assessed,"41 Hall was emphatic that the role of the states was not unlimited. "But Atkins did not give the states unfettered discretion to define the full scope of the constitutional protection."⁴² In explaining the

^{35.} *Compare, e.g.*, Leland v. Oregon, 343 U.S. 790, 798-99 (1952) (holding that it is constitutional for a State to place the insanity defense burden, which is discretionary, at the level of "beyond a reasonable doubt"), *with* Cooper v. Oklahoma, 517 U.S. 348, 355-56, 366-67, 369 (1996) (holding that it is unconstitutional for a state to impose the burden of proving incompetence to stand trial, which is not discretionary, at the level of "clear and convincing evidence").

^{36. 134} S. Ct. 1986 (2014). The only earlier case that addressed an issue tangentially related to *Atkins* was *Bobby v. Bies*, in which the Court held that a state was not precluded under the Double Jeopardy Clause from contesting a defendant's *Atkins* claim where the issue of whether he had intellectual disability had not been fully litigated in previous proceedings. Bobby v. Bies, 556 U.S. 825, 828-29, 836-37 (2009).

^{37.} The issue of standard error of measurement ("SEM") and the holding of *Hall* are discussed in detail *infra* Part VI.C.

^{38.} Atkins, 536 U.S. at 317 (quoting Ford v. Wainwright, 477 U.S. 399, 405, 416-17 (1986)).

^{39.} See Hall, 134 S. Ct. at 2000-01.

^{40.} Id. at 1998-99.

^{41.} Id. at 1998.

^{42.} Id.; see also Moore v. Texas, 137 S. Ct. 1039, 1048 (2017).

limits on the ability of the states to interpret its decisions, the Court observed:

If the States were to have complete autonomy to define intellectual disability as they wished, the Court's decision in Atkins could become a nullity, and the Eighth Amendment's protection of human dignity would not become a reality. This Court thus reads Atkins to provide substantial guidance on the definition of intellectual disability.⁴³

The opinion in *Hall* also made clear that the Court takes the *Atkins* principle very seriously. Having observed that a crucial function of the Eighth Amendment is to "reaffirm[] the duty of the government to respect the dignity of all persons,"⁴⁴ the Court concluded that "Florida's law contravenes our Nation's commitment to dignity and its duty to teach human decency as the mark of a civilized world."⁴⁵ And, in implementing that principle, the Court emphasized that "[t]he clinical definitions of intellectual disability... were a *fundamental premise* of *Atkins*."⁴⁶

B. Moore v. Texas

Three years after the Supreme Court addressed the issue of the standard error of measurement in *Hall*, it considered issues regarding adaptive behavior in *Moore v. Texas*.⁴⁷ As it had in *Hall*, the Court in *Moore* emphasized the importance of adherence to scientific standards in the adjudication of *Atkins* cases: "*Hall* indicated that being informed by the medical community does not demand adherence to everything stated in the latest medical guide. But neither does our precedent license disregard of current medical standards."⁴⁸

The *Moore* majority first addressed the intellectual functioning prong of the definition of intellectual disability.⁴⁹ The Texas Court of Criminal Appeals ("CCA") had held that the defendant had failed to satisfy this component of the definition because it believed that his scores on seven intelligence quotient ("IQ") tests taken over his lifetime

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^{43.} Hall, 134 S. Ct. at 1999.

^{44.} Id. at 1992 (quoting Roper v. Simmons, 543 U.S. 551, 560 (2005)).

^{45.} Id. at 2001.

^{46.} Id. at 1999 (emphasis added); see also Moore, 137 S. Ct. at 1049.

^{47. 137} S. Ct. at 1039. The issues surrounding deficits in adaptive behavior are discussed in greater detail *infra* Part VII. The Supreme Court had briefly touched on both IQ and adaptive behavior issues in *Brumfield v. Cain*, 135 S. Ct. 2269, 2276-82 (2015). The main focus of that decision was on habeas procedural questions, but the Court did consider some adaptive behavior issues in order to resolve the larger procedural question. *Id.*

^{48.} Moore, 137 S. Ct. at 1049.

^{49.} Id. at 1049-50.

failed to demonstrate that he had the requisite intellectual impairment.⁵⁰ But the Supreme Court rejected that conclusion,⁵¹ holding that the lower court was required to "continue the inquiry and consider other evidence of intellectual disability where an individual's IQ score, adjusted for the test's standard error, falls within the clinically established range for intellectual-functioning deficits."⁵²

Turning to the definition's requirement of deficits in adaptive functioning, the Court clearly rejected the Texas practice of requiring Atkins courts to evaluate clinical testimony in light of non-clinical considerations which had no support in the clinical or scientific literature.53 The Supreme Court noted that the CCA's "balancing" of deficits in the individual's adaptive behavior against purported "strengths," was inconsistent with clinical standards because "the medical community focuses the adaptive-functioning inquiry on adaptive *deficits*."54 The Court also rejected the practice of relying upon testimony about the functioning of a defendant in prison, noting that such evidence is likely to be distorted "in a controlled setting, as a prison surely is."55 In addition, the Court rejected the notion that the existence of additional clinical diagnoses (known as comorbid conditions) was somehow disqualifying for a diagnosis of intellectual disability.⁵⁶ "The existence of a personality disorder or mental-health issue, in short, is not evidence that a person does not also have intellectual disability."57

The rejection of the Texas "*Briseno* factors" was particularly emphatic. The Court stated: "By design and in operation, the *Briseno* factors creat[e] an unacceptable risk that persons with intellectual disability will be executed."⁵⁸ (Although the Court was divided on other issues, its rejection of the *Briseno* factors was unanimous.⁵⁹) Texas's

^{50.} Id. at 1047.

^{51.} *Id.* at 1049 ("The CCA's conclusion that Moore's IQ scores established that he is not intellectually disabled is irreconcilable with *Hall*.").

^{52.} Id. at 1050.

^{53.} Id. at 1050-52.

^{54.} *Id.* at 1050 (emphasis added). For a fuller discussion of strengths and weaknesses in adaptive deficits, see *infra* Part VII.C.

^{55.} *Moore*, 137 S. Ct. at 1050 (internal quotation omitted). For additional information on the dangers of the use of a defendant's functioning in prison as part of an evaluation for intellectual disability, see *infra* notes 126-28.

^{56.} Moore, 137 S. Ct. at 1051. For more information on comorbidity, see infra Part V.

^{57.} Moore, 137 S. Ct. at 1051 (internal quotation omitted).

^{58.} *Id.* (alteration in original) (internal quotation omitted); *see Ex parte* Briseno, 135 S.W.3d 1, 6-9 (Tex. Crim. App. 2004). For a more in-depth discussion of the rejection of the *Briseno* factors, see *infra* Part VII.E.

^{59.} See Moore, 137 S. Ct. at 1053 ("I agree with the Court today that those factors are an unacceptable method of enforcing the guarantee of *Atkins*, and that the CCA therefore erred in using them to analyze adaptive deficits.") (Roberts, C.J., dissenting).

implicit reliance on stereotypes about people with intellectual disability was severely criticized,⁶⁰ with the Supreme Court describing them as "wholly non-clinical."⁶¹ The Court concluded that the Texas court had "failed adequately to inform itself of the medical community's diagnostic framework. Because *Briseno* pervasively infected the CCA's analysis, the decision of that court cannot stand."⁶²

Taken together, *Hall* and *Moore* emphasize that the Eighth Amendment requires adhering to the contemporary clinical understanding of intellectual disability that is reflected in the clinical literature and in the judgments by the professional associations of those who study and work in the field of intellectual disability.⁶³

* * * * * * *

Determining which defendants fall within the scope of the law's protection is the solemn responsibility of state and lower federal courts,⁶⁴ and the following Parts of this Article are intended to offer them assistance with specific issues that will arise in that task.

III. NOTES ON CHANGING TERMINOLOGY

A. The Change from "Mental Retardation" to "Intellectual Disability"

The term "mental retardation" has become the subject of considerable discussion in recent years among professionals in the field. Those professionals and others in the disability community now employ the term "intellectual disability" in place of "mental retardation."⁶⁵

^{60.} *Id.* at 1051-53; *id.* at 1052 ("[T]he medical profession has endeavored to counter lay stereotypes of the intellectually disabled."). For a fuller discussion of stereotypes, see *infra* Part VII.E.

^{61.} Moore, 137 S. Ct. at 1053.

^{62.} *Id.* (citation omitted) (internal quotation omitted).

^{63.} *See id.* at 1044 ("As we instructed in *Hall*, adjudications of intellectual disability should be 'informed by the views of medical experts.' That instruction cannot sensibly be read to give courts leave to diminish the force of the medical community's consensus." (citations omitted)).

^{64.} See Atkins v. Virginia, 536 U.S. 304, 317 (2002).

^{65.} See Robert L. Schalock et al., The Renaming of Mental Retardation: Understanding the Change to the Term Intellectual Disability, 45 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 116 (2007) (explaining that the change in terminology involves no substantive change in the definition); see also AMERICAN ASSOCIATION ON INTELLECTUAL & DEVELOPMENTAL DISABILITIES, USER'S GUIDE: TO ACCOMPANY THE 11TH EDITION OF INTELLECTUAL DISABILITY: DEFINITION, CLASSIFICATION, AND SYSTEMS OF SUPPORTS 72 (2012) [hereinafter AAIDD, USER'S GUIDE 2012] ("The term intellectual disability covers the same population of individuals who were diagnosed previously with mental retardation in number, kind, level, type, and duration of the disability and the need by people with this disability for individualized services and supports. Furthermore, every individual who is or was eligible for a diagnosis of mental retardation is eligible for a diagnosis of intellectual disability."); AMERICAN ASSOCIATION ON INTELLECTUAL AND DEVELOPMENTAL DISABILITIES, INTELLECTUAL DISABILITY: DEFINITION, CLASSIFICATION, AND

These concerns about the term "mental retardation" led the principal organizations in the field to change their names: the organization previously known as the Association for Retarded Citizens of the United States is now known simply as "The Arc," and the American Association on Mental Retardation ("AAMR") has renamed itself "The American Association on Intellectual and Developmental Disabilities" ("AAIDD").⁶⁶ The current (11th) edition of AAIDD's classification manual reflects the change as well.⁶⁷

The concerns that have produced this shift in terminology result, in large part, from the perception that the term "mental retardation" is stigmatizing to individuals who bear the label of the disability.⁶⁸ The intense negative reaction to the label "mental retardation" was a central part of the decision to change terminology within the field.⁶⁹

67. AAIDD 2010, *supra* note 65, at 3. Like previous editions, the latest version of the classification manual is the product of a team of eighteen scholars from a variety of professional disciplines who have a wide range of professional experience with people who have intellectual disabilities. *See id.* at v-vi.

69. Robert L. Schalock et al., The Renaming of Mental Retardation: Understanding the

SYSTEMS OF SUPPORTS, at xvi (11th ed. 2010) [hereinafter AAIDD 2010] (same). The American Psychiatric Association also now uses the term "intellectual disability." AMERICAN PSYCHIATRIC ASS'N, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS 33 (5th ed. 2013) [hereinafter APA, DSM-5] ("Thus, *intellectual disability* is the term in common use by medical, educational, and other professions and by the lay public and advocacy groups.").

^{66.} See Ruth Luckasson & Alya Reeve, Naming, Defining and Classifying in Mental Retardation, 39 MENTAL RETARDATION 47, 48 (2001) (noting that The Arc changed its name); Editor's Note, 45 INTELLECTUAL & DEVELOPMENTAL DISABILITIES at ii (Feb. 2007) (explaining that AAIDD had changed its name). Similarly, the principal professional journals in the field have changed their names. "MENTAL RETARDATION" is now "INTELLECTUAL AND DEVELOPMENTAL DISABILITIES," Editor's Note, 45 INTELLECTUAL & DEVELOPMENTAL DISABILITIES," Editor's Note, 45 INTELLECTUAL & DEVELOPMENTAL DISABILITIES, Editor's Note, 45 INTELLECTUAL & DEVELOPMENTAL DISABILITIES at ii (Feb. 2007), and the "AMERICAN JOURNAL ON MENTAL RETARDATION" is now the "AMERICAN JOURNAL ON INTELLECTUAL AND DEVELOPMENTAL DISABILITIES," Leonard Abbeduto, Editorial, 114 AM. J. ON INELLECTUAL & DEVELOPMENTAL DISABILITIES 1, 1 (2009). Comparable changes have also taken place within government. For example, the U.S. President's Committee on Mental Retardation is now named "President's Committee for People with Intellectual Disabilities." See Exec. Order No. 13309, 3 C.F.R., 2003 Comp., p. 240-41 (2003).

In addition to its definition and classification manual, AAIDD also publishes a "User's Guide" to each edition. *See, e.g.*, AAIDD, USER'S GUIDE 2012, *supra* note 65. Courts often find the explanations in those Guides to be helpful in *Atkins* cases. *See, e.g.*, *Moore*, 137 S. Ct. at 1049; Hall v. Florida, 134 S. Ct. 1986, 1995 (2014); Thomas v. Allen, 614 F. Supp. 2d 1257, 1289-92 (N.D. Ala. 2009).

^{68.} See, e.g., Gary N. Siperstein et al., Sticks, Stones, and Stigma: A Study of Students' Use of the Derogatory Term "Retard," 48 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 126 (2010); Avery B. Albert et al., Sticks, Stones, and Stigma: Student Bystander Behavior in Response to Hearing the Word "Retard," 54 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 391, 397 (2016); AAIDD 2010, supra note 65, at 3; Nicole Ditchman et al., Stigma and Intellectual Disability: Potential Application of Mental Illness Research, 58 REHABILITATION PSYCHOLOGY 206 (2013); Sasha M. Zeedyk et al., Bullying Youth with IDD: Collateral Effects, in MALTREATMENT OF PEOPLE WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 109-35 (John R. Lutzker, Kate Guastaferro & Megan L. Benka-Coker eds., 2016).

It is well established, however, that the change in clinically preferred terminology has made no difference in the substance of our understanding of the disability or the characteristics of those who fall within the definition. AAIDD has made clear that the meaning of the term "intellectual disability" is the same as the meaning of "mental retardation."⁷⁰ Indeed, the definition of "intellectual disability" is identical to the previous definition of "mental retardation."⁷¹ The contours of the group that fell within the definition of mental retardation are precisely the same as the group of individuals who will now be diagnosed as having intellectual disabilities.

In its recent decision in *Hall v. Florida*,⁷² the Supreme Court took note of the changing terminology and adopted the term "intellectual disability" as synonymous with "mental retardation."⁷³

Because of the language in the original Supreme Court decision in *Atkins*, and because of the terms used in the statutes of many of the states, it is anticipated that most courts will continue to encounter the term "mental retardation" in some documents and testimony when adjudicating *Atkins* claims. This should not cause any practical difficulties for the courts, so long as judges bear in mind that most clinical reports will now employ the term "intellectual disability," as will most publications of newer clinical research in the field.

B. Terminology Regarding the Extent of Disability

In addition to the terminology discussed above—"intellectual disability" (previously "mental retardation")—reports and testimony in *Atkins* cases may also include other clinical terms unfamiliar to courts. This is particularly likely when reference is made to reports or other older documents prepared at an earlier time in the defendant's life.⁷⁴

Change to the Term Intellectual Disability, 45 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 116 (2007). This negative reaction also led Congress to change the designation in many federal statutes. *See, e.g.,* Rosa's Law, Pub. L. No. 111-256, 124 Stat. 2643, 2781 (2010).

^{70.} AAIDD 2010, *supra* note 65, at 3 ("The term intellectual disability (ID) is used throughout this Manual to replace the previously used term mental retardation.") (emphasis omitted).

^{71.} See supra note 65.

^{72. 134} S. Ct. 1986 (2014).

^{73.} *Id.* at 1990 ("This opinion uses the term 'intellectual disability' to describe the identical phenomenon."); *id.* at 2001-02 (Alito, J., dissenting); *see also* Brumfield v. Cain, 135 S. Ct. 2269, 2274 n.1 (2015). The Court's shift in terminology has been welcomed in the disability and clinical communities. *See, e.g.*, Tony Mauro, *It's 'Intellectual Disability' Now*, NATIONAL LAW J., June 2, 2014, at 20.

^{74.} For a brief overview of the history of earlier systems of classification and the terminology those systems employed, see Randy W. Kamphaus et al., *A History of Intelligence Test Interpretation, in* CONTEMPORARY INTELLECTUAL ASSESSMENT: THEORIES, TESTS, AND ISSUES 56,

Some of these terms, such as "idiot," "moral idiot,"⁷⁵ "imbecile," "moral imbecile,"⁷⁶ and "feeble-minded," which were commonly used by clinicians in an earlier era,⁷⁷ have long since been abandoned by scholars in the field, and are now viewed as offensive slurs.⁷⁸ The term "mental deficiency," which was in use as recently as the 1980s as a synonym for mental retardation, has also been abandoned.⁷⁹

Courts are more likely to encounter the terms "mild," "moderate," "severe," and "profound" as modifiers of the term "mental retardation." As the terminology suggests, these terms were part of a taxonomy attempting to describe the degree of an individual's mental impairment.⁸⁰ The boundaries between these categories were originally established solely by reference to IQ scores, with "profound" mental retardation describing individuals with IQ scores below 20 or 25, etc.⁸¹ Categorizing individuals on the basis of IQ scores (which are distributed along a normal bell-shaped curve), meant that roughly 80-90% of individuals with mental retardation were identified as having "mild mental retardation."⁸² In the criminal justice system, the percentage of individuals with "mild" mental retardation would be substantially higher, with very few defendants in the "moderate" classification, and practically none in the "severe" or "profound" categories.⁸³

79. See, e.g., James W. Ellis, *It's Time to Change AAMD's Name*, 24 MENTAL RETARDATION 319, 319 (1986) (guest editorial arguing for abandonment of the archaic term "mental deficiency").

^{56-59 (}Dawn P. Flanagan & Patti L. Harrison eds., 3d ed. 2012).

^{75.} See JAMES W. TRENT, JR., INVENTING THE FEEBLE MIND: A HISTORY OF MENTAL RETARDATION IN THE UNITED STATES 20-23 (1994).

^{76.} *Id.* at 84-88; NICOLE HAHN RAFTER, CREATING BORN CRIMINALS 73-92 (1997) (Chapter 4: The Rise of the Moral Imbecile).

^{77.} See, e.g., WILLIAM WOTHERSPOON IRELAND, THE MENTAL AFFECTIONS OF CHILDREN: IDIOCY, IMBECILITY AND INSANITY (1898); see also Phillip M. Ferguson, The Development of Systems of Supports: Intellectual Disability in Middle Modern Times (1800 $_{CE}$ to 1899 $_{CE}$), in THE STORY OF INTELLECTUAL DISABILITY: AN EVOLUTION OF MEANING, UNDERSTANDING, AND PUBLIC PERCEPTION 79, 94-97 (Michael L. Wehmeyer ed., 2013).

^{78.} See, e.g., Martha E. Snell & Ruth Luckasson et al., *Characteristics and Needs of People with Intellectual Disability Who Have Higher IQs*, 47 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 220, 221 (2009) [hereinafter Snell, *Characteristics*].

^{80.} Less frequently, courts may encounter the terms "educable" and "trainable" as modifiers of "mental retardation." "Educable" roughly coincided with "mild" mental retardation, while "trainable" was interchangeable with "moderate" mental retardation. *See, e.g.*, AMERICAN ASSOCIATION ON MENTAL DEFICIENCY, CLASSIFICATION IN MENTAL RETARDATION glossary at 170, 200 (rev. 1983) [hereinafter AAMD 1983]. These terms are now abandoned as archaic. AMERICAN PSYCHIATRIC ASSOCIATION, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS 43 (4th ed. text rev. 2000) [hereinafter APA, DSM-IV-TR] ("This outdated term ['trainable'] should not be used because it wrongly implies that people with Moderate Mental Retardation cannot benefit from educational programs.").

^{81.} AAMD 1983, supra note 80, at 13.

^{82.} See, e.g., Snell, Characteristics, supra note 77, at 220.

^{83.} See Gilbert S. Macvaugh, III & Mark D. Cunningham, Atkins v. Virginia: Implications

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The American Association on Mental Retardation (now AAIDD) abandoned the mild/moderate/severe/profound classification more than two decades ago, because it found the focus on classifying people with mental retardation on the basis of their IQ scores was less helpful than focusing on their adaptive functioning and their individual needs for supports.⁸⁴ The American Psychiatric Association lists the four terms in its diagnostic manual, but differentiates the described sub-groups by adaptive deficits rather than by IQ scores.⁸⁵ Whatever the clinical merits might be, these labels are unlikely to be particularly helpful to *Atkins* courts in their task of resolving the diagnostic issue before them.⁸⁶ Essentially all the individuals in the criminal justice system—and therefore all the defendants in *Atkins* cases—fall within the same subcategory, "mild."⁸⁷ As a result, the label "mild" generally lacks

Snell, Characteristics, supra note 77, at 228.

85. APA, DSM-5, *supra* note 65, at 33 ("The various levels of severity are defined on the basis of adaptive functioning, and not IQ scores, because it is adaptive functioning that determines the level of supports required. Moreover, IQ measures are less valid in the lower end of the IQ range."). By contrast, the earlier version of the APA's manual had classified four levels of severity based on IQ scores. APA, DSM-IV-TR, *supra* note 80, at 42-44.

87. Marc J. Tassé, Adaptive Behavior Assessment and the Diagnosis of Mental Retardation in Capital Cases, 16 APPLIED NEUROPSYCHOLOGY 114, 117 (2009) [hereinafter Tassé, Adaptive Behavior and Diagnosis] (reporting that because the "vast majority" of people with mental

and Recommendations for Forensic Practice, 37 J. PSYCHIATRY & LAW 131, 142 (2009) [hereinafter Macvaugh & Cunningham, Forensic Practice] ("[V]irtually all [capital offenders with mental retardation] are within the mild category of mental retardation."); Daniel J. Reschly, *Documenting the Developmental Origins of Mild Mental Retardation*, 16 APPLIED NEUROPSYCHOLOGY 124, 125 (2009) [hereinafter Reschly, *Documenting Origins*] ("Death penalty appeals involving claims of MR [mental retardation] ... virtually always involve MMR [mild mental retardation].").

^{84.} AMERICAN ASSOCIATION ON MENTAL RETARDATION, MENTAL RETARDATION: DEFINITION, CLASSIFICATION, AND SYSTEMS OF SUPPORTS 34 (9th ed. 1992) [hereinafter AAMR 1992]; see also Gary N. Siperstein & Melissa A. Collins, *Intellectual Disability, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 21, 25 (Edward A. Polloway ed., 2015) (describing the debate in the clinical community about the subcategories).

One group of distinguished clinicians has recently observed:

Once an individual's IQ is known (which was essential for the diagnosis) nothing further is gained by classification of that IQ score into an IQ band or range. . . To attempt to create different diagnostic criteria for the already small group of individuals with intellectual disability, and to separate and identify them into diagnostic groups (mild intellectual disability and moderate intellectual disability, for example) is not supported and may introduce additional error. This notion of separate diagnoses would take us backwards to the incorrect stereotype that individuals with intellectual disability with higher IQs have "mild" needs, and those with lower IQs have "profound" needs, neither of which provides any specificity for designing individualized supports.

^{86.} See Ellis & Luckasson, *Defendants, supra* note 10, at 423 ("Mildly retarded people have IQ scores in the range between 50 to 55 and approximately 70, and thus have a substantial disability. Judges and other criminal justice personnel unfamiliar with this classification scheme may find the labels of 'mild' and 'moderate' to be euphemistic descriptions of individuals at those levels of disability.").

descriptive or analytical usefulness in distinguishing those who are within the protection of *Atkins*.

Courts may also encounter a reference, particularly in older documents and records, to an individual's supposed "mental age," a term that was once used in the field of intellectual disability to describe the relative severity of an individual's intellectual limitation.⁸⁸ An individual's "mental age" can simultaneously underestimate and overestimate the intellectual functioning of the adult to whom it is applied. An adult with intellectual disability will have the physical development and some of the interests and experiences of his nondisabled age peers; a "mental age" equivalence to children represents a substantial underestimation in that sense.⁸⁹ Mental age substantially *over*estimates the ability of adults with intellectual disability to use logic and foresight in addressing and solving problems.⁹⁰

Another frequently encountered term, "developmental disabilities," has multiple meanings, and care must be taken to make certain what an author (or individual clinician) means by the term in a particular context. Sometimes the term is used loosely as a synonym for "mental retardation" or "intellectual disability." More formally (and frequently), it is an umbrella term which encompasses intellectual disability, but also some other disabilities that originate in childhood.⁹¹ Much of the clinical

91. See, e.g., 42 U.S.C. § 15002(8)(A) (2012) (defining developmental disabilities in

retardation fall within the so-called "mild mental retardation" category, "[t]he vast majority of 'Atkins claims,' if not all, will likely involve individuals who have intellectual and adaptive functioning levels that are near the diagnostic cut-off range."); *see* Moore v. Texas, 137 S. Ct. 1039, 1051 (2017) ("Mild levels of intellectual disability, although they may fall outside Texas citizens' consensus, nevertheless remain intellectual disabilities, and States may not execute anyone in the *entire category* of [intellectually disabled] offenders." (alteration in original) (citations omitted) (internal quotation omitted)).

^{88.} See, e.g., AAMD 1983, supra note 80, glossary at 183 (defining "mental age"). An individual's "mental age" was calculated as the chronological age of children without intellectual disability whose average IQ test performance was equivalent to that of the individual who did have intellectual disability. See, e.g., DAVID WECHSLER, THE MEASUREMENT OF ADULT INTELLIGENCE 20-36 (1st ed. 1939). The equivalence between children who do not have intellectual disability and adults who do have ID was always, of course, imprecise, and the terminology has not been used in references like AAIDD's classification manuals for more than thirty years. See, e.g., AAMR 1992, supra note 84.

^{89.} See Penry v. Lynaugh (Penry I), 492 U.S. 302, 339-40 (1989).

^{90.} See id. at 339; Herman H. Spitz, Intellectual Extremes, Mental Age, and the Nature of Human Intelligence, 28 MERRILL-PALMER QUARTERLY 167, 171 (1982) ("Although the retarded and gifted had equal MAs [mental ages] they arrived at these MAs by different means. Consequently, it makes no sense to talk about the two groups being at the same developmental level, or being able to perform at the same cognitive level."). Somewhat less problematic are references which courts may encounter that compare the adult defendant with younger persons regarding a specific academic ability (e.g. "reads at a third-grade level").

literature on developmental disabilities focuses primarily on individuals with intellectual disability.⁹²

Another term courts may encounter is "borderline," which is, unfortunately, a term of considerable ambiguity. The word is sometimes used to describe individuals who fall just outside the definition of intellectual disability. This could include a person whose measured intelligence does not meet the definition's requirement, or someone who lacks sufficient impairment in adaptive behavior. This is the sense in which the term is most frequently encountered in the published clinical literature.⁹³ But the term is also sometimes used more informally to

Developmental Disabilities Assistance and Bill of Rights legislation); CAL. WELF. & INST. CODE § 4512(a) (West 2016) ("Developmental Disability' means a disability that originates before an individual attains 18 years of age; continues, or can be expected to continue, indefinitely; and constitutes a substantial disability for that individual.... [T]his term shall include intellectual disability, cerebral palsy, epilepsy, and autism. This term shall also include disabling conditions found to be closely related to intellectual disability or to require treatment similar to that required for individuals with an intellectual disability, but shall not include other handicapping conditions that are solely physical in nature."); *see also* APA, DSM-5, *supra* note 65, at 31 (including Intellectual Disabilities within the category of "Neurodevelopmental Disorders").

^{92.} See Samuel L. Odom et al., *The Construct of Developmental Disabilities, in* HANDBOOK OF DEVELOPMENTAL DISABILITIES 3-14 (Samuel L. Odom et al. eds., 2007) [hereinafter ODOM, HANDBOOK OF DD].

Another term that courts may occasionally encounter, particularly in pediatric or school records is "developmental delay." *See* Bruce K. Shapiro & Mark L. Batshaw, *Developmental Delay and Intellectual Disability, in* CHILDREN WITH DISABILITIES 291 (Mark L. Batshaw, Nancy J. Roizen & Gaetano R. Lotrecchiano eds., 7th ed. 2013) ("The term global developmental delay is most commonly used as a temporary diagnosis in young children at risk for developmental disabilities, especially intellectual disabilities. In this context, it indicates a failure to achieve age-appropriate neurodevelopmental milestones in the areas of language, motor, and social-adaptive development.") (emphasis omitted); Edward A. Polloway et al., *Mild Intellectual Disabilities: Legacies and Trends in Concepts and Educational Practices*, 45 EDUC. & TRAINING IN AUTISM & DEVELOPMENTAL DISABILITIES 54, 58 (2010) ("It is reasonable to consider that some of the children identified as developmentally delayed will meet the identification criteria for intellectual disability once the age of nine is reached and the term developmental delay is no longer acceptable for usage under IDEA.").

^{93.} See AAMD 1983, supra note 80, at 6; APA, DSM-5, supra note 65, at 727 ("Borderline Intellectual Functioning"); APA, DSM-IV-TR, supra note 80, at 740; Snell, Characteristics, supra note 77, at 229. The term appears to be used somewhat more frequently in other countries than in the U.S. See, e.g., Minna Peltopuro et al., Borderline Intellectual Functioning: A Systematic Literature Review, 52 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 419, 423 (2014); see also id. at 420 ("Since 1973, BIF [borderline intellectual functioning] has not been included in any diagnostic category.").

Another potential source of confusion arises from the fact that the word "borderline" is also used for an entirely unrelated mental *illness*, "borderline personality disorder," sometimes shorthanded by mental health professionals as just "borderline." *See* APA, DSM-5, *supra* note 65, at 663 ("The essential feature of borderline personality disorder is a pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity that begins by early childhood and is present in a variety of contexts."); APA, DSM-IV-TR, *supra* note 80, at 706 (stating same); *see also* JOHN G. GUNDERSON & PAUL S. LINKS, BORDERLINE PERSONALITY DISORDER: A CLINICAL GUIDE 1 (2d ed. 2008) ("[The Borderline Personality Disorder] (BPD)

describe an individual who may have intellectual disability or may not; which is to say, someone whom initial observation estimates to be in the "border" area of intellectual disability, indicating the need for more careful and thorough evaluation. Courts need to be cautious because it is not always clear, particularly from older documents, which of the meanings is intended.

IV. THE DEFINITION OF INTELLECTUAL DISABILITY: AN OVERVIEW

The phenomenon of intellectual disability has been recognized for centuries. Although various descriptions have been formulated over the ages,⁹⁴ the current clinical understanding of intellectual disability focuses on a commonly accepted consensus that has endured for more than half a century.

All the definitions of intellectual disability adopted by legislatures and courts follow the same basic model. The definition has three elements: (1) significant impairments in intellectual functioning; (2) deficits in real-world skills and abilities; and (3) onset of the disability before the individual became an adult. There are minor variations in the

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diagnosis entered the American Psychiatric Association's DSM-III in 1980.... The growth in the recognition and use of this diagnosis during the period from 1975 to 1990 has been remarkable. It is easily the most widely and commonly used diagnosis for personality disorders in modern clinical practice.") (internal citations omitted); John G. Gunderson, Mary C. Zanarini & Cassandra L. Kisiel, *Borderline Personality Disorder, in* THE DSM-IV PERSONALITY DISORDERS 141-57 (W. John Livesley ed., 1995); JEROME KROLL, THE CHALLENGE OF THE BORDERLINE PATIENT: COMPETENCY IN DIAGNOSIS AND TREATMENT (1988); BIOLOGICAL AND NEUROBEHAVIORAL STUDIES OF BORDERLINE PERSONALITY DISORDER (Kenneth R. Silk ed., 1994).

Compounding the potential confusion, the psychiatric diagnosis of "borderline personality disorder" has been diagnosed in some people with intellectual disability. *See* Lawrence Dana, *Personality Disorder in Persons with Mental Retardation: Assessment and Diagnosis, in* MENTAL HEALTH ASPECTS OF MENTAL RETARDATION 130, 137 (Robert J. Fletcher & Anton Dosen eds., 1993). As a result, courts and evaluators may be well-advised to avoid the use of the term as a descriptor of intellectual impairment. *See* ALAN S. KAUFMAN & ELIZABETH O. LICHTENBERGER, ASSESSING ADOLESCENT AND ADULT INTELLIGENCE 414 (3d ed. 2006) [hereinafter KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE] ("The term *Borderline* is indecisive, and may be confused with the *DSM-IV* psychiatric label of the same name. Examiners ... may wish to ... substitut[e] Well Below Average for Borderline.").

^{94.} See STEPHEN B. RICHARDS, MICHAEL P. BRADY & RONALD L. TAYLOR, COGNITIVE AND INTELLECTUAL DISABILITIES: HISTORICAL PERSPECTIVES, CURRENT PRACTICES, AND FUTURE DIRECTIONS 3-16 (2d ed. 2015); R.C. SCHEERENBERGER, 1 A HISTORY OF MENTAL RETARDATION 3-87 (1983); Pallab K. Maulik, Catherine K. Harbour & Jane McCarthy, *Epidemiology, in* HANDBOOK OF PSYCHOPATHOLOGY IN INTELLECTUAL DISABILITY: RESEARCH, PRACTICE, AND POLICY, at 9, 10 (Elias Tsakanikos & Jane McCarthy eds., 2014) [hereinafter PSYCHOPATHOLOGY IN ID] ("Ancient Greeks and Romans believed that children with intellectual disabilities were born as a result of having angered the Gods, and children with severe ID would be allowed to die of exposure as infants rather than permitted to grow up.").

terms that are used to describe these elements.⁹⁵ However, they are all essentially describing the same phenomenon,⁹⁶ and identifying the same

Other states adopted the definition published by the American Association on Mental Retardation in 1992:

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 1992, *supra* note 84, at 1 (emphasis omitted). This was the definition used by the Supreme Court in *Atkins*. 536 U.S. 304, 308 n.3 (2002).

The third form of the definition first appeared in AAIDD's classification manual published in 2002. "Mental retardation is 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." AMERICAN ASSOCIATION ON MENTAL RETARDATION, MENTAL RETARDATION: DEFINITION, CLASSIFICATION, AND SYSTEMS OF SUPPORTS 1 (10th ed. 2002) [hereinafter AAMR 2002]. This definition was retained as the definition for intellectual disability. AAIDD 2010, *supra* note 65, at 1 ("Intellectual disability is characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. This disability originates before age 18.").

The minor variations among these definitions are primarily focused on the terminology characterizing deficits in adaptive behavior, and will be discussed *infra* Part IV.B.

96. As indicated in the previous note, the definitional models for legislation, as well as the forms of the definition that will be encountered most frequently by courts, are the formulations adopted by the American Association on Intellectual and Developmental Disabilities (AAIDD). This reflects the fact that AAIDD's expertise in the field, as well as the direct clinical experience of its members, has made it the most widely accepted definition. *See, e.g.*, Jeffrey Ditterline & Thomas Oakland, *Relationships Between Adaptive Behavior and Impairment, in* ASSESSING IMPAIRMENT: FROM THEORY TO PRACTICE 31, 34 (Sam Goldstein & Jack A. Naglieri eds., 2009) ("The AAIDD and its predecessor, the AAMR, have been the most authoritative voice in reference to issues pertaining to persons with mental retardation.").

However, courts may also encounter reports and testimony referring to a definition propounded by the American Psychiatric Association. The most recent edition of its classification manual is AMERICAN PSYCHIATRIC ASS'N, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS (5th ed. 2013) (DSM-5). While the DSM-5 is focused primarily on categorizing mental *illness*, it also includes a definition of "Intellectual Disability (Intellectual Developmental Disorder)," which is almost identical to AAIDD's definition:

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

A. Deficits in intellectual functions, such as reasoning, problem solving, planning, abstract thinking, judgment, academic learning, and learning from experience,

^{95.} There are three definitional variants that courts might be likely to encounter in adjudicating *Atkins* cases:

A number of states, particularly those that adopted statutes in the 1980s and 1990s, adopted the basic form of the American Association on Mental Deficiency's (now AAIDD's) classification manual published in 1983. "Mental retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period." AAMD 1983, *supra* note 80, at 1. This was the definition used by the U.S. Supreme Court in *Penry I*. 492 U.S. 302, 308 n.1 (1989).

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group of individuals as having intellectual disability.⁹⁷

It is worth noting that the formulation and the relatively minor re-formulations of these definitions by scientists and clinicians over the years have had as their major purpose increasing diagnostic accuracy.⁹⁸ This focus on precision in the diagnostic process has also been intended to enhance the ability of clinicians to improve the educational and other services that we provide to individuals who have intellectual disability.

C. Onset of intellectual and adaptive deficits during the developmental period. APA, DSM-5, *supra* note 65, at 33.

Courts may occasionally be confronted with evaluations of a defendant in which the clinician had used the previous edition of the APA manual's definition, AMERICAN PSYCHIATRIC ASS'N, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS (4th ed. text rev. 2000) (APA, DSM-IV-TR):

The essential feature of Mental Retardation is significantly subaverage general intellectual functioning (Criterion A) that is accompanied by significant limitations in adaptive functioning in at least two of the following skill areas: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety (Criterion B). The onset must occur before age 18 years (Criterion C).

APA, DSM-IV-TR, *supra* note 80, at 41. This definition is nearly identical to the AAMR's definition in its 1992 manual. *See* AAMR 1992, *supra* note 84, at 1.

97. It is widely accepted that the causes of intellectual disability are varied, and for a considerable number of individuals who have the disability, the cause is unknown. AAIDD 2010, *supra* note 65, at 59 ("[E]ven the most extensive and up-to-date genetic and biomedical testing will identify an etiology in less than half of all cases."); Suzanne McDermott et al., *Epidemiology and Etiology of Mental Retardation, in* HANDBOOK OF INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 3, 9 (John W. Jacobson, James A. Mulick & Johannes Rojahn eds., 2007) ("In approximately half of the cause of MR the cause is unknown.").

For a more general discussion of the etiology of intellectual disability, see AAMR 2002, *supra* note 95, at 123-41 (rejecting the previous bright-line distinction between biological and psychosocial causes in favor of a multifactorial approach); APA, DSM-5, *supra* note 65, at 38 ("Intellectual disability is a heterogeneous condition with multiple causes."); APA, DSM-IV-TR, *supra* note 80, at 41 ("Mental retardation has many etiologies and may be seen as a final common pathway of various pathological processes that affect the functioning of the central nervous system."); Ludwik S. Szymanski & Maija Wilska, *Childhood Disorders: Mental Retardation, in* 1 PSYCHIATRY 687, 690-700 (Allan Tasman, Jerald Kay & Jeffrey A. Lieberman eds., 2d ed. 2003) [hereinafter Szymanski & Wilska, *Mental Retardation*]; see also Jennifer McLaren & Susan E. Bryson, *Review of Recent Epidemiological Studies of Mental Retardation: Prevalence, Associated Disorders, and Etiology*, 92 AM. J. MENTAL RETARDATION 243, 247-51 (1987); Kim Van Naarden Braun et al., *The Epidemiology of Intellectual Disabilities, in* FETAL AND NEUROSURGERY 876 (Malcolm I. Levene & Frank A. Chervenak eds., 4th ed. 2009).

98. See, e.g., AAIDD-2010, supra note 67, preface at xiii-xvi.

confirmed by both clinical assessment and individualized, standardized intelligence testing.

B. 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.

While the definition has remained largely unchanged over the last three or four decades, during that same period, several aspects of our public policies have changed substantially.⁹⁹ Facilitating and accommodating these changes has been a focus of the professional organizations as they continue to address classification issues.¹⁰⁰ The precise application of these issues to legal questions involving the implementation of public policies may come before the courts in cases involving such issues as special education¹⁰¹ or community services.¹⁰² Those broader policy questions have more limited relevance, of course, to courts adjudicating *Atkins* cases in the criminal justice system, where the focus is directed to the accuracy of individual clinical diagnoses.

The remainder of this Part of the Article will briefly discuss the three components of the definition of intellectual disability. Later Subparts will address, in more detail, specific clinical issues likely to arise in the adjudication of *Atkins* cases.¹⁰³

A. Intellectual Functioning

The essence of the definition of intellectual disability is that it consists, at its core, of a substantial, measurable impairment in intellectual functioning, and that this impairment is accompanied by a

^{99.} One prominent example has been the movement away from institutional confinement of people with mental retardation and the creation of community alternatives. *See* DISABILITY AT THE DAWN OF THE 21ST CENTURY AND THE STATE OF THE STATES (David Braddock et al. eds., 2002); JAMES W. TRENT, JR., INVENTING THE FEEBLE MIND: A HISTORY OF MENTAL RETARDATION IN THE UNITED STATES 250-65 (1994). Another example has been prohibiting the categorical exclusion of children with intellectual disabilities from public schools. *See* RUTH COLKER & PAUL D. GROSSMAN, THE LAW OF DISABILITY DISCRIMINATION 413-20 (8th ed. 2013); LAURA ROTHSTEIN & SCOTT F. JOHNSON, SPECIAL EDUCATION LAW 12-23 (5th ed. 2014). In 1975, the Education for All Handicapped Children Act, Pub. L. No. 94-142, 89 Stat. 773 (codified as amended at the Individuals with Disabilities Education Act, 20 U.S.C. § 1400 *et seq.*) was enacted. *See generally Endrew F. v. Douglas County Sch. Dist.*, 137 S. Ct. 988 (2017); *Fry v. Napoleon Community Sch.*, 137 S. Ct. 743, 748 (2017) ("The Individuals with Disabilities Education Act (IDEA or Act), 84 Stat. 175, as amended, 20 U. S. C. § 1400 *et seq.*, ensures that children with disabilities receive needed special education services.").

^{100.} See, e.g., AAMR 2002, supra note 95, at 168 ("The supports paradigm has revolutionized how we provide education and habilitation services to people with mental retardation and closely related disabilities."); see also Todd R. Risley & Dennis H. Reid, Management and Organizational Issues in the Delivery of Psychological Services for People with Mental Retardation, in MANUAL OF DIAGNOSIS AND PROFESSIONAL PRACTICE IN MENTAL RETARDATION 383, 383 (John W. Jacobson & James A. Mulick eds., American Psychological Association, 1996) ("[D]eveloping effective psychological treatment requires a comprehensive understanding of human development, including developmental, social, and psychoeducational aspects.").

^{101.} See 20 U.S.C. \$ 1401(3)(A)(i) (2012) (noting that children with intellectual disabilities are included within the definition of "child with a disability").

^{102.} See Olmstead v. L.C., 527 U.S. 581 (1999).

^{103.} See infra Parts V, VI.D, VII.B.

real-world disability which significantly limits functioning in the individual's life.¹⁰⁴ The starting point in the diagnostic process (and, thus, the first prong of the definition) is therefore assessing the impairment in intellectual functioning.¹⁰⁵

The development of psychometric instruments to measure intellectual functioning began in the early years of the twentieth century.¹⁰⁶ Our scientific understanding of those instruments evolved over the century, but has become substantially more refined over the last couple of decades.¹⁰⁷ Psychologists and other clinicians now have a substantially clearer view of the strengths and weaknesses of IQ tests, as well as their proper administration and interpretation. But while IQ tests have become considerably more sophisticated, the interpretation of their results still requires experienced and knowledgeable professional judgment.

To satisfy the intellectual impairment prong of the definition of intellectual disability, an individual's measured intelligence must be "significantly subaverage." "Significantly subaverage" is a term of art indicating that the individual's measured intelligence falls approximately two standard deviations below the mean score.¹⁰⁸ As a practical matter, it

107. See infra Part VI for a discussion of IQ tests and their administration.

108. AAIDD 2010, *supra* note 65, at 31 ("The 'significant limitations in intellectual functioning' criterion for a diagnosis of intellectual disability is an IQ score that is *approximately two standard deviations below the mean*, considering the standard error of measurement for the

^{104.} See Everington & Olley, *Defining and Diagnosing, supra* note 15, at 13. ("[M]ental retardation is a problem in learning; people with intellectual disabilities learn more slowly and with a lesser degree of complexity.").

^{105.} In actual practice of course, it is quite likely that inquiry into the possibility that an individual has intellectual disability originated with someone's—a parent, a teacher, or someone else—observation that the individual appeared to have difficulty learning or trouble in performing ordinary life functions. APA, DSM-IV-TR, *supra* note 80, at 42 ("Impairments in adaptive functioning, rather than a low IQ, are usually the presenting symptoms in individuals with Mental Retardation.").

^{106.} For an overview of the development of the testing of intelligence, see KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, *supra* note 93, at 3-7 ("A Short History of IQ Tests"); ALAN S. KAUFMAN ET AL., INTELLIGENT TESTING WITH THE WISC–V, at 7-11 (2016); John D. Wasserman & David S. Tulsky, *A History of Intelligence Assessment, in* CONTEMPORARY INTELLECTUAL ASSESSMENT: THEORIES, TESTS, AND ISSUES 3, 3-22 (Dawn P. Flanagan & Patti L. Harrison eds., 2d ed. 2005); ANNE ANASTASI & SUSANA URBINA, PSYCHOLOGICAL TESTING 32-38 (7th ed. 1997) [hereinafter ANASTASI & URBINA, PSYCHOLOGICAL TESTING]; LEWIS R. AIKEN, ASSESSMENT OF INTELLECTUAL FUNCTIONING 1-21 (2d ed. 1996) [hereinafter AIKEN, ASSESSMENT OF INTELLECTUAL FUNCTIONING 1-21 (2d ed. 1996) [hereinafter AIKEN, ASSESSMENT OF INTELLECTUAL FUNCTIONING]. For discussion of the development of IQ testing in America, see LEILA ZENDERLAND, MEASURING MINDS: HENRY HERBERT GODDARD AND THE ORIGINS OF AMERICAN INTELLIGENCE TESTING (1998); see also ALFRED BINET & TH. SIMON, THE INTELLIGENCE OF THE FEEBLE-MINDED (Elizabeth S. Kite trans., 1916); JOSEPH PETERSON, EARLY CONCEPTIONS AND TESTS OF INTELLIGENCE (1926); DAVID WECHSLER, THE MEASUREMENT OF ADULT INTELLIGENCE (1st ed. 1939). For a more general overview of the field, see R. MICHAEL FURR & VERNE R. BACHARACH, PSYCHOMETRICS: AN INTRODUCTION (2d ed. 2014).

has generally been understood that this indicates that fewer than roughly three percent of the population could be classified as having intellectual disability.¹⁰⁹

The requirement of "two standard deviations" can then be expressed as IQ scores in order to ascertain whether an individual meets the first prong of the definition. The clinical organizations that formulate the definition have identified the upper boundary for mental retardation at IQ scores of "approximately 70 to 75, taking into account measurement error."¹¹⁰

110. AAMR 2002, *supra* note 95, at 58; *see also* Snell, *Characteristics, supra* note 77, at 229. The American Psychiatric Association has reached the same conclusion. APA, DSM-5, *supra* note 65, at 37 ("[A] person with an IQ score above 70 may have such severe adaptive behavior problems in social judgment, social understanding, and other areas of adaptive functioning that the person's actual functioning is comparable to that of individuals with a lower IQ score."); APA, DSM-IV-TR, *supra* note 80, at 48 ("Thus, it is possible to diagnose Mental Retardation in individuals with IQ scores between 71 and 75 if they have significant deficits in adaptive behavior that meet the criteria for Mental Retardation."). This formulation is of long standing in the field of intellectual disability. *See, e.g.*, AAMR 1992, *supra* note 84, at 14 ("If the IQ score is valid, this will generally result in a score of approximately 70 to 75 or below. The upper boundary of IQs for use in classification of mental retardation is flexible to reflect the statistical variance inherent in all intelligence tests and the need for clinical judgment by a qualified psychological examiner."); AAMD 1983, *supra* note 80, at 23 ("[T]he recommended ceiling may be extended up through IQ 75."); *see* Atkins v. Virginia, 536 U.S. 304, 309 n.5 (2002) ("It is estimated that between 1 and 3 percent of the

specific instruments used and the instruments' strengths and limitations." (emphasis added)); AAMR 2002, *supra* note 95, at 58 ("The 'intellectual functioning' criterion for diagnosis of mental retardation is [an IQ score that is] *approximately two standard deviations below the mean*, considering the SEM [standard error of measurement] for the specific assessment instruments used and the instruments' strengths and limitations." (emphasis added)). Application of the Standard Error of Measurement will be discussed *infra* Part VI.C.

^{109.} See, e.g., Marc J. Tassé Robert L. Schalock, Giulia Balboni, Hank Bersani, Jr., Sharon A. Borthwick-Duffy, Scott Spreat, David Thissen, Keith F. Widman & Dalun Zhang, The Construct of Adaptive Behavior: Its Conceptualization, Measurement, and Use in the Field of Intellectual Disability, 117 AM. J. ON INTELLECTUAL & DEVELOPMENTAL DISABILITIES 291, 298 (2012) [hereinafter Tassé et al., Construct of Adaptive Behavior] ("On the basis of known properties of the normal distribution, approximately 2.28% of the population falls below an IQ score that is two standard deviations below the population mean. In a sense, the operational definition of a significant deficit in intelligence is a score that is approximately in the bottom 2% of the general population."); MARTHA A. FIELD & VALERIE A. SANCHEZ, EQUAL TREATMENT FOR PEOPLE WITH MENTAL RETARDATION: HAVING AND RAISING CHILDREN 23 (1999) ("[B]etween .67 and 3 percent of the total U.S. population has mental retardation."); APA, DSM-IV-TR, supra note 80, at 46 ("The prevalence rate of Mental Retardation has been estimated at approximately 1%. However, different studies have reported different rates depending on definitions used, methods of ascertainment, and population studied."); MARC J. TASSÉ & JOHN H. BLUME, INTELLECTUAL DISABILITY AND THE DEATH PENALTY 4-5 (2018) ("[T]he actual estimated prevalence (i.e., the number of people who have ID) is closer to 1.04%"). Determining the precise incidence of mental retardation in the overall population is a surprisingly complex endeavor for clinicians and epidemiologists. See, e.g., Sheryl A. Larson, K. Charlie Lakin, et al., Prevalence of Mental Retardation and Developmental Disabilities: Estimates from the 1994/1995 National Health Interview Survey Disability Supplements, 106 AM. J. MENTAL RETARDATION 231 (2001). Fortunately, achieving such precision is not required for the adjudication of Atkins cases.

B. Deficits in Adaptive Behavior

The second prong of the definition inquires about the impact that the impaired intellectual functioning has in the individual's everyday life.¹¹¹ Clinicians and scholars in the field have long recognized that low scores on IQ testing should not be enough to label an individual as having intellectual disability.¹¹² (The importance of adaptive deficits was also emphasized in the recent decisions by the Supreme Court in *Hall v*. *Florida* and *Moore v*. *Texas*.¹¹³) The description of the requisite deficit has changed somewhat over time, but the purpose has remained the same: to exclude from the definition any individuals whose impaired performance on IQ testing was not accompanied by substantially disabling impairment in functioning in life.¹¹⁴ In other words, the goal of

112. See Henry Leland, Adaptive Behavior, in 1 ENCYCLOPEDIA OF HUMAN INTELLIGENCE 19, 19 (Robert J. Sternberg ed., 1994) [hereinafter ENCYCLOPEDIA OF INTELLIGENCE] ("[T]he first recorded measurement of adaptive behavior was probably Felix Voisin [in 1843]."). See generally Robert H. Bruininks, Martha Thurlow & Cheri J. Gilman, Adaptive Behavior and Mental Retardation, 21 J. SPECIAL EDUCATION 69 (1987).

113. *Hall*, 134 S. Ct. at 1991 ("[A]n individual's ability or lack of ability to adapt or adjust to the requirements of daily life, and success or lack of success in doing so, is central to the framework followed by psychiatrists and other professionals in diagnosing intellectual disability."); *id.* at 2001 ("Intellectual disability is a condition, not a number."); *id.* ("Freddie Lee Hall may or may not be intellectual disability, including deficits in adaptive functioning over his lifetime."); *Moore*, 137 S. Ct. at 1050 ("[W]e do not end the intellectual-disability inquiry, one way or the other, based on Moore's IQ score. Rather, in line with *Hall*, we require that courts continue the inquiry and consider other evidence of intellectual disability where an individual's IQ score, adjusted for the test's standard error, falls within the clinically established range for intellectual-functioning deficits.").

114. For a discussion of the evolution of the adaptive behavior component, see Kazuo Nihira, *Adaptive Behavior: A Historical Overview, in* ADAPTIVE BEHAVIOR AND ITS MEASUREMENT: IMPLICATIONS FOR THE FIELD OF MENTAL RETARDATION 7 (Robert L. Schalock ed., 1999) [hereinafter Schalock, ADAPTIVE BEHAVIOR]; Tassé et al., *Construct of Adaptive Behavior, supra*

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 mental retardation definition." (emphasis added)); MANUAL OF DIAGNOSIS AND PROFESSIONAL PRACTICE IN MENTAL RETARDATION 15 (John W. Jacobson & James A. Mulick eds., American Psychological Association, 1996) (identifying "70-75" as the upper boundary of mental retardation); see also Moore v. Texas, 137 S. Ct. 1039, 1049 (2017); Hall v. Florida, 134 S. Ct. 1986, 1994-95 (2014).

^{111.} As the leading diagnostic manual in the field has observed: "Subaverage intellectual functioning... is a necessary but insufficient criterion to establish a diagnosis of mental retardation." AAMR 2002, *supra* note 95, at 66 (emphasis omitted); *see also* AAIDD 2010, *supra* note 65, at 44; ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 248 ("The current definition reaffirms the notion that intellectual limitation is a necessary but not a sufficient condition for mental retardation."); Reschly, *Documenting Origins, supra* note 83, at 132 ("No single information element or source is ever sufficient to diagnose MMR [mild mental retardation] developmentally or during the adult years. Even a very low score on a single measure of general intellectual functioning is never sufficient. All valid MMR diagnoses require consideration of a broad variety of information. Four types of information should be considered: (a) tests given directly to the individual, (b) observations of the individual in relevant settings, (c) records from all available sources, and (d) interviews with relevant persons.").

this prong of the definition is to limit the diagnosis of intellectual disability to people who have an actual, significant, disability.¹¹⁵

It should be noted that over the fifty years that adaptive behavior deficits have been part of the clinical definition of intellectual disability, it has never required that clinicians demonstrate or conclude that the deficits were *caused* by the intellectual impairment.¹¹⁶ The lack of a requirement that diagnosticians prove that one manifestation was caused by the other derives from the fact that clinicians lack the tools or scientific standards to establish such a proof.¹¹⁷

117. Marc J. Tassé et al., *The Relation Between Intellectual Functioning and Adaptive Behavior in the Diagnosis of Intellectual Disability*, 54 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 381, 387 (2016) ("Demonstrating a causative relationship between these two criteria for a diagnosis of ID is clinically impossible and irrelevant, and attempting to do so would mistakenly add a fourth criterion to the diagnostic process."). As AAMR explained in 1992, the requirement that the limitations be "related" was to establish that "[t]he limitations in adaptive skills are more closely related to the intellectual limitation than to some other circumstance such as cultural or linguistic diversity or sensory limitation." AAMR 1992, *supra* note 84, at 6. Thus, if an individual had deficits in the area of communication (which was then one of the definition's listed skill areas) because he was deaf, that fact, without more, would not demonstrate that he had mental

note 109, at 292-93; Thomas Oakland & Patti L. Harrison, *Adaptive Behaviors and Skills: An Introduction, in* ADAPTIVE BEHAVIOR ASSESSMENT SYSTEM–II: CLINICAL USE AND INTERPRETATION 3, 7-13 (Thomas Oakland & Patti L. Harrison eds., 2008).

^{115.} Tassé et al., *Construct of Adaptive Behavior, supra* note 109, at 291 (Adaptive behavior addresses "skills that have been learned and are performed by people in their everyday lives." (citing AAIDD 2010, *supra* note 65, at 43)).

Conversely, individuals who have significant deficits in adaptive behavior but who do not have the requisite deficits in intellectual functioning do not fall within the clinical definition of ID. Some of these individuals may be diagnosed under the category of "Autism Spectrum Disorder." *See* APA, DSM-5, *supra* note 65, at 50-59. However, it is important to note that some people with Autism Spectrum Disorder will also have intellectual impairment that places them within the definition of intellectual disability. *Id.* at 40. For a fuller analysis of the phenomenon of comorbidity, see *infra* Part V ("Defendants with Multiple Disabilities").

^{116.} Marc J. Tassé et al., The Relation Between Intellectual Functioning and Adaptive Behavior in the Diagnosis of Intellectual Disability, 54 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 381 (2016); see, e.g., AMERICAN ASSOCIATION ON MENTAL DEFICIENCY, A MANUAL ON TERMINOLOGY AND CLASSIFICATION IN MENTAL RETARDATION 3 (2d ed. 1961) (Impairment in intellectual functioning "is associated with impairment in adaptive behavior." (emphasis added)); AMERICAN ASSOCIATION ON MENTAL DEFICIENCY, MANUAL ON TERMINOLOGY AND CLASSIFICATION IN MENTAL RETARDATION 5 (rev. ed. 1973) ("existing concurrently with deficits in adaptive behavior"); AAMD 1983, supra note 80, at 1 ("existing concurrently with deficits in adaptive behavior" (emphasis added)); AAMR 1992, supra note 84, at 5 ("existing concurrently with related limitations in ... adaptive skill areas"); AAMR 2002, supra note 95, at 1 ("significant limitations both in intellectual functioning and in adaptive behavior"); AAIDD 2010, supra note 65, at 1 ("significant limitations both in intellectual functioning and in adaptive behavior"); J. Gregory Olley & Ann W. Cox, Assessment of Adaptive Behavior in Adult Forensic Cases: The Use of the Adaptive Behavior Assessment System-II, in ADAPTIVE BEHAVIOR ASSESSMENT SYSTEM-II: CLINICAL USE AND INTERPRETATION 381, 385 (Thomas Oakland & Patti L. Harrison eds., 2008) [hereinafter Olley & Cox, Assessment of Adult Behavior] ("If the deficit exists with impairment in intelligence that originated in childhood and adolescence, the diagnosis of mental retardation is made regardless of the presumed cause of the impairments.").

The adaptive behavior prong consists of "significant limitations . . . in adaptive behavior as expressed in conceptual, social, and practical adaptive skills."¹¹⁸ As AAIDD has explained, adaptive behavior is the collection of skills "that have been learned and are performed by people in their everyday lives."¹¹⁹ Unlike the testing of

The 1983 AAMD definition (and earlier versions) had described adaptive deficits in less detailed terms. *See* AAMD 1983, *supra* note 80, at 1 ("Adaptive behavior is defined as the effectiveness or degree with which individuals meet the standards of personal independence and social responsibility expected for age and cultural group.").

Each of these formulations has found its way into the statutory definitions in one or more of the states. Courts in those states will obviously focus on the language adopted by their legislatures. Clinicians and the relevant professional organizations have tinkered with the language about adaptive behavior deficits in order to allow diagnoses and diagnostic reports that will assist in such tasks as the development of individual educational plans in the schools and the tailoring of social and habilitative services to meet an adult's individual needs. *See, e.g.*, AAMR 2002, *supra* note 95, at 81 (explaining that despite the shift from ten skill areas to three more general domains, "[t]he 10 skill areas have been reported to be particularly useful for developing profiles of strengths and weaknesses and for programming supports for people with mental retardation. Measures of the 10 skill areas . . . may also be valuable tools for planning supports or educational programming."). It has never been the intention of the formulators of the definition to alter the contours of the group of individuals who meet the definition of intellectual disability.

Courts that are adjudicating *Atkins* cases are, of course, less concerned with the precision of the match between an individual's deficits in adaptive skills and the services he might optimally receive outside the context of the criminal justice system. These courts will focus instead on whether there is sufficient evidence that the defendant had a substantial, real-world disability at the time of the offense with which he is charged.

119. AAIDD 2010, *supra* note 65, at 43. It should also be noted that while the three "domains" of adaptive behavior—conceptual, social, and practical—are listed with the conjunctive "and," the actual measurement of deficits in any one of the three domains will generally be sufficient to satisfy the adaptive behavior prong of the definition. *See* APA, DSM-5, *supra* note 65, at 38 ("Criterion B [deficits in adaptive functioning] is met when at least one domain of adaptive functioning—

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retardation. See DSM-5, supra note 65, at 38. For a discussion of the etiology of intellectual disability, see supra note 97.

The fact that the definition does not include a requirement of demonstrating causation also means that evaluators should not be permitted to speculate that "defendant has ID, but I believe that his behavior was caused by [a comorbid condition]." See *infra* Part V for a discussion of comorbidity.

^{118.} AAIDD 2010, *supra* note 65, at 1. The 2002 AAMR definition used almost identical terms. *See* AAMR 2002, *supra* note 95, at 1 ("Mental retardation is a disability characterized by significant limitations in both intellectual functioning *and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills.*" (emphasis added)).

The 1992 version of AAMR's definition defined adaptive skill deficits by identifying categories in which the limitations must be experienced. AAMR 1992, *supra* note 84, at 5 ("It is characterized by significantly subaverage intellectual functioning, *existing concurrently with related limitations in two or more of the following applicable skill areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure, and work."* (emphasis added)). The American Psychiatric Association followed this same model. APA, DSM-IV-TR, *supra* note 80, at 41 ("accompanied by significant limitations in adaptive functioning in at least two of the following skill areas: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety").

intellectual functioning, the clinical assessment of deficits in adaptive behavior is not measured by a single kind of instrument administered to the subject himself or herself. Rather, determining whether an individual has significant limitations in adaptive skills involves a wider-ranging inquiry.¹²⁰ As a part of that inquiry, the clinician will frequently employ a standardized instrument of assessment called an "adaptive behavior scale" (or "AB scale"), which explores the impact of the individual's intellectual impairment on the person's functioning in life.¹²¹ As part of the process, the clinical evaluator will inquire about the subject's adaptive functioning by interviewing individuals who have observed him or her in childhood or in adult life.¹²²

Details about particular issues involving adaptive behavior that may prove to be of interest to the courts will be discussed more fully *infra* in Part VII of this Article. However, three general principles about adaptive behavior may be helpful at this at this point.

First, the measurement of adaptive behavior deficits inquires whether there are sufficient limitations in the individual's functioning *under ordinary circumstances*. As AAIDD has explained: "The assessment of adaptive behavior focuses on the individual's typical performance and not their best or assumed ability or maximum performance. Thus, what the person typically does, rather than what the

conceptual, social, or practical—is sufficiently impaired that ongoing support is needed in order for the person to perform adequately in one or more life settings at school, at work, at home, or in the community."). This subject is discussed more fully *infra* note 295.

^{120.} See J. Gregory Olley, The Assessment of Adaptive Behavior in Adult Forensic Cases: Part 3: Sources of Adaptive Behavior Information, 33(1) PSYCHOLOGY IN MENTAL RETARDATION & DEVELOPMENTAL DISABILITIES, Summer 2007, at 3, 4-5; Caroline Everington & Denis W. Keyes, Diagnosing Mental Retardation in Criminal Proceedings: The Critical Importance of Documenting Adaptive Behavior, FORENSIC EXAMINER, July/Aug. 1999, at 31, 32-33.

^{121.} See AAIDD 2010, supra note 65, at 43-55; Scott Spreat, Psychometric Standards for Adaptive Behavior Assessment, in Schalock, ADAPTIVE BEHAVIOR, supra note 114, at 103-17; Tassé et al., Construct of Adaptive Behavior, supra note 109, at 293; Sharon A. Borthwick-Duffy, Adaptive Behavior, in HANDBOOK OF INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 279, 283-84 (John W. Jacobson, James A. Mulick, & Johannes Rojahn eds., 2007) ("The development in the past 20 years of psychometrically adequate, norm-referenced measures of adaptive behavior has led to a greater recognition of the value of the construct in diagnosis and planning supports."). For a fuller discussion of these instruments, and the cases in which they cannot be employed, see infra Part VII.

^{122.} AAIDD 2010, *supra* note 65, at 47 ("Using standardized adaptive behavior measures to determine significant limitations in adaptive behavior usually involves obtaining information regarding the individual's adaptive behavior from a person or persons who know the individual well.... Obtaining information from multiple respondents and other relevant sources (e.g., school records, employment history, previous evaluations) is essential to providing corroborating information that provides a comprehensive picture of the individual's functioning.").

However, particular care needs to be taken in using accounts by the examined individuals (i.e., the defendants) themselves about what they can or cannot do. This issue is explored more fully *infra* Part VII.

individual can do or could do, is assessed when evaluating the individual's adaptive behavior."¹²³

This focus on the person's ordinary, everyday functioning helps explain why inquiries to informants who have known the individual over a period of time are so important to clinical assessment of adaptive behavior.¹²⁴

This adaptive behavior focus on *actual everyday functioning* also stands in sharp contrast to the methodology used in measuring intellectual functioning (IQ testing), where the purpose is to assess the person's *full mental ability*.¹²⁵ This means that the appropriate clinical

124. J. Gregory Olley, *Adaptive Behavior Instruments*, in THE DEATH PENALTY AND INTELLECTUAL DISABILITY 187, 193 (Edward A. Polloway ed., 2015) ("Among the most common and potentially most valuable sources are interviews with family members and others who have known the individual well in varied community settings. Multiple informants who have known the individual at different ages before the pertinent crime can provide consensual validity regarding adaptive functioning.").

125. See KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, supra note 93, at 336 ("Tests of cognitive functioning are intended to measure optimal maximum performance, or potential, while adaptive behavior scales measure typical performance."); AAIDD 2010, supra note 65, at 47 ("This is a critical distinction between the assessment of adaptive behavior and the assessment of intellectual functioning, where best or maximal performance is assessed."); Everington & Olley, Defining and Diagnosing, supra note 15, at 11 ("[A]daptive behavior is the individual's typical performance in his/her community setting."); Macvaugh & Cunningham,

^{123.} AAIDD 2010, supra note 65, at 47 (emphasis omitted); see also AAMR 2002, supra note 95, at 74; Keith F. Widaman & Kevin S. McGrew, The Structure of Adaptive Behavior, in MANUAL OF DIAGNOSIS AND PROFESSIONAL PRACTICE IN MENTAL RETARDATION 97, 98 (John W. Jacobson & James A. Mulick eds., American Psychological Association 1996) ("Measures of adaptive behavior are usually measures of *typical* performance, assessing the level of skill a person typically displays when responding to challenges in his or her environment."); Marc J. Tassé et al., The Relation Between Intellectual Functioning and Adaptive Behavior in the Diagnosis of Intellectual Disability, 54 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 381, 387 (2016) ("A complete understanding of human functioning requires an understanding of the person's typical performance, which is the case in the assessment of adaptive behavior, not maximum performance, which is the case in the assessment of intellectual functioning." (emphasis added)); Olley & Cox, Assessment of Adult Behavior, supra note 116, at 385 ("Adaptive behavior assessment describes an individual's actual functional performance and is not used to speculate as to a person's potential. In other words, a person's adaptive behavior is what a person has done rather than what he or she may have done or could have done if raised in more ideal conditions."); Caroline Everington, Challenges of Conveying Intellectual Disabilities to Judge and Jury, 23 WM. & MARY BILL OF RIGHTS J. 467, 471 (2014) ("An accurate diagnosis requires an in-depth understanding of the construct of adaptive behavior and its manifestation in defendants with ID. Key to this is the context of adaptive skill assessmentthe individual's actual performance in community settings. It is not based on a hypothesis of what the person has the potential to do." (emphasis added) (footnote omitted)); Henry Leland, Adaptive Behavior, in 1 ENCYCLOPEDIA OF INTELLIGENCE, supra note 112, at 18, 23 (noting that assessment of adaptive behavior is "a way of determining how a person may be expected to cope in average or usual daily activities"); Tassé, Adaptive Behavior and Diagnosis, supra note 87, at 116 ("This view is consistent with AAIDD's long-standing position that adaptive behavior assessment must focus on the individual's typical performance and not maximal ability."); Everington & Olley, Defining and Diagnosing, supra note 15, at 10 ("The consensus of contemporary views on assessment of adaptive behavior clearly indicates that adaptive behavior is the individual's actual performance.").

focus in adaptive behavior is on how an individual performed (or failed to perform) tasks in general society,¹²⁶ rather than on whether he or she experiences functional limitations in the more regimented (and, in significant ways, less demanding) setting of imprisonment¹²⁷ (e.g., a

126. Since the defendant's culpability at the time of the offense is central to the holding of *Atkins*, that time period must be the focus of the adaptive behavior assessment in determining whether the defendant satisfies the definition of intellectual disability. *See infra* Part VII.B (discussing the retrospective nature of *Atkins* evaluations).

While evidence of an inmate's successful adaptation to prison conditions *can* be probative evidence on the separate and distinct issue of future dangerousness, and therefore admissible in mitigation at capital sentencing, see, e.g., Skipper v. South Carolina, 476 U.S. 1, 7 (1986), it does not have the same relevance in an Atkins case to the issue of whether the defendant had deficits in adaptive behavior at the time of the offense. See J. Gregory Olley, The Assessment of Adaptive Behavior in Adult Forensic Cases: Part 1, 32(1) PSYCHOLOGY IN MENTAL RETARDATION & DEVELOPMENTAL DISABILITIES, Summer 2006, at 2, 2 ("[S]tandard approaches cannot be used, because prison life offers no opportunity to demonstrate most areas of adaptive functioning."); Caroline Everington et al., Challenges in the Assessment of Adaptive Behavior of People Who Are Incarcerated, in THE DEATH PENALTY AND INTELLECTUAL DISABILITY 201, 202 (Edward A. Polloway ed., 2015) ("[A] satisfactory assessment of AB is not possible in a prison context because the individual has no opportunities to demonstrate the presence or absence of adaptive skills typical in day-to-day life. Inmates do not cook, choose clothing, or make independent choices about their day-to-day existence. By design, correctional settings remove virtually all personal control from the individual, and, as such, practical behaviors pertinent to the diagnosis cannot be demonstrated."); Macvaugh & Cunningham, Forensic Practice, supra note 83, at 161 ("Institutional adaptation should generally not be regarded as dispositive of adaptive functioning in the open community. In such situations, forensic examiners should clearly state the limitations of retrospective assessments of adaptive functioning."). The Supreme Court has taken note of this issue. See Moore v. Texas, 137 S. Ct. 1039, 1050 (2017) ("Clinicians, however, caution against reliance on adaptive strengths developed in a controlled setting, as a prison surely is." (internal quotation omitted)).

127. Tassé, Adaptive Behavior and Diagnosis, supra note 87, at 119 ("The prison setting is an artificial environment that offers limited opportunities for many activities and behaviors defining adaptive behavior."); Everington & Olley, Defining and Diagnosing, supra note 15, at 12 ("[T]he limited opportunities available to people in prison make it impossible to assess adaptive behavior within the context of community environments " (internal quotation omitted)); APA, DSM-5, supra note 65, at 38 ("Adaptive functioning may be difficult to assess in a controlled setting (e.g., prisons, detention centers); if possible, corroborative information reflecting functioning outside those settings should be obtained."); Macvaugh & Cunningham, Forensic Practice, supra note 83, at 160 ("Most of the instruments that are available for assessing adaptive behavior are intended to measure an individual's current functioning in the community. This creates methodological problems for assessments of adaptive functioning with incarcerated populations, particularly for those who have been on death row for many years following a capital murder conviction. In cases in which the examinee has been incarcerated for a number of years, the examiner must perform a retrospective assessment of adaptive functioning."); Richard J. Bonnie & Katherine Gustafson, The Challenge of Implementing Atkins v. Virginia: How Legislatures and Courts Can Promote Accurate Assessments and Adjudications of Mental Retardation in Death Penalty Cases, 41 U. RICHMOND L. REV. 811, 848 (2007) [hereinafter Bonnie & Gustafson, Implementing Atkins] ("A mentally

Forensic Practice, supra note 83, at 162 ("[T]here is [a] consensus [among clinicians] that assessment of adaptive behavior should measure a person's typical or actual *performance*, as opposed to *knowledge* of a skill or estimated potential." (citation omitted)). (The Macvaugh and Cunningham article is an outgrowth of the ad hoc committee on *Atkins* evaluations within the relevant section of the American Psychological Association, and also includes the authors' practice recommendations for evaluators. *Id.* at 133-34.)

correctional officer's estimation of a defendant's functioning in jail while awaiting trial).¹²⁸

The second general principle about assessing adaptive behavior is that the inquiry necessarily focuses on *deficits* in defendants' adaptive skills, and not on their abilities or strengths.¹²⁹ This principle may be, at

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retarded person is also likely to show stronger adaptive behavior in the structured environment of a correctional facility than in society, thus possibly inflating scores that would have been indicative of mental retardation in the community environment.").

There may also be other problems that arise from purported evidence of adaptive behavior in a prison setting. For example, testimony is sometimes offered of prison behavior that a correctional officer believes to be inconsistent with mental retardation. In addition to the likelihood of stereotypes entering into such an assessment, see *infra* Part VII.E, there may also be other evidentiary problems. For example, regarding documents purportedly written by a defendant:

[[]T]he implications of such writings are often ambiguous because independent authorship cannot be assumed. It is not uncommon for less literate inmates to request that more literate inmates write correspondence, grievances, legal research requests, or even legal briefs on their behalf. In some cases, the less literate inmate may have done no more than sign the document. At times, such ghost writing is evident from the widely varying handwriting on these documents. In other instances, however, the less literate inmate may painstakingly copy the document provided by the more literate inmate. Discovery of these procedures may be complicated by the less literate inmate's desire to avoid having his limitations revealed to others.

Macvaugh & Cunningham, Forensic Practice, supra note 83, at 163-64.

For similar reasons, testimony from correctional officers about an inmate's reading material may be equally suspect. Everington, *supra* note 123, at 475-76 ("[S]uch officers do not have the type of continuous contact necessary for documenting skills. For example, even when skills, such as reading a newspaper, are demonstrated, inaccurate conclusions can be reached. That is, just being observed with a book or a newspaper does not mean that the defendant is able to comprehend and explain what was read. A careful evaluator will probe the defendant for comprehension as well as conduct collateral academic testing.").

^{128.} Given the problem and risks of stereotyping by correctional witnesses, and the lack of comparability between structured correctional settings and the society where the defendant lived prior to his arrest, many clinical experts have argued for the exclusion of evidence from correctional officers. See, e.g., Olley & Cox, Assessment of Adult Behavior, supra note 116, at 386 ("[R]eports from corrections officers or other observations of current functioning in prison are not valid indicators of level of adaptive behavior."); Macvaugh & Cunningham, Forensic Practice, supra note 83, at 161 ("[A]n assessment of a particular inmate's adaptive behavior while in a highlystructured prison environment has very limited correspondence to the adaptive demands of the open community, whether or not the offender's adaptation is compared with other inmates."); Tassé, Adaptive Behavior and Diagnosis, supra note 87, at 119 ("Correctional officers and other prison personnel should probably never be sought as respondents to provide information regarding the adaptive behavior of an individual that they've observed in a prison setting."). Tassé's concerns are well-founded. On the other hand, there may be cases in which specific information from a correctional officer is particularly crucial, in the clinical judgment of the diagnostician, to complete the picture of a defendant's actual level of functioning. As a result, a rigid categorical exclusion of such evidence may or may not be warranted. But, at a minimum, there should be a strong presumption against reliance on such testimony.

^{129.} AAIDD 2010, *supra* note 65, at 47 (noting that in the diagnostic process, "significant limitations in conceptual, social, or practical adaptive skills" are not "outweighed by the potential strengths in some adaptive skills"); *see Moore*, 137 S. Ct. at 1050 ("[T]he medical community focuses the adaptive-functioning inquiry on adaptive *deficits.*"); Brumfield v. Cain, 135 S. Ct. 2269,

least initially, counterintuitive to many people. At first blush, it might seem to be a sensible approach to balance an individual's strengths against his weaknesses, and use their combination as the adaptive prong of the definition. Although superficially attractive, that approach is totally inconsistent with the definition of intellectual disability and with sound diagnostic practice. An in-depth discussion of the necessity of using deficits, not strengths, to diagnose intellectual disability is provided *infra* in Part VII.C.

The third general principle, closely related to the second, is that it is essential to avoid the trap of falling back on stereotypes about people with intellectual disability and what they can and cannot do.¹³⁰ The problems these stereotypes and preconceived images pose for the courts in evaluating individuals who may have intellectual disability is discussed *infra* in Part VII.E.

C. Age of Onset

The final component of the definition of intellectual disability is the stipulation that the disability must have originated during the developmental period of life.¹³¹ This requirement has proven to present the fewest issues for diagnosticians in *Atkins* cases,¹³² and few cases have turned on this prong.¹³³ The vast majority of people with the level

133. Bonnie & Gustafson, Implementing Atkins, supra note 127, at 855. ("In sum, the

^{2281 (2015) (&}quot;[I]ntellectually disabled persons may have 'strengths in social or physical capabilities, strengths in some adaptive skill areas, or strengths in one aspect of an adaptive skill in which they otherwise show an overall limitation." (quoting AAMR 2002, *supra* note 95, at 8)).

^{130.} See Moore, 137 S. Ct. at 1052 ("[T]he medical profession has endeavored to counter lay stereotypes of the intellectually disabled. Those stereotypes, much more than medical and clinical appraisals, should spark skepticism." (citations omitted)).

^{131.} AAIDD 2010, *supra* note 65, at 1 ("This disability originates before age 18."); AAMR 2002, *supra* note 95, at 1 (same); AAMR 1992, *supra* note 84, at 1 ("Mental retardation manifests before age 18."); AAMD 1983, *supra* note 80, at 1 ("Mental retardation ... [is] manifested during the developmental period"); APA, DSM-5, *supra* note 65, at 33 ("Intellectual disability ... is a disability with onset during the developmental period"); APA, DSM-IV-TR, *supra* note 80, at 41 ("The onset must occur before age 18 years").

^{132.} Indeed, at least two legislatures found it unnecessary to include an age of onset component in their statutes. *See* NEB. REV. STAT. § 28-105.01(3) (2017); N.M. STAT. ANN. § 31-20A-2.1(A) (2000) (repealed 2009). Other state statutes established a different measure for the age of onset. *See*, *e.g.*, IND. CODE § 35-36-9-2 (2017) ("As used in this chapter, 'individual with an intellectual disability' means an individual who, before becoming twenty-two (22) years of age, manifests "); *see also Legislative Guide, supra* note 3, at 13. Social Security also appears to use the age of 22. *See* NATIONAL RESEARCH COUNCIL, MENTAL RETARDATION: DETERMINING ELIGIBILITY FOR SOCIAL SECURITY BENEFITS 29 (Daniel J. Reschly et al. eds., 2002) ("The impairment must be present before the age of 22, although the diagnosis may be made at any time."). Some jurisdictions may have chosen the age of 22 because it marks the duration of the eligibility of students with disabilities for special education under Federal law (IDEA). *See* Individuals with Disabilities Act (IDEA), 20 U.S.C. § 1412(a)(1)(A) (2012).

of intellectual impairment to satisfy the first prong of the definition and the deficits in adaptive behavior to satisfy the second prong—first experienced their disability in childhood, and for some, the cause can be traced back to their birth or their genetic make-up.¹³⁴ The only individuals who are excluded from the category by the age of onset requirement are individuals whose disability can be traced to events during adulthood. Examples would include individuals whose neurocognitive impairments occurred post-adolescence as with dementia,¹³⁵ or brain injuries due to post-adolescence accidents.¹³⁶ But for diagnostic purposes, adult-onset impairments can be identified and distinguished from intellectual disability.¹³⁷

137. Note, however, that an individual's trauma or injury as an adult does not rule out a diagnosis of intellectual disability if there is also evidence of a developmental delay prior to age 18. Addressing concerns about equity and proportionality rather than diagnosis, the American Bar Association has recommended that "[d]efendants should not be executed or sentenced to death if, at the time of the offense, they had significant limitations in both their intellectual functioning and adaptive behavior, as expressed in conceptual, social, and practical adaptive skills, resulting from *mental retardation, dementia, or a traumatic brain injury.*" American Bar Association, *Recommendation and Report on the Death Penalty and Persons with Mental Disabilities*, 30 MENTAL & PHYSICAL DISABILITY L. REPORTER 668, 668 (2006) (emphasis added); *see also id.* at

developmental onset requirement, though diagnostically essential, does very little work in the ordinary *Atkins* adjudication."); John H. Blume et al., *A Tale of Two (and Possibly Three)* Atkins: *Intellectual Disability and Capital Punishment Twelve Years After the Supreme Court's Creation of a Categorical Bar*, 23 WM. & MARY BILL OF RIGHTS J. 393, 408-09 (2014) ("Very few persons raising claims of intellectual disability lose on Prong 3 alone; in fact, we were only able to identify three cases appropriately classified as a loss on Prong 3 only.").

^{134.} For a discussion of the etiology of intellectual disabilities, see discussion *supra* note 97; see also AAIDD 2010, *supra* note 65, at 57-72.

^{135.} See, e.g., APA, DSM-5, supra note 65, at 611-14 ("Major or Mild Neurocognitive Disorder Due to Alzheimer's Disease"). Note, however, that Alzheimer's can occur in individuals who also had intellectual disability throughout their lives. See Kathleen M. Bishop et al., Guidelines for Dementia-Related Health Advocacy for Adults with Intellectual Disability and Dementia: National Task Group on Intellectual Disabilities and Dementia Practices, 53 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 2 (2015).

^{136.} See, e.g., APA, DSM-5, supra note 65, at 624-27 ("Major or Mild Neurocognitive Disorder Due to Traumatic Brain Injury"). But note that impairment caused by trauma that an individual experienced during childhood presents no impediment to diagnosing intellectual disability. See Dennis C. Russo et al., Pediatric Brain Injury, in HANDBOOK OF INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 97 (John W. Jacobson, James A. Mulick & Johannes Rojahn eds., 2007); AAIDD 2010, supra note 65, at 27 ("Sometimes, however, especially when the etiology of the disability indicates progressive damage (such as malnutrition) or damage related to an acquired disease or injury (such as infection or traumatic brain injury), the condition may originate later [in the developmental period]."). Another possible reason for onset of the disability in adolescence could be prolonged exposure to chemical agents. See, e.g., Alison J. Falck et. al., Developmental Exposure to Environmental Toxicants, 62 PEDIATRIC CLINICS OF NORTH AMERICA 1173, 1177 (2015) (discussing the wide variety of environmental toxins extant generally and adolescent exposure sources). The Supreme Court has taken note of the incomplete development of the brains of adolescents. See, e.g., Miller v. Alabama, 567 U.S. 460, 472 n.5 (2012) ("It is increasingly clear that adolescent brains are not yet fully mature" (quoting Brief for Am. Psychological Ass'n et al. as Amici Curiae in Support of Petitioners at 4, Miller, 567 U.S. 460 (No. 10-9646))).

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The only major point of confusion about the age of onset requirement in *Atkins* cases appears to involve the definition's requirement that the disability must have "originated" or "manifested" during the developmental period of life. *The definition does not require that there have been IQ tests or formal assessments of adaptive deficits while the individual was a child.*¹³⁸ Whether a person had received such testing or diagnostic services as a child is, of course, a matter of happenstance, with no relevance to questions of culpability.¹³⁹ Educational policy choices, even routine bureaucratic decisions, may play a part in determining whether a child is tested and properly diagnosed as having intellectual disability.¹⁴⁰

139. "Some individuals, due in part to social and cultural factors, have taken standardized intelligence or adaptive behavior tests before the age of eighteen, while others have not." John H. Blume et al., *Of* Atkins and Men: Deviations from Clinical Definitions of Mental Retardation in Death Penalty Cases, 18 CORNELL J. Law & PUBLIC POLICY 689, 697 (2009); Matthew H. Scullin, Large State-Level Fluctuations in Mental Retardation Classifications Related to Introduction of Renormed Intelligence Test, 111 AM. J. MENTAL RETARDATION 322, 332 (2006) ("[M]any adults who currently meet the IQ and poor adaptive functioning criteria necessary for being classified with mental retardation may have never received a formal developmental period classification.").

140. See Sheryl A. Larson & K. Charlie Lakin, Changes in the Primary Diagnosis of Students With Intellectual or Developmental Disabilities Ages 6 to 21 Receiving Special Education Services 1999 to 2008, 48 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 233, 233 (2010) (discussing "[c]hanging trends in diagnostic categories used for U.S. special education students"); Matthew H. Scullin, Large State-Level Fluctuations in Mental Retardation Classifications Related to Introduction of Renormed Intelligence Test, 111 AM. J. MENTAL RETARDATION 322, 324 (2006) ("State policies regarding the classification of children as having mental retardation vary widely from state to state").

Clinicians have catalogued several reasons that might explain the presence or absence of diagnostic labeling during an individual's childhood:

^{669 (&}quot;The language in this part of the Recommendation is also meant to encompass dementia and traumatic brain injury, disabilities very similar to mental retardation in their impact on intellectual and adaptive functioning except that they always (in the case of dementia) or often (in the case of head injury) are manifested after age eighteen."). This recommendation has also been endorsed by the American Psychiatric Association and the American Psychological Association. *Id.*

^{138.} Tassé, Adaptive Behavior and Diagnosis, supra note 87, at 115 ("It should be noted that 'originated during the developmental period' does not preclude making a first time diagnosis of mental retardation when an individual is an adult. The clinician must, however, adequately document that the deficits in intellectual and adaptive functioning were present before the end of the developmental period."); Matthew H. Scullin, Large State-Level Fluctuations in Mental Retardation Classifications Related to Introduction of Renormed Intelligence Test, 111 AM. J. MENTAL RETARDATION 322, 331 (2006) ("There is no professionally recognized requirement for a developmental period classification of mental retardation or developmental period IQs in the mental retardation range from childhood to establish mental retardation for these [Supplemental Security Income] benefits."); Reschly, Documenting Origins, supra note 83, at 124 ("Persons can, of course, be properly diagnosed as MR as adults even if no official diagnosis can be found over the ages of birth to 18, but evidence must exist that the condition of MR existed before age 18."); see also ROBERT L. SCHALOCK & RUTH LUCKASSON, CLINICAL JUDGMENT 37-41 (1st ed. 2005) (discussing case example in which the individual had not had an IQ test administered during the developmental period, but retrospective investigation revealed functional manifestations had been present during the individual's childhood).

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If a defendant currently meets the first two criteria, and there are indications of impairment, delayed development, etc., from childhood, and if there is no indication that the impairment resulted from causes that occurred in adulthood, a diagnosis of intellectual disability is appropriate,¹⁴¹ and constitutionally compelled.¹⁴²

A number of reasons might explain the lack of an earlier, official diagnosis of mental retardation, including: (a) the individual was excluded from a full school experience; (b) the person's age precluded his/her involvement in specialized services such as special education programs; (c) the person was given no diagnosis or a different diagnosis for "political purposes" such as protection from stigma or teasing, avoidance of assertions of discrimination, or related to conclusions about the potential benefits or dangers of a particular diagnosis; (d) the school's concern about over-representation for data reporting purposes of specific diagnostic groups within their student population; (e) parental concerns about labels; (f) contextual school-based issues such as availability or nonavailability of services and potential funding streams at that time; and (g) the lack of entry referral into the diagnostic-referral process due to cultural and linguistic differences or for other reasons.

AMERICAN ASSOCIATION ON INTELLECTUAL & DEVELOPMENTAL DISABILITIES, USER'S GUIDE: MENTAL RETARDATION: DEFINITION, CLASSIFICATION AND SYSTEMS OF SUPPORTS 10TH EDITION 18 (2007) [hereinafter AAIDD, USER'S GUIDE 2007]; *see also* Everington & Olley, *Defining and Diagnosing, supra* note 15, at 11-12 ("Some school systems delete mention of Special Education placement from students' permanent records for two key reasons: (a) the Family Educational Rights and Privacy Act (FERPA) requires it; and (b) because school officials may feel that such information is stigmatizing."). For a fuller discussion of issues involving school records, see *infra* notes 302-11 and accompanying text.

Schools may fail to correctly diagnose intellectual disability even when students are tested, if an outdated version of the test is used. Test scores may be artificially inflated by a phenomenon known as the Norm Obsolescence Effect. *See, e.g.*, Tomoe Kanaya, Matthew H. Scullin & Stephen J. Ceci, *The Flynn Effect and U.S. Policies: The Impact of Rising IQ Scores on American Society Via Mental Retardation Diagnoses*, 58 AM. PSYCHOLOGIST 778, 787 (2003) ("Also, some psychologists and districts may prefer not to use a newly normed test until all of the older test record forms are used up, so it may take many years before an older IQ test is completely phased out of a school system. In our experience, before an old test is completely phased out, different children may be tested on different norms in the same year—even within the same school district."). For a fuller discussion of the problems posed by the Norm Obsolescence Effect in accurately assessing intellectual impairment, see *infra* Part VI.D.

^{141.} The relative importance of age of onset was summarized by Bonnie & Gustafson:

[[]C]ourts should not require a diagnosis before the age of eighteen or scores in the range of mental retardation from IQ tests administered before the age of eighteen. Courts should regard tests administered during adulthood (even after the capital offense) as highly probative on the diagnosis of mental retardation. Finally, courts should presume that currently diagnosed mental retardation had a developmental onset in the absence of clear evidence of post-childhood onset of the defendant's disability.

^{142.} Bonnie & Gustafson, *Implementing* Atkins, *supra* note 127, at 855 ("Such a requirement [of testing during the individual's childhood] would be unconstitutional because it would amount to discrimination against people whose need for special education was overlooked and who did not have access to adequate clinical or social services as a child. The age-of-onset requirement therefore only requires that there is evidence, not necessarily test scores, that intellectual and adaptive deficits became manifest before the age of eighteen.").

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V. DEFENDANTS WITH MULTIPLE DISABILITIES

Many individuals who have intellectual disability also have other mental or physical disabilities,¹⁴³ and the existence of these co-existing (sometimes referred to in medical documents as "comorbid,"¹⁴⁴ and by others as "dual diagnosis"¹⁴⁵) conditions may raise questions in the

^{143.} See, e.g., DARYL PAUL EVANS, THE LIVES OF MENTALLY RETARDED PEOPLE 119 (1983) ("Many retarded people have physical handicaps that undermine their emotional well-being."); *id.* ("Some have sensory-perceptual handicaps that make it difficult for them to adapt to social environment appropriately."); *id.* at 120 ("Many retarded people have motor problems that lead them to move their bodies in an abnormal fashion or engage in repetitive movements."); Shoumitro Deb, *Epilepsy in People with Mental Retardation, in* HANDBOOK OF INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 81 (John W. Jacobson, James A. Mulick & Johannes Rojahn eds., 2007); John M. Pellock & Lawrence D. Morton, *Treatment of Epilepsy in the Multiply Handicapped*, 6 MENTAL RETARDATION & DEVELOPMENTAL DISABILITIES RESEARCH REVIEWS 309, 309 (2000) ("It is estimated that 20% to 40% of patients with mental retardation and cerebral palsy have epilepsy." (citation omitted)). The connection of intellectual disability to physical disabilities has been long—if incompletely—recognized in the field. *See, e.g.*, Michael L. Hardman & Clifford J. Drew, *The Physically Handicapped Retarded Individual: A Review*, 15 MENTAL RETARDATION 43 (1977).

Another condition that is encountered with some frequency, and which can have cognitive, behavioral, and physical manifestations, is fetal alcohol syndrome. See APA, DSM-5, supra note 65, at 798-801 ("Neurobehavioral Disorder Associated With Prenatal Alcohol Exposure"); Reschly, Documenting Origins, supra note 83, at 132 ("In several cases the adult defendant was the product of a teen age pregnancy in which the expectant mother used excessive amounts of alcohol daily along with other drugs prior to and after birth. In such cases, an evaluation is warranted of the adult with MMR by a physician skilled in the diagnosis of fetal alcohol spectrum disorder (FASD)."); Martha J. Wunsch, Charles J. Conlon & Peter C. Scheidt, Substance Abuse: A Preventable Threat to Development, in CHILDREN WITH DISABILITIES 107, 110-17 (Mark L. Batshaw ed., 5th ed. 2002); Andrew Levitas et al., Behavioral Phenotype of Genetic Disorders, in DIAGNOSTIC MANUAL-INTELLECTUAL DISABILITY: A TEXTBOOK OF DIAGNOSIS OF MENTAL DISORDERS IN PERSONS WITH INTELLECTUAL DISABILITY 35, 49-52 (Robert Fletcher et al. eds., National Association for the Dually Diagnosed 2016) [hereinafter DM-ID2] ("Fetal Alcohol Syndrome and the Fetal Alcohol Spectrum Disorders"). Note, the above cited volume of the DM-ID was published by the National Association for the Dually Diagnosed ("NADD") in association with the American Psychiatric Association, and is the most detailed medical treatise on individuals who have both mental retardation and mental illness.

^{144.} Under the heading of "Comorbidity," the American Psychiatric Association includes several forms of mental illness frequently encountered in individuals who have intellectual disability. APA, DSM-5, *supra* note 65, at 40 ("The most common co-occurring mental and neurodevelopmental disorders are attention-deficit/hyperactivity disorder; depressive and bipolar disorders; anxiety disorders; autism spectrum disorder; stereotypic movement disorder (with or without self-injurious behavior); impulse-control disorders; and major neurocognitive disorder. Major depressive disorder may occur throughout the range of severity of intellectual disability." (see *infra* note 365 for an explanation of "stereotypies")); *see* Moore v. Texas, 137 S. Ct. 1039, 1051 (2017) ("Coexisting conditions frequently encountered in intellectually disabled individuals have been described in clinical literature as '[c]omorbidit[ies]."" (alteration in original)).

^{145.} For more than a quarter of a century, a primary voluntary organization concerned with these issues has been the National Association for the Dually Diagnosed, also known as "NADD: An association for persons with developmental disabilities and mental health needs." *See About Us*, NADD, http://thenadd.org/about-nadd (last visited Aug. 23, 2018).

evaluation process. For example, if a defendant is deaf, blind, or mobility-impaired, the evaluator may need to adjust the process of testing and other diagnostic techniques to account for the person's other disability.¹⁴⁶

It has long been recognized by psychologists, psychiatrists, and other clinicians,¹⁴⁷ as well as courts,¹⁴⁸ that a substantial number of people who have intellectual disability also have one or more diagnosable mental illnesses.¹⁴⁹ These mental disorders may include

^{146.} Other conditions often experienced by individuals with intellectual disability include cerebral palsy, seizure disorders, and sensory impairments. See Szymanski & Wilska, Mental Retardation, supra note 97, at 689-90; AAMR 2002, supra note 95, at 174-75 ("Seizures and epilepsy are more common among people with mental retardation compared to the general population. The prevalence of epilepsy is 0.6% in the general population but ranges from 8.8% to 32% among people with mental retardation. For individuals with both mental retardation and cerebral palsy, the prevalence of epilepsy is approximately 50%."); Robert Winterhalder & Howard Ring, Epilepsy, in PSYCHOPATHOLOGY IN ID, supra note 94, at 95-107. Autism is another condition that is experienced by a considerable number of individuals with intellectual disability. See Szymanski & Wilska, Mental Retardation, supra note 97, at 714 ("About 75 to 80% of children who have autistic disorder also have mental retardation."); Elspeth Bradley, Phoebe Caldwell & Lisa Underwood, Autism Spectrum Disorder, in PSYCHOPATHOLOGY IN ID, supra note 94, at 237-64. It is not clear how frequently such other disabilities are diagnosed in individuals with intellectual disability who come before the criminal justice system, but they certainly have been encountered in some capital cases. See, e.g., Hall v. State, 201 So.3d 628, 629, 631 (Fla. 2016) (per curiam) (remanded from Hall v. Florida, 134 S. Ct. 1986 (2014) (acknowledging that Freddie Lee Hall was diagnosed with mental illness, finding that he also has intellectual disability, and vacating his sentence of death)).

^{147.} See, e.g., A. F. TREDGOLD, MENTAL DEFICIENCY (AMENTIA) 310-323 (1908) ("Chapter XVII: Insane Aments"); *id.* at 311 ("On the whole I think we may say that close on 10 per cent of the feeble-minded have a definite insane predisposition.").

^{148.} See, e.g., Olmstead v. Zimring ex rel L.C., 527 U.S. 581, 593 (1999) ("Respondents L.C. and E.W. are mentally retarded women; L.C. has also been diagnosed with schizophrenia, and E.W. with a personality disorder.").

^{149.} See, e.g., Bonnie D. Kerker et al., Mental Health Disorders Among Individuals with Mental Retardation: Challenges to Accurate Prevalence Estimates, 119 PUBLIC HEALTH REPORTS 409 (2004); J. Helen Yoo, Maria G. Valdovinos & Stephen R. Schroeder, The Epidemiology of Psychopathology in People with Intellectual Disability: A Forty-Year Review, in 42 INTERNATIONAL REVIEW OF RESEARCH IN DEVELOPMENTAL DISABILITIES 31, 32-36 (Robert M. Hodapp ed., 2012); id. at 42 ("A full range of psychopathology was reported for persons with ID."); Julie A. Parsons, Jack G. May, Jr. & Frank J. Menolascino, The Nature and Incidence of Mental Illness in Mentally Retarded Individuals, in HANDBOOK OF MENTAL ILLNESS IN THE MENTALLY RETARDED 3 (Frank J. Menolascino & Jack A. Stark eds., 1984); STEVEN REISS, HUMAN NEEDS AND INTELLECTUAL DISABILITIES: APPLICATIONS FOR PERSON CENTERED PLANNING, DUAL DIAGNOSIS, AND CRISIS INTERVENTION 57-67 (2010) (Chapter 6: "Mental Illness and Intellectual Disabilities"); Marion Glick, A Developmental Approach to Psychopathology in People with Mild Mental Retardation, in HANDBOOK OF MENTAL RETARDATION AND DEVELOPMENT 563 (Jacob A. Burack, Robert M. Hodapp & Edward Zigler eds., 1998) ("All available evidence suggests that people with mental retardation show disproportionally high rates of psychiatric disturbance."); Andrew T. Russell, The Association Between Mental Retardation and Psychiatric Disorder: Epidemiological Issues, in MENTAL RETARDATION AND MENTAL HEALTH: CLASSIFICATION, DIAGNOSIS, TREATMENT, SERVICES 41 (Jack A. Stark et al. eds., 1988); Szymanski & Wilska, Mental Retardation, supra note 97, at 714 (table reporting results of studies of the incidence of

schizophrenia,¹⁵⁰ affective or mood disorders such as bipolar disorder and clinical depression,¹⁵¹ attention deficit and hyperactivity disorder,¹⁵²

psychopathology in persons with mental retardation); Johannes Rojahn & Lisa J. Meier, Epidemiology of Mental Illness and Maladaptive Behavior in Intellectual Disabilities, in 38 INTERNATIONAL REVIEW OF RESEARCH IN MENTAL RETARDATION 239 (Robert M. Hodapp ed., 2009); Dimitrios Paschos & Nick Bouras, Mental Health Supports in Developmental Disabilities, in ODOM, HANDBOOK OF DD, supra note 92, at 483-500; AAMR 1992, supra note 84, at 54 ("At the present time, the best evidence suggests that overall prevalence rates [of mental illness] tend to be higher for persons with mental retardation, primarily because of a greater vulnerability to environmental stressors."); Haleigh M. Scott & Susan M. Havercamp, Mental Health for People With Intellectual Disability: The Impact of Stress and Social Support, 119 AM. J. ON INTELLECTUAL & DEVELOPMENTAL DISABILITIES 552 (2014); Johannes Rojahn & Marc J. Tassé, Psychopathology in Mental Retardation, in MANUAL OF DIAGNOSIS AND PROFESSIONAL PRACTICE IN MENTAL RETARDATION 147-56 (John W. Jacobson & James A. Mulick eds., American Psychological Association, 1996); George W. Woods, David Freedman & Timothy J. Derning, Intellectual Disability and Comorbid Disorders, in THE DEATH PENALTY AND INTELLECTUAL DISABILITY 279-92 (Edward A. Polloway ed., 2015). Often, the mental illness experienced by an individual with intellectual disability first manifested during childhood. See Mark Reber, Dual Diagnosis: Mental Retardation and Psychiatric Disorders, in CHILDREN WITH DISABILITIES 347-63 (Mark L. Batshaw ed., 5th ed. 2002); Stewart L. Einfeld et al., Comorbidity of Intellectual Disability and Mental Disorder in Children and Adolescents: A Systematic Review, 36 J. INTELLECTUAL & DEVELOPMENTAL DISABILITY 137 (2011).

^{150.} Angela Hassiotis et al., Schizophrenia and Other Psychotic Disorders, in DM-ID2, supra note 143, at 231-44; see also Szymanski & Wilska, Mental Retardation, supra note 97, at 715-16; Andrew Reid, Schizophrenic and Paranoid Syndromes in Persons with Mental Retardation: Assessment and Diagnosis, in MENTAL HEALTH ASPECTS OF MENTAL RETARDATION: PROGRESS IN ASSESSMENT AND TREATMENT 98 (Robert J. Fletcher & Anton Dosen eds., 1993); George W. Woods, David Freedman & Timothy J. Derning, Intellectual Disability and Comorbid Disorders, in THE DEATH PENALTY AND INTELLECTUAL DISABILITY 279, 279-82 (Edward A. Polloway ed., 2015) ("Psychotic Disorders-Schizophrenia"); Colin Hemmings, Schizophrenia Spectrum Disorders, in PSYCHOPATHOLOGY IN ID, supra note 94, at 147-60. See generally A. S. David et al., IQ and Risk for Schizophrenia: A Population-Based Cohort Study, 27 PSYCHOLOGICAL MEDICINE 1311 (1997).

^{151.} APA, DSM-5, supra note 65, at 40 ("[Among] the most common co-occurring mental and neurodevelopmental disorders are ... depressive and bipolar disorders Major depressive disorder may occur throughout the range of severity of intellectual disability."); Lauren Charlot et al., Depressive Disorders, in DM-ID2, supra note 143, at 265-302; id. at 265 ("Depression occurs more often in people with ID than individuals without an ID."); Robert J. Pary et al., Bipolar and Related Disorders, in DM-ID2, supra note 143, at 245-63; Szymanski & Wilska, Mental Retardation, supra note 97, at 716-17; Anton Dosen & Jan J. M. Gielen, Depression in Persons with Mental Retardation: Assessment and Diagnosis, in MENTAL HEALTH ASPECTS OF MENTAL RETARDATION: PROGRESS IN ASSESSMENT AND TREATMENT 70 (Robert J. Fletcher & Anton Dosen eds., 1993); Sigan L. Hartley & William E. MacLean, Jr., Depression in Adults with Mild Intellectual Disability: Role of Stress, Attributions, and Coping, 114 AM. J. ON INTELLECTUAL & DEVELOPMENTAL DISABILITIES 147 (2009); Stephen Ruedrich, Bipolar Mood Disorders in Persons with Mental Retardation: Assessment and Diagnosis, in MENTAL HEALTH ASPECTS OF MENTAL RETARDATION: PROGRESS IN ASSESSMENT AND TREATMENT 111 (Robert J. Fletcher & Anton Dosen eds., 1993); George W. Woods, David Freedman & Timothy J. Derning, Intellectual Disability and Comorbid Disorders, in THE DEATH PENALTY AND INTELLECTUAL DISABILITY 279, 282-84 (Edward A. Polloway ed., 2015) ("Mood Disorders"); Steven Reiss & Betsey A. Benson, Psychosocial Correlates of Depression in Mentally Retarded Adults: I. Minimal Social Support and Stigmatization, 89 AM. J. MENTAL DEFICIENCY 331 (1985); MOOD DISORDERS IN PEOPLE WITH

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and post-traumatic stress disorder ("PTSD").¹⁵³ PTSD, which can be caused by physical abuse and other forms of mistreatment in an intellectually disabled person's childhood,¹⁵⁴ may have particular

154. See AAIDD 2010, supra note 65, at 60 (listing among the postnatal risk factors for intellectual disability: child abuse and neglect, domestic violence, and traumatic brain injury); Daniel J. Tomasulo & Nancy J. Razza, *Posttraumatic Stress Disorder*, in DIAGNOSTIC MANUAL-INTELLECTUAL DISABILITY: A TEXTBOOK OF DIAGNOSIS OF MENTAL DISORDERS IN PERSONS WITH INTELLECTUAL DISABILITY 365, 368 (Robert Fletcher et al. eds, National Association for the Dually Diagnosed 2007) ("In addition to lower intellectual levels, people with ID [intellectual disability] have higher rates of many additional factors known to increase vulnerability to PTSD, such as early separation from parents (through early institutionalization or hospital admissions), lower educational levels, less training and preparation for negative life events (training and preparation that might have increased the individual's sense of personal control), and limited capacity for garnering social support."); George W. Woods, David Freedman & Timothy J. Derning, *Intellectual Disability and Comorbid Disorders, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 279, 285 (Edward A. Polloway ed., 2015) ("Trauma hits people with ID hardest in their areas of greatest

MENTAL RETARDATION (Peter Sturmey ed., 2005); Angela Hassiotis et al., *Mood and Anxiety Disorders, in* PSYCHOPATHOLOGY IN ID, *supra* note 94, at 161-75.

^{152.} See Moore v. Texas, 137 S. Ct. 1039, 1051 (2017) ("[M]any intellectually disabled people also have other mental or physical impairments, for example, attention-deficit/hyperactivity disorder, depressive and bipolar disorders, and autism. DSM-5, [supra note 65,] at 40 ('[c]ooccurring mental, neurodevelopmental, medical, and physical conditions are frequent in intellectual disability, with rates of some conditions (e.g., mental disorders, cerebral palsy, and epilepsy) three to four times higher than in the general population'); [see AAIDD 2010, supra note 65,] at 58-63."). 153. Ruth Ryan, Posttraumatic Stress Disorder in Persons with Developmental Disabilities, 30 COMMUNITY MENTAL HEALTH J. 45, 46 (1994) ("People with developmental disabilities are more likely than nondisabled persons to be abused physically, emotionally, or sexually. Individuals victimized sexually are more likely to be victimized by multiple perpetrators."); Szymanski & Wilska, Mental Retardation, supra note 97, at 718; Jane McCarthy et al., Trauma-and Stressor-Related Disorders, in DM-ID2, supra note 143, at 353-99; Chrissoula Stavrakaki & Yona Lunsky, Depression, Anxiety and Adjustment Disorders in People with Intellectual Disabilities, in PSYCHIATRIC AND BEHAVIOURAL DISORDERS IN INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 113, 119 (Nick Bouras & Geraldine Holt eds., 2d ed. 2007) ("One major cause of PTSD in these individuals are high rates of physical and sexual abuse."); Almudena Martorell & Elias Tsakanikos, Traumatic Experiences and Life Events in People with Intellectual Disability, 21 CURRENT OPINION IN PSYCHIATRY 445 (2008) (literature review); Henry F. Crabbe, Treatment of Anxiety Disorders in Persons with Mental Retardation, in TREATING MENTAL ILLNESS AND BEHAVIOR DISORDERS IN CHILDREN AND ADULTS WITH MENTAL RETARDATION 227, 230 (Anton Dosen & Kenneth Day eds., 2001) ("Posttraumatic stress disorder (PTSD) in persons with mental retardation is probably significantly underdiagnosed, and it can be presented with symptoms of panic attack, agoraphobia, and others. This disorder should be routinely considered in differential diagnosis." (internal citation omitted)); Dimitrios Paschos & Nick Bouras, Mental Health Supports in Developmental Disabilities, in ODOM, HANDBOOK OF DD, supra note 92, at 483, 488 ("People with developmental disabilities may be particularly vulnerable to PTSD because of the increased incidence of traumatic experiences, such as sexual abuse, in this population."); AAMR 2002, supra note 95, at 172 ("The incidence of anxiety and stress disorders is greater in the population with mental retardation compared with the population of people without mental retardation who are of similar age."). See generally Rebecca T. Leeb, Jennifer W. Kaminski, et al., The Association Between Childhood Disability and Child Maltreatment: A Systematic Review of the Literature, in MALTREATMENT OF PEOPLE WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 11-81 (John R. Lutzker, Kate Guastaferro & Megan L. Benka-Coker eds., 2016). For a general discussion of PTSD, see APA, DSM-5, supra note 65, at 271-80.

relevance in capital cases involving defendants with intellectual disabilities.¹⁵⁵ The behavioral manifestations that are frequently encountered in individuals who have both conditions are at the confluence of the intellectual disability and the consequence of traumatic stressors.¹⁵⁶ Other forms of mental illness encountered with some frequency in individuals with intellectual disability in the criminal justice system include substance-related disorders.¹⁵⁷

157. See Edwin J. Mikkelsen et al., Substance-Related and Addictive Disorders, in DM-ID2, supra note 143, at 561-71; Jerry Annand & Chrissoula Stavrakaki, Substance-Related Disorders, in DIAGNOSTIC MANUAL-INTELLECTUAL DISABILITY: A TEXTBOOK OF DIAGNOSIS OF MENTAL DISORDERS IN PERSONS WITH INTELLECTUAL DISABILITY 233, 233-44 (Robert Fletcher et al. eds, National Association for the Dually Diagnosed 2007); *id.* at 240 ("A self-perceived feeling of being different from others often presents as a need to 'fit in.' It is caused by the different path of development from infancy to adulthood that makes the person with ID more vulnerable to the 'comradeship' effect of alcohol or drug use.... The need for a sense of acceptance, characteristic of many with ID, decreases the conflict between values and behaviors that alerts persons without ID to

weakness: new, novel, and stressful circumstances."); Roberta A. Hibbard et al., *Maltreatment of Children with Disabilities*, 119 PEDIATRICS 1018 (2007) (discussing that children with disabilities were found to be at greater risk of becoming victims of abuse and neglect) (This American Academy of Pediatrics policy statement was reaffirmed in 2011. 127 PEDIATRICS e1367 (2011)); Patricia M. Sullivan & John F. Knutson, *Maltreatment and Disabilities: A Population-Based Epidemiological Study*, 24 CHILD ABUSE & NEGLECT 1257 (2000); *see also Charles A. Nelson & Leslie J. Carver, The Effects of Stress and Trauma on Brain and Memory: A View from Developmental Cognitive Neuroscience*, 10 DEVELOPMENT & PSYCHOPATHOLOGY 793 (1998).

^{155.} The list of the "constellation of symptoms" that are "more commonly seen in association with an interpersonal stressor (e.g., childhood sexual or physical abuse, domestic battering)" includes "impaired affect modulation; self-destructive and impulsive behavior; . . . social withdrawal; feeling constantly threatened; impaired relationships with others; [and] a change from the individual's previous personality characteristics." APA, DSM-IV-TR, *supra* note 80, at 465; *see also* APA, DSM-5, *supra* note 65, at 276 ("Following prolonged, repeated, and severe traumatic events (e.g., childhood abuse, torture), the individual may additionally experience difficulties in regulating emotions or maintaining stable interpersonal relationships, or dissociative symptoms."); Megan Norris, Nancy Cunningham, & Eric M. Butter, *Sexual Trauma in Children and Adolescents with IDD, in* MALTREATMENT OF PEOPLE WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 83-108 (John R. Lutzker, Kate Guastaferro, & Megan L. Benka-Coker eds., 2016).

^{156.} Daniel J. Tomasulo & Nancy J. Razza, Posttraumatic Stress Disorder, in DIAGNOSTIC MANUAL-INTELLECTUAL DISABILITY: A TEXTBOOK OF DIAGNOSIS OF MENTAL DISORDERS IN PERSONS WITH INTELLECTUAL DISABILITY 365, 367 (Robert Fletcher et al. eds, National Association for the Dually Diagnosed 2007) ("[Behavioral symptoms can] be a function of, or be exacerbated by, traumatic exposure—symptoms such as the tendency to 'act out' rather than 'think through' when distressed; difficulty describing emotional states in words; difficulty in understanding causality, including understanding the role of one's own behavior in the treatment received from others; the presence of learning disabilities; and distorted self-concept."); Dorothy Griffiths, Strategic Behavioral Interventions in Aggression, in TREATING MENTAL ILLNESS AND BEHAVIOR DISORDERS IN CHILDREN AND ADULTS WITH MENTAL RETARDATION 305, 310 (Anton Dosen & Kenneth Day eds., 2001) ("It is therefore more likely that persons with a developmental disability may experience posttraumatic stress disorder (PTSD), which until recently has not been diagnosed nor treated in persons with disabilities. According to DSM-5, outbursts of anger are one of the persistent symptoms of increased arousal associated with PTSD."); see APA, DSM-5, supra note 65, at 275 ("Individuals with PTSD may be quick tempered and may even engage in aggressive verbal and/or physical behavior with little or no provocation").

The existence of an individual's intellectual disability has sometimes prevented clinicians or diagnosticians from recognizing that the person also has mental illness (a process known as "diagnostic overshadowing").¹⁵⁸ The inverse is also true; the symptoms and behavior that accompany an individual's mental illness may draw attention away from the (often less dramatic and obvious) deficits in adaptive behavior that are the manifestation of intellectual disability.¹⁵⁹

This phenomenon poses two problems for *Atkins* courts. First, the visible and behavioral manifestations of mental illness, along with the practical and management challenges they can pose, may distract courts and clinical evaluators from focusing on evidence about the defendant's intellectual disability.¹⁶⁰ For example, an individual may display

160. Thomas E. Gift, John S. Strauss & Barry A. Ritzler, The Failure to Detect Low IQ in Psychiatric Assessment, 135 AM. J. PSYCHIATRY 345 (1978); J. Gregory Olley, The Death Penalty,

the onset of alcohol or drug use issues." (citations omitted)); LeeAnn Christian & Alan Poling, Drug Abuse in Persons with Mental Retardation: A Review, 102 AM. J. ON MENTAL RETARDATION 126, 128-29, 134 (1997); Neil B. McGillicuddy, A Review of Substance Use Research Among Those with Mental Retardation, 12 MENTAL RETARDATION & DEVELOPMENTAL DISABILITIES RESEARCH REVIEWS 41, 42-44 (2006) (citing as a possible factor the ID individual's "increased tendency to 'follow the crowd.""); Shawna L. Carroll Chapman & Li-Tzy Wu, Substance Abuse Among Individuals with Intellectual Disabilities, 33 RESEARCH IN DEVELOPMENTAL DISABILITIES 1147, 1151 (2012) ("Additional reasons suggested for increased substance use are inadequate coping skills for stress, a desire to fit in or increase social inclusion and overcome loneliness, stigmatization, and limited social skills." (citations omitted)); Frank Wenc, The Developmentally Disabled Substance Abuser, 5 ALCOHOL HEALTH & RESEARCH WORLD 42, 44 (1980-81) ("Intoxication is a great intellectual equalizer."); Joseph Westermeyer, Kenneth Kemp & Sean Nugent, Substance Disorder Among Persons with Mild Mental Retardation: A Comparative Study, 5 AM. J. ON ADDICTIONS 23 (1996). (Similar results have been found in other countries. See, e.g., Jane A. McGillivray & Megan R. Moore, Substance Use by Offenders with Mild Intellectual Disability, 26 J. INTELLECTUAL & DEVELOPMENTAL DISABILITY 297 (2001).) There is also some indication in the literature that individuals who have both ID and mental illness have reduced access to substance abuse treatment programs. See Elspeth M. Slayter, Disparities in Access to Substance Abuse Treatment Among People with Intellectual Disabilities and Serious Mental Illness, 35 HEALTH & SOCIAL WORK 49 (2010).

^{158.} Szymanski & Wilska, *Mental Retardation, supra* note 97, at 707 ("Another phenomenon has been 'diagnostic overshadowing'—when clinicians know that a person has mental retardation, they tend to overlook the comorbid mental disorder."); David A. Jopp & Christopher B. Keys, *Diagnostic Overshadowing Reviewed and Reconsidered*, 106 AM. J. ON MENTAL RETARDATION 416 (2001); AAMR 2002, *supra* note 95, at 174 ("There has been a general tendency to attribute all changes in mood and behavior to the diagnosis of mental retardation. This phenomenon has been named *diagnostic overshadowing*."); J. Helen Yoo, Maria G. Valdovinos & Stephen R. Schroeder, *The Epidemiology of Psychopathology in People with Intellectual Disability: A Forty-Year Review, in* 42 INTERNATIONAL REVIEW OF RESEARCH IN DEVELOPMENTAL DISABILITIES 31, 34 (Robert M. Hodapp ed., 2012) ("Diagnostic overshadowing can diminish the apparent need for a proper psychiatric assessment and may lead to the subsequent lack of proper treatment and care.").

^{159.} See AAMR 2002, supra note 95, at 174 ("The same diagnostic error can be made from the other diagnostic side, leading to underrecognition of intellectual impairments among individuals with depression, psychosis, or anxiety disorders. Clinicians and teams who support individuals with mental retardation must remain attentive to the possibility of mistakes in *both* of these directions.").

behavioral limitations that are consistent with a diagnosis of ID, but those adaptive deficits may be attributed to the more obvious psychiatric disorder and, as a result, IQ testing may not be pursued, resulting in a missed ID diagnosis. Second, the same kind of masking effect may well have been present during an individual's childhood. Mental illness symptoms can appear even in young children, and courts and evaluators must be alert to the possibility that, due to the (understandable) focus on a child's symptom-related behaviors, school records and childhood psychological evaluations may have failed to document a defendant's intellectual disability, even though it was present during the developmental period.¹⁶¹

Similarly, although it is not a mental illness, the poverty which may be a part of a defendant's life history, and particularly of his childhood, may also be the functional equivalent of a "comorbid condition," in the sense that it has the potential to mask an individual's intellectual disability. As with mental illness, it is exceedingly important to avoid letting the existence of one condition interfere with the diagnostic process concerning the other.¹⁶²

There is a clear consensus among clinicians and professional associations that the diagnosis and existence of any form of mental illness in an individual cannot preclude a diagnosis of intellectual disability.¹⁶³ The American Psychiatric Association, for example, has

the Courts, and Intellectual Disabilities, in THE HANDBOOK OF HIGH-RISK CHALLENGING BEHAVIORS IN PEOPLE WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 229, 232 (James K. Luiselli ed., 2012) [hereinafter Olley, *Death Penalty and Courts*] ("An understanding of dual diagnoses is important because it may be mistakenly argued in court that the defendant has a mental illness diagnosis that rules out mental retardation.").

^{161.} For a discussion of the age of onset requirement of the definition, see supra Part IV.C.

^{162.} See Olley, Death Penalty and Courts, supra note 160, at 232 ("[T]he relationship between the conditions of poverty and mild ID are well established, especially when such conditions are experienced in early childhood.... A failure to understand this relationship sometimes leads to misguided court testimony in which it is argued that these conditions are the cause of the defendant's limitations, and, thus, the diagnosis of mental retardation cannot be made. In fact, these conditions are such a familiar pattern that mild ID has historically been referred to as 'cultural familial mental retardation.") (internal citations omitted); see also Moore v. Texas, 137 S. Ct. 1039, 1051 (2017) (identifying "childhood abuse and suffering" as "traumatic experiences [that] count in the medical community as 'risk factors' for intellectual disability.").

^{163.} See, e.g., APA, DSM-5, supra note 65, at 31, 39, 40; Macvaugh & Cunningham, Forensic Practice, supra note 83, at 151-52.

Another question that occasionally arises is whether and how an individual with mental illness can even be evaluated for intellectual disability. Experienced clinicians recognize that the existence of one condition does not preclude accurate diagnosis regarding the other.

In the face of active and significant symptoms of psychological disorder, we recommend that the evaluation be postponed until the evaluee is clinically stable. However, the diagnosis of mental retardation is routinely made in clinical settings in the presence of a comorbid psychological disorder. Accordingly, as long as the active symptoms of mental

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advised diagnosticians that "[t]he diagnostic criteria for Mental Retardation do not include an exclusion criterion; therefore, the diagnosis should be made whenever the diagnostic criteria are met, regardless of, and in addition to, the presence of another disorder."¹⁶⁴

VI. ISSUES IN EVALUATING INTELLECTUAL FUNCTIONING

A. Commonly Used IQ Tests

As discussed earlier in this Article, IQ testing is the starting point in determining whether an individual has "significantly subaverage general intellectual functioning," which is the first prong of the definition.¹⁶⁵ For any court evaluating an *Atkins* claim, therefore, evaluation of the results of IQ tests is likely to be the first order of business.

The concept of the intelligence quotient,¹⁶⁶ and the tests to measure it, were developed early in the twentieth century and have been intensively studied and improved over the following decades.¹⁶⁷ The tests can be thought of as measuring what the individual has learned over time, and thus can serve as a measured reflection of his or her ability or capacity to learn.¹⁶⁸ IQ tests provide a measure of the individual's intellectual ability, but not an explanation of the reasons for it.¹⁶⁹ For the

illness are well-controlled with treatment, the presence of such a disorder alone should not be assumed to account for observed deficient IQ scores, particularly when there is a history of intellectual limitations and adaptive behavior deficits. Similarly, the presence of a personality disorder does not contraindicate a finding of mental retardation.

Id. at 152.

^{164.} APA, DSM-IV-TR, *supra* note 80, at 47; *see also* AAMR 2002, *supra* note 95, at 172 (discussing the "prevalence of mental health disorders among individuals with mental retardation"); APA, DSM-5, *supra* note 65, at 40 (explaining that co-occurring conditions are "frequent," with some, such as mental disorders, being "three to four times higher than in the general population"). The Supreme Court has noted this professional consensus. Brumfield v. Cain, 135 S. Ct. 2269, 2280 (2015) (citing APA, DSM-IV-TR, *supra* note 80, at 47; AAMR 2002, *supra* note 95, at 172); *Moore*, 137 S. Ct. at 1051 ("As mental-health professionals recognize, however, many intellectually disabled people also have other mental or physical impairments").

^{165.} See supra Part IV.A.

^{166.} See ANASTASI & URBINA, PSYCHOLOGICAL TESTING, supra note 106, at 296 ("[I]ntelligence is not a single, unitary ability, but a composite of several functions. The term is commonly used to cover that combination of abilities required for survival and advancement within a particular culture."). David Wechsler, the psychologist who developed the Wechsler scales, described intelligence as "the aggregate or global capacity of the individual to act purposefully, to think rationally and to deal effectively with his environment." DAVID WECHSLER, THE MEASUREMENT OF ADULT INTELLIGENCE 3 (1st ed. 1939) (emphasis omitted).

^{167.} See supra note 106.

^{168.} ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 295-96; KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, *supra* note 93, at 23.

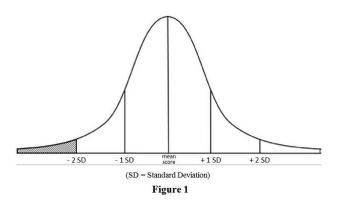
^{169.} ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 295 ("[T]ested intelligence should be regarded as a descriptive rather than an explanatory concept. An IQ is an

population as a whole, the spectrum of measured intelligence can be envisioned as a bell-curve, with the mean (average) score of $100.^{170}$

Psychologists then compare the examined person's IQ score against that average, and measure the individual's score in terms of its distance from the general population's average. As noted earlier, to satisfy the first prong of the definition of intellectual disability, the person's measured intelligence must be at least two standard deviations below the mean score of 100 (taking into account the standard error of measurement). Fewer than three percent of the population have scores that are at least two standard deviations below the mean.¹⁷¹ That is the threshold for the first element of the definition of intellectual disability.

Normal Distribution of IQ Scores

The shaded area represents people eligible for a diagnosis of ID under prong 1.



Psychologists have developed a wide array of IQ tests which they use for various purposes,¹⁷² but the courts are most likely to encounter only a few in *Atkins* evaluations.¹⁷³ One series of instruments courts may

expression of an individual's ability level at a given point in time, in relation to the available age norms. No intelligence test can indicate the reasons for one's performance."). For a discussion of the causation of intellectual disability, see *supra* note 97 and sources cited therein.

^{170.} See infra Figure 1.

^{171.} See Lisa Whipple Drozdick et al., The Wechsler Adult Intelligence Scale-Fourth Edition and the Wechsler Memory Scale-Fourth Edition, in CONTEMPORARY INTELLECTUAL ASSESSMENT: THEORIES TESTS AND ISSUES 197, 197 (Dawn P. Flanagan & Patti L. Harrison eds., 3d ed. 2012); see also supra note 110 and sources cited therein.

^{172.} See, e.g., Sara S. Sparrow & Stephanie M. Davis, Recent Advances in the Assessment of Intelligence and Cognition, 41 J. CHILD PSYCHOLOGY & PSYCHIATRY 117, 124-26 Table 1 (2000).

^{173.} Courts may also encounter other tests in a defendant's history. A number of these tests are described in CONTEMPORARY INTELLECTUAL ASSESSMENT: THEORIES, TESTS AND ISSUES, 197-455

see frequently are the IQ tests developed originally by Alfred Binet at the turn of the twentieth century and then modified and adapted over the years by psychologists at Stanford University. These tests are known as the "Stanford-Binet Intelligence Scales," and since the current version is the fifth edition, the shorthand term used by psychologists is the "SB5."¹⁷⁴

The other tests most frequently encountered in intellectual disability cases are the series of tests developed originally by David Wechsler in the middle of the twentieth century.¹⁷⁵ There are two basic versions. The first is designed to measure the intelligence of children, the "Wechsler Intelligence Scale for Children," which is now in its fifth edition and shorthanded as "WISC-V."¹⁷⁶ The other principal test is the "Wechsler Adult Intelligence Scale,"¹⁷⁷ now in its fourth edition, known as the "WAIS-IV."¹⁷⁸ (The creation and evolution of both the Stanford-Binet and the Wechsler scales are a result of refinements in psychometric

⁽Dawn P. Flanagan & Patti L. Harrison eds., 3d ed. 2012). See *infra* notes 424-29 and accompanying text for a discussion of the need for experts to have specific knowledge of every test they interpret.

^{174.} The SB5 was published in 2003. GALE H. ROID & R. ANDREW BARRAM, ESSENTIALS OF STANFORD-BINET INTELLIGENCE SCALES (SB5) ASSESSMENT 1 (2004).

^{175.} The first version was the Wechsler-Bellevue Intelligence Scale, which was published in 1939. ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 215. For a history of the development of IQ testing and the role of Dr. Wechsler, see generally Corwin Boake, *From the Binet–Simon to the Wechsler–Bellevue: Tracing the History of Intelligence Testing*, 24 J. CLINICAL & EXPERIMENTAL NEUROPSYCHOLOGY 383 (2002).

^{176.} ALAN S. KAUFMAN ET AL., INTELLIGENT TESTING WITH THE WISC-V, at 5 (2016). Because the WISC is intended for testing with children, courts will be unlikely to see test results from the WISC-V, published in 2014, for a few years in the capital context. A comprehensive explanation of the WISC-V may be found at *id.*, pt. I-III. The WISC-IV was published in 2003, and is likely to be the instrument that will appear in records of prior testing for some time to come. *See* DAWN P. FLANAGAN & ALAN S. KAUFMAN, ESSENTIALS OF WISC-IV ASSESSMENT (2d ed. 2009). There is also a separate test for younger children, the Wechsler Preschool and Primary Scale of Intelligence—Third Edition, or "WPPSI-III," published in 2002. ESTHER STRAUSS, ELISABETH M. S. SHERMAN & OTFRIED SPREEN, A COMPENDIUM OF NEUROPSYCHOLOGICAL TESTS: ADMINISTRATION, NORMS, AND COMMENTARY 337 (3d ed. 2006). For a fuller explanation of the WISC-IV and the WPPSI-III, see *id.* at 310-47.

^{177.} The first WAIS was published in 1955. KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, *supra* note 93, at 3.

^{178.} ELIZABETH O. LICHTENBERGER & ALAN S. KAUFMAN, ESSENTIALS OF WAIS-IV ASSESSMENT 37-42 (2d ed. 2013). The WAIS-IV was published in 2009. *Id.*; WAIS-IV CLINICAL USE AND INTERPRETATION (Lawrence G. Weiss et al. eds., 2010); WAIS-IV, WMS-IV, AND ACS: ADVANCED CLINICAL INTERPRETATION (James A. Holdnack et al. eds., 2013).

The WAIS-III, which courts may still encounter from prior testing, is for use from ages 16 to 89. KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, *supra* note 93, at 3. Although the adult version is obviously the appropriate instrument for the adults in the criminal justice system, courts may also see WISC results (from one edition or another) when reviewing any testing that that may have been done on the defendant earlier in life, particularly when he was in school.

understanding, incorporating the practical experience of the psychologists who have administered the tests.¹⁷⁹)

These frequently used psychometric instruments have a great deal in common with one another. Each consists of a standardized list of individual questions and tasks¹⁸⁰ that are administered under carefully monitored time limitations and testing conditions.¹⁸¹ The questions to be asked and the equipment to be used accompany the test kit.¹⁸² When the individual who is to be evaluated has completed the test, the examiner reviews the results given and, based on the percentage of correct answers, assigns the appropriate IQ score (The IQ score is derived from a table which reflects the percentage of individuals in the general population who gave the same number of correct and incorrect answers).¹⁸³ The standards for each test are prescribed in great detail in

182. ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 208 Figure 8–1 (showing a photograph of the test materials used in administering a Stanford-Binet scale).

183. Among the issues involved in the construction of these instruments are the "validity" and "reliability" of the particular tests. The *validity* of a test is an assessment of how clearly its results focus on the attribute that its designers set out to measure. *See, e.g.*, Pamela A. Moss, *Validity, in 2* ENCYCLOPEDIA OF INTELLIGENCE, *supra* note 112, at 1101, 1103 ("First, is the test any good as a measure of the characteristic it is interpreted to assess? Second, should the test be used for the proposed purpose?" (quoting Samuel Messick, *The Standard Problem: Meaning and Values in Measurement and Evaluation,* 30 AM. PSYCHOL. 955, 962 (1975))). *Reliability* refers more specifically to whether the results of a test are accurate, in the sense that they would be replicated on

^{179.} An indication of the intensity of the professional scrutiny of the instruments is the plethora of scholarly articles and books analyzing and criticizing various aspects of each edition of the tests and suggesting improvements. For example, the Wechsler instruments have engendered "several thousand publications" reflecting extensive clinical commentary. ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 215. These comments, critiques, and testing results are then evaluated and incorporated in later iterations of the instrument. *See id.* at 222. ("The successive editions of the three Wechsler scales reflect an increasing level of sophistication and experience in test construction, corresponding to the decades when they were developed.").

^{180.} Keith F. Widaman, *Concepts of Measurement, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 55, 62 (Edward A. Polloway ed., 2015) ("Many items on intelligence tests are scored in dichotomous fashion (0 = incorrect, 1 = correct) or ternary form (0 = incorrect, 1 = partial credit, 2 = full credit). Other items may be scored based on time taken to complete a set of operations, so they might lead to a transformation of time, with longer times to solve receiving lower scores.").

^{181.} ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 6 ("Standardization implies *uniformity of procedure* in administering and scoring the test. If the scores obtained by different persons are to be comparable, testing conditions must obviously be the same for all."). If the examiner varies from the test's time requirements, or if the conditions of administration are not consistent with the test's standards, there is a substantial risk that the resulting score will be incorrect. *See, e.g.*, Malcolm Ree, *Standardization, in* 2 ENCYCLOPEDIA OF INTELLIGENCE, *supra* note 112, at 1032; KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, *supra* note 132; KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, *supra* note 93, at 197-202 (discussing administration and scoring errors on Wechsler IQ tests); Jeffrey G. Kuentzel et al., *Testing Intelligently Includes Double-Checking Wechsler IQ Scores*, 29 J. PSYCHOEDUCATIONAL ASSESSMENT 39 (2011); GARY GROTH-MARNAT, HANDBOOK OF PSYCHOLOGICAL ASSESSMENT 137 (5th ed. 2009) (listing the most common errors in test administration that can distort individual scores).

the test's published manual, details with which every clinical evaluator needs to be familiar and experienced. What might seem to a layperson to be a minor departure from the rules for administering and interpreting these tests¹⁸⁴ can have substantial consequences and distort the test's results.¹⁸⁵

Each of the psychometric instruments used to measure intelligence has been pretested and normed on the relevant populations prior to its

185. Paul A. McDermott, Marley W. Watkins & Anna M. Rhoad, *Whose IQ Is It?—Assessor Bias Variance in High-Stakes Psychological Assessment*, 26 PSYCHOLOGICAL ASSESSMENT 207, 208 (2014) ("Administration and scoring biases, most especially pervasive types, undermine the purpose of testing. Their corrupting effects are exponentially more serious when testing purposes are high stakes, and there is abundant evidence that such biases will operate to distort major score interpretations, to change results of clinical trials, and to alter clinical diagnoses and special education classifications.").

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another occasion or when administered by another tester. *See, e.g.*, Cecil R. Reynolds, *Reliability, in* 2 ENCYCLOPEDIA OF INTELLIGENCE, *supra* note 112, at 949 ("In thinking about reliability, one must address such questions as what the probability is of a person obtaining the same score if tested at a different time."); Domenic V. Cicchetti, *Guidelines, Criteria, and Rules of Thumb for Evaluating Normed and Standardized Assessment Instruments in Psychology*, 6 PSYCHOLOGICAL ASSESSMENT 284 (1994); John W. Jacobson & James A. Mulick, *Psychometrics, in* MANUAL OF DIAGNOSIS AND PROFESSIONAL PRACTICE IN MENTAL RETARDATION 75, 77-80 (John W. Jacobson & James A. Mulick eds., American Psychological Association, 1996); Widaman, *supra* note 180, at 65-73.

^{184.} Great care must be taken to avoid administrative and scoring errors, which create the risk of misreporting the defendant's intellectual functioning. For discussion of the role of computational and other errors in the administration and scoring of Wechsler scales, see John R. Slate & Larry C. Hunnicutt, Jr., Examiner Errors on the Wechsler Scales, 6 J. PSYCHOEDUCATIONAL ASSESSMENT 280 (1988); Gary W. Moon et al., Frequent WAIS-R Administration Errors: An Ignored Source of Inaccurate Measurement, 22 PROF. PSYCHOLOGY: RESEARCH & PRACTICE 256 (1991) (listing the most common evaluator errors and the frequency with which they occur); Joseph J. Ryan, Aurelio Prifitera & Linda Powers, Scoring Reliability on the WAIS-R, 51 J. CONSULTING & CLINICAL PSYCHOLOGY 149 (1983); Paul A. McDermott, Marley W. Watkins & Anna M. Rhoad, Whose IO Is It?—Assessor Bias Variance in High-Stakes Psychological Assessment, 26 PSYCHOLOGICAL ASSESSMENT 207, 208 (2014) ("Assessor bias is manifest where, for example, a psychologist will tend to drift from the standardized protocol for test administration (altering or ignoring stopping rules or verbal prompts, mishandling presentation of items and materials, etc.) and erroneously scoring test responses (failure to query ambiguous answers, giving too much or too little credit for performance, erring on time limits, etc.)."); KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, supra note 93, at 197-202; John R. Slate et al., Practitioners' Administration and Scoring of the WISC-R: Evidence That We Do Err, 30 J. SCHOOL PSYCHOLOGY 77, 81 (1992) ("The frequent mistake of 'generosity' in assigning points may reflect a sincere desire to help a child/client that creates a subtle pressure to 'read into answers.""); Janice Whitten et al., Examiner Errors in Administering and Scoring the WPPSI-R, 12 J. PSYCHOEDUCATIONAL ASSESSMENT 49, 51 (1994) ("Examiners were 1.6 times more likely to assign too many points than too few points."). See generally William McQueen et al., Improving Graduate Student Performance in Cognitive Assessment: The Saga Continues, 25 PROF. PSYCHOLOGY: RESEARCH & PRACTICE 283 (1994). Courts should be particularly alert to the possibility of errors in testing performed during the individual's childhood. See Larry C. Hunnicutt, Jr. et al., Examiner Errors on the Kaufman Assessment Battery for Children: A Preliminary Investigation, 28 J. SCHOOL PSYCHOLOGY 271, 272-76 (1990).

publication.¹⁸⁶ The group on which the test has been normed may also be limited by age.¹⁸⁷ The norming process involves careful analysis of the results of its administration to a large and diverse collection of individuals, including individuals with intellectual disability.¹⁸⁸

The actual administration of any of the principal IQ tests typically takes two to three hours, and the scoring and interpretation of the results by the clinical examiner generally occupies about two or three additional hours.¹⁸⁹ Such a report should include not only the results of the testing but also any observations regarding the test conditions.¹⁹⁰

^{186.} For any particular instrument, it is essential that the population sample from which the norming is derived is representative of the overall population. Keith F. Widaman, *Concepts of Measurement, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 55, 63 (Edward A. Polloway ed., 2015) ("A norming sample is typically selected to be representative of the population of a country with regard to region of residence, socioeconomic status, ethnicity, and other relevant demographic variables. The norming samples of adaptive behavior and intelligence tests serve as representative 'snap shots' of the complete population or country."); Richard W. Woodcock, *Norms, in* 2 ENCYCLOPEDIA OF INTELLIGENCE, *supra* note 112, at 770, 774; *see infra* notes 248-49 (discussing the use of the version of a test with the most recent norms whenever possible).

^{187.} Keith F. Widaman, *Concepts of Measurement, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 55, 63 (Edward A. Polloway ed., 2015) ("If a measure, such as an intelligence test or inventory of adaptive behavior, assesses constructs presumed to vary as a function of chronological age, then norming samples for each age level must be obtained.").

^{188.} Any test that is administered to determine whether an individual has intellectual disability must have been properly normed on a broad sample that includes the appropriate number of people with intellectual disability. *See* Richard W. Woodcock, *Norms, in* 2 ENCYCLOPEDIA OF INTELLIGENCE, *supra* note 112, at 770, 772; ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 69. Instruments that have not been rigorously normed should not be used in assessing the IQ of anyone who may have intellectual disability.

^{189.} See KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, *supra* note 93, at 192-97 (discussing administration of the third edition of the WAIS).

^{190.} Skilled and experienced clinicians administering these instruments may be in a position to learn more than just the individual's test results:

Over the decades, clinicians have come to regard the Stanford-Binet and similar individual scales not only as standardized tests but also as clinical interviews. The very features that make these scales difficult to administer also create opportunities for interaction between examiner and examinee and provide other sources of clues for the experienced clinician. [These tests] make it possible to observe the respondent's work methods, problem-solving approaches, and other qualitative aspects of performance.

ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 207-08.

The testing process can also be helpful in identifying the possibility of co-existing mental illness. *See* AIKEN, ASSESSMENT OF INTELLECTUAL FUNCTIONING, *supra* note 106, at 160 ("[A]dministering a test should also be viewed as a chance to make observations in a controlled situation, an opportunity that can provide a great deal of extratest information and data to confirm or disconfirm hypotheses about the examinee's mental status and personality functioning."). Nonetheless, it is crucial to avoid confusing such observations with the results of the tests themselves:

Any qualitative observations made in the course of administering individual scales should, of course, be clearly recognized as such and ought not to be interpreted in the same way as objective test scores. The value of such qualitative observations depends largely on the skill, experience, and psychological sophistication of the examiner, as well

The Stanford-Binet. The Stanford-Binet 5 (or SB5) is the most recent edition of the test that is the ancestor of all modern IQ instruments.¹⁹¹ Like all the others, its scores distribute results so that individuals with measured intelligence at least two standard deviations below the mean will receive scores in the range of approximately 70-75 or below.¹⁹² A feature of the Stanford-Binet is that it provides clinicians with three different interpretive indices (or scores): the Verbal IQ, the Nonverbal (previously described as "Performance") IQ, and the Full Scale IQ (which incorporates both the Verbal and the Nonverbal results).¹⁹³

The Wechsler Adult Intelligence Scale. The Wechsler Adult Intelligence Scale, 4th edition (WAIS-IV) is the latest edition of the test first devised by David Wechsler in 1939 as an alternative to the Stanford-Binet.¹⁹⁴ Like the Stanford-Binet, its scoring system organizes results so that individuals whose measured intelligence is at least two standard deviations below the mean will receive scores in the range of 70-75 or below. And, like the Stanford-Binet, previous editions of the Wechsler tests have, up through the WAIS-III, provided the examiner

as on her or his awareness of the pitfalls and limitations inherent in this type of observation.

ANASTASI & URBINA, PSYCHOLOGICAL TESTING, supra note 106, at 208.

^{191.} Gale H. Roid & Mark Pomplun, *The Stanford Binet Intelligence Scales, Fifth Edition, in* CONTEMPORARY INTELLECTUAL ASSESSMENT: THEORIES, TESTS AND ISSUES 249, 266 (Dawn P. Flanagan & Patti L. Harrison eds., 3d ed. 2012).

^{192.} For a discussion of the SB5's sub-tests, as well as issues involved in administration and scoring, see *id.* at 251-54.

^{193.} ESTHER STRAUSS, ELISABETH M. S. SHERMAN & OTFRIED SPREEN, A COMPENDIUM OF NEUROPSYCHOLOGICAL TESTS: ADMINISTRATION, NORMS, AND COMMENTARY 259-60 (3d ed. 2006). Both the Verbal and Nonverbal (Performance) scores are, themselves, based on five so-called factor indices. *Id.; see also* GALE H. ROID & R. ANDREW BARRAM, ESSENTIALS OF STANFORD-BINET INTELLIGENCE SCALES (SB5) ASSESSMENT 9-10 (2004) There is a consensus among psychologists that the Full Scale score is generally the most reliable indicator of the individual's level of intelligence. *See infra* note 195. For a detailed description of the SB5, see STRAUSS ET AL., *supra*, at 258-68.

^{194.} Lisa Whipple Drozdick et al., *The Wechsler Adult Intelligence Scale-Fourth Edition and the Wechsler Memory Scale-Fourth Edition, in* CONTEMPORARY INTELLECTUAL ASSESSMENT: THEORIES TESTS AND ISSUES 197, 197 (Dawn P. Flanagan & Patti L. Harrison eds., 3d ed. 2012) ("The Wechsler Adult Intelligence Scale—Fourth Edition (WAIS-IV) is the most recent revision of the WAIS and incorporates numerous changes from previous editions while maintaining the integrity and tradition of the Wechsler scales. It is used to assess intellectual and cognitive functioning in adults and adolescents ages 16 to 90 and provides information on an individual's general intellectual ability, as well as abilities across various cognitive domains. Since the WAIS-IV provides an overall estimate of cognitive functioning, it is frequently used alongside other instruments in comprehensive evaluations."). For a discussion of the WAIS-IV's subtests, see *id.* at 200-07. The Wechsler tests now appear to be "the most widely employed individual [IQ] tests." ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 219.

with a Full Scale score and Verbal and Performance scores.¹⁹⁵ The WAIS-IV is organized somewhat differently, and no longer has the division between Verbal and Performance IQ scores.¹⁹⁶ The report from the administration of the WAIS-IV will include a Full Scale IQ score accompanied by scores in four "index" areas: verbal comprehension, working memory, perceptual reasoning, and processing speed.¹⁹⁷

In addition to Wechsler and Stanford-Binet, there are other instruments that have been used in recent years.¹⁹⁸ Courts are most likely to encounter reports based on these instruments in the process of reviewing a defendant's history from earlier times in his life.

B. Short Forms and Group Tests

At times, the courts may encounter an evaluation report or testimony from a witness who has not given the examined individual a complete, standardized IQ test, and instead has administered a portion of such a test or given a so-called "short form" version of an IQ test.

Short forms of the most popular IQ tests have been available for decades,¹⁹⁹ and, while there is considerable controversy surrounding

198. See Sara S. Sparrow & Stephanie M. Davis, *Recent Advances in the Assessment of Intelligence and Cognition*, 41 J. CHILD PSYCHOLOGY & PSYCHIATRY 117, 129 (2000) ("In the last two decades of the twentieth century, there have been an abundance of new and revised tests to measure cognition.").

^{195.} ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 217 (The earlier versions of the Wechsler scales, which courts remain likely to encounter, have performance subtests which "typically require the manipulation of various objects, such as puzzles and blocks, or the visual scanning of printed materials, like pictures or symbols. They all place time limits on the test taker, who in most cases is also given bonus points for speed. In the Verbal Scale, by contrast, only one subtest (Arithmetic) is speeded."). *See generally* ESTHER STRAUSS, ELISABETH M. S. SHERMAN & OTFRIED SPREEN, A COMPENDIUM OF NEUROPSYCHOLOGICAL TESTS: ADMINISTRATION, NORMS, AND COMMENTARY 283-310 (3d ed. 2006) (describing the details of the WAIS-III).

^{196.} GARY GROTH-MARNAT, HANDBOOK OF PSYCHOLOGICAL ASSESSMENT 122 (5th ed. 2009).

^{197.} *Id.* at 122-23 ("The major rationale for the elimination of the Verbal-Performance IQs is that they are not pure measures but typically combine a number of different abilities. For example, the Verbal IQ included measures of verbal abilities as well as working memory. Thus it was not a unitary measure of an ability. In contrast, relying on the four index scores ensures that relatively pure, theoretically sound measures of abilities have been made.").

One such instrument was developed by Professor Alan Kaufman, the "Kaufman Adolescent and Adult Intelligence Test," also known as the "KAIT," which was designed for administration to individuals between the ages of 11 and 85. ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 224. The publisher of the KAIT stopped publishing it several years ago, in part because of the expense of the process of frequently updating and reformulating such instruments in light of phenomena such as the Obsolescent Norms (Flynn) effect, discussed *infra* Part VI.D.

^{199.} For example, a short form variant of the Stanford-Binet was published as the "Slosson Intelligence Test." AAMR 2002, *supra* note 95, at 64 ("Slosson . . . designed this instrument to provide an estimate of intelligence that requires little specialized training for the examiner and little

them, some psychologists have found them helpful for making quick assessments and rough screenings of intellectual functioning.²⁰⁰ These tests achieve their brevity either by reducing the number of items in each subtest or by eliminating some of the subtests altogether. Some other short tests focus on one particular aspect of intelligence.²⁰¹ The goal of developing a short form is to save time for the evaluator.²⁰²

Whatever usefulness these short tests may have for initial assessments in contexts such as educational placement, there is a strong consensus among psychologists and other clinicians that they cannot be used as a substitute for a full assessment of intelligence in matters of significance.²⁰³ Relying on such abbreviated testing,

time to administer."). The Slosson test, in particular, has been severely criticized. *See, e.g.*, KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, *supra* note 93, at 630-31; *id.* at 660 ("The Slosson Intelligence Test, a mostly verbal test organized in the format of the old Binet, has been commonly used for decades, but it has largely unknown psychometric properties and a poor standardization sample."). There are similar concerns about the "Ammons Quick Test." Caroline Everington, *Challenges of Conveying Intellectual Disabilities to Judge and Jury*, 23 WM. & MARY BILL OF RIGHTS J. 467, 474 (2014) ("The Ammons test is designed as a quick screening tool and is very limited in scope, primarily measuring vocabulary, which is only one component of intellectual functioning." (footnote omitted)). Short forms have been developed for the Wechsler and Kaufman tests as well. ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 217 ("Since the publication of the original Wechsler-Bellevue, a large number of abbreviated scales or short forms have been proposed for the Wechsler scales." (emphasis omitted)); *id.* at 225 ("The Kaufman Brief Intelligence Test (K-BIT) was designed as a quick screening instrument to estimate level of intellectual functioning. Although it is individually administered, the test is simple and can be given by a technician." (citation omitted)).

^{200.} For a discussion of the history of these instruments, see A.B. Silverstein, *Short Forms of Individual Intelligence Tests*, 2 PSYCHOLOGICAL ASSESSMENT 3 (1990); KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, *supra* note 93, at 629-33.

^{201.} See KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, supra note 93, at 650. An example is the Peabody Picture Vocabulary Test—Third Edition (PPVT-III). See id. In addition, some clinicians focus on only a single portion of the standardized test, i.e., only reporting the verbal or the performance subtests. Kevin S. McGrew, Intellectual Functioning, in THE DEATH PENALTY AND INTELLECTUAL DISABILITY 85, 105 (Edward A. Polloway ed., 2015). Great care must be taken when using measures other than full-scale IQ. Id. ("The total full-scale IQ score is usually the best estimate of a client's overall intellectual functioning for diagnostic purposes. However, there are instances in which, and individuals for whom, the total test score may not be the best representation of overall intellectual functioning."); APA, DSM-5, supra note 65, at 37 ("[H]ighly discrepant individual subtest scores may make an overall IQ score invalid."); see, e.g., People v. Superior Court (Vidal), 155 P.3d 259, 266-67 (Cal. 2007).

^{202.} A.B. Silverstein, *Short Forms of Individual Intelligence Tests*, 2 PSYCHOLOGICAL ASSESSMENT 3, 4 (1990).

^{203.} See, e.g., *id.* at 9 ("There appears to be rather general agreement that the use of a short form . . . is definitely *not* legitimate if an important decision is to be made on the basis of the results (e.g., when placement in a special education program is being considered)."); *see also* APA, DSM-5, *supra* note 65, at 37 ("Invalid scores may result from the use of brief intelligence screening tests or group tests"); ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 217-19 ("[M]any of the important qualitative observations made possible by the administration of an individual scale are lost when abbreviated scales are used. Thus, it is probably inadvisable to use such abbreviated versions except as rough screening devices."); AIKEN, ASSESSMENT OF

particularly in opposition to an *Atkins* claim,²⁰⁴ is inconsistent with professional standards.

Similar concerns are raised by IQ tests that are administered to groups rather than individually.²⁰⁵ These group tests, such as the Revised Beta, are often employed by correctional institutions as part of their initial screening process for new inmates.²⁰⁶ These tests were originally designed for use in the armed forces in World War I,²⁰⁷ and have been

INTELLECTUAL FUNCTIONING, supra note 106, at 152 ("Whenever shortened or abbreviated versions of the WAIS-R are administered, they should be viewed as rough screening devices that do not provide the same opportunity as administration of the Full Scale for making qualitative observations of the examinee's behavior."); Everington & Olley, Defining and Diagnosing, supra note 15, at 7 ("These brief tests may be useful screening instruments for placement purposes but are not valid measures for diagnosing mental retardation and should not be compared to a test of global intelligence, such as the Wechsler scale."); Cecil R. Reynolds & Daneen A. Milam, Challenging Intellectual Testing Results, in COPING WITH PSYCHIATRIC AND PSYCHOLOGICAL TESTIMONY 311, 327 (David Faust ed., 6th ed. 2012) ("Shortened versions of tests are less reliable (their scores contain larger error components) and typically have less scientific evidence available to support their interpretations."); Bradley N. Axelrod, Validity of the Wechsler Abbreviated Scale of Intelligence and Other Very Short Forms of Estimating Intellectual Functioning, 9 ASSESSMENT 17, 22 (2002) ("[1]f the clinician's goal is to obtain an accurate estimation of general intellectual functioning, the current results suggest that the WASI should not be used in the assessment of individual patients."); Gilbert S. Macvaugh, III, Karen L. Salekin & J. Gregory Olley, Mental Retardation: Death Penalty, in 4 WILEY ENCYCLOPEDIA OF FORENSIC SCIENCE 1730, 1733 (Allan Jamieson & Andre Moenssens eds., 2009) ("[O]nly global measures of intelligence are appropriate for diagnosing mental retardation"); James C. Kaufman & Alan S. Kaufman, Time for the Changing of the Guard: A Farewell to Short Forms of Intelligence Tests, 19 J. PSYCHOEDUCATIONAL ASSESSMENT 245 (2001) (arguing that even for initial screening purposes, other instruments are superior to the short forms).

^{204.} Contemporaneous testing using short forms does not give courts adequate information on which to decide whether a defendant is entitled to *Atkins* relief. However, if a court encounters records of, for example, a Slosson test or some other short form administered earlier in the defendant's life, there may be some evidentiary value on such issues as the age of onset of the defendant's disability.

^{205.} Group tests are generally pencil-and-paper tests. JOHN SALVIA & JAMES E. YSSELDYKE, ASSESSMENT IN SPECIAL EDUCATION 200 (4th ed. 1988). As is the case with short tests, this means that only some aspects of intelligence are tested, in contrast to the full-scale instruments. *See supra* notes 206-11 and accompanying text. For additional issues regarding group tests, see John Fremer, *Group Tests, in* 1 ENCYCLOPEDIA OF INTELLIGENCE, *supra* note 112, at 508-12.

^{206.} Everington & Olley, *Defining and Diagnosing, supra* note 15, at 6 ("[G]roup-administered tests, such as the *Revised Beta*, are commonly used upon entry into correctional facilities...." (citation omitted)).

Group tests, including the Lorge-Thorndike and Otis-Lennon, were also employed by some school districts or individual schools for administrative purposes. JOHN SALVIA & JAMES E. YSSELDYKE, ASSESSMENT IN SPECIAL EDUCATION 200 (4th ed. 1988) ("Most often they are routinely administered as screening devices to identify those who are different enough to warrant further assessment."); *id.* at 217 ("Many school districts have done away with the use of group intelligence tests for several reasons . . . [including concern that] teachers may form unrealistic or inaccurate expectancies or stereotypes based on the scores.").

^{207.} See AIKEN, ASSESSMENT OF INTELLECTUAL FUNCTIONING, supra note 106, at 17-19; see also LEILA ZENDERLAND, MEASURING MINDS: HENRY HERBERT GODDARD AND THE ORIGINS OF AMERICAN INTELLIGENCE TESTING 292-93 (1998); Frederick L. McGuire, Army Alpha and Beta

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updated and modified over the years. For a variety of reasons, including the lack of direct interaction and observation between the examiner and the subject, group tests are viewed as having substantially reduced accuracy and reliability.²⁰⁸ They are particularly unreliable when used for diagnostic purposes in *Atkins* cases.

C. Standard Error of Measurement for IQ Testing

As with measurements in any area of our lives, the process of ascertaining an individual's IQ necessarily includes some degree of imprecision. Rather than ignore this potential imprecision, or make claims for a greater level of certainty than the scientific facts warrant, psychologists and other clinicians have addressed the issue directly: "Because all measurement in science is imperfect, psychologists have developed mathematical theories to assist them in determining how well tests measure psychological traits or characteristics."²⁰⁹ This acknowledgement has produced a specific tool, which is known as the "standard error of measurement," or "SEM."²¹⁰

The standard error of measurement is essentially a quantification of the likelihood that the score that was achieved on a particular administration of a test was an accurate measure.²¹¹ Since it is not

Tests of Intelligence, in 1 ENCYCLOPEDIA OF INTELLIGENCE, supra note 112, at 125-29.

^{208.} Caroline Everington, *Challenges of Conveying Intellectual Disabilities to Judge and Jury*, 23 WM. & MARY BILL OF RIGHTS J. 467, 474 (2014) ("A commonly observed error is the reliance on screening or group-administered intelligence tests that do not provide accurate measures of IQ.... Group-administered paper and pencil tests, such as the *Beta III*, used in correctional settings, are also inappropriate for diagnosis as they do not yield accurate scores. In the case of group-administered tests, there is the additional risk that the individual received additional help or copied the responses of others."); AAIDD 2010, *supra* note 65, at 41 ("For evaluating whether or not a person meets the significant limitations in intellectual functioning criterion for a diagnosis of ID, one should employ an *individually administered*, standardized instrument that yields a measure of general intellectual functioning." (emphasis added)). Group tests are often not well-standardized due to grade level and age fluctuations, and often not standardized on representative populations. JOHN SALVIA & JAMES E. YSSELDYKE, ASSESSMENT IN SPECIAL EDUCATION 217 (4th ed. 1988).

^{209.} Edward J. Slawski, *Error of Measurement, in* 1 ENCYCLOPEDIA OF INTELLIGENCE, *supra* note 112, at 395.

^{210.} AAIDD 2010, *supra* note 65, at 36. The statistical phenomenon of measurement error is not unique to IQ testing; it applies to a wide array of educational and psychological measurements. *See, e.g.*, Hall v. Florida, 134 S. Ct. 1986, 2000 (2014) ("SEM is not a concept peculiar to the psychiatric profession and IQ tests."). For a more technical explanation of the phenomenon, see David H. Kaye & David A. Freedman, *Reference Guide on Statistics, in* REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 211, 243-46 (Federal Judicial Center & National Research Council of the National Academies eds., 3d ed. 2011).

^{211.} ROBERT M. THORNDIKE & TRACY THORNDIKE-CHRIST, MEASUREMENT AND EVALUATION IN PSYCHOLOGY AND EDUCATION 132 (8th ed. 2010) ("Another way to view the standard error of measurement is as an indication of how much a person's score might change on retesting. Each person's score on the first testing includes some amount of error.").

possible to evaluate that accuracy by repeating the testing,²¹² the statistical tool of SEM quantifies the evaluator's level of confidence in the score.²¹³ Viewed another way, the SEM represents the professionally-required level of modesty about the accuracy of the results of IQ testing.²¹⁴

The principle underlying the standard error of measurement applies fully to IQ testing to determine whether an individual has intellectual disability.²¹⁵ Indeed, taking it into account is essential to accurate assessment of intellectual disability.²¹⁶ This fact, of course, has the potential to complicate a court's job in evaluating an *Atkins* claim.²¹⁷

217. Bonnie & Gustafson, Implementing Atkins, supra note 127, at 834-37. For example, every

^{212.} See infra notes 229-37 and accompanying text for a discussion of the practice effect.

^{213.} See AAIDD 2010, supra note 65, at 36 ("The term standard error of measurement, which varies by test, subgroup, and age group, is used to quantify this variability and provide a stated statistical confidence interval within which the person's true score falls."); AIKEN, ASSESSMENT OF INTELLECTUAL FUNCTIONING, supra note 106, at 42 ("Knowing the standard error of measurement of a test permits the determination of a range of values (a confidence interval) within which we can be fairly certain that an examinee's true score on the test falls.").

^{214.} See THORNDIKE & THORNDIKE-CHRIST, supra note 211, at 121-22 ("With psychological or educational data, we usually cannot make a whole series of measurements on each individual because of practice and fatigue effects, as well as time constraints . . . Often, we are fortunate if we can get two scores for each individual. But, if we have a pair of measurements for each individual, we can make an estimate . . . of what the scattering of scores would have been for the average person if we had made the measurements again and again. Our index of scatter, the standard error of measurement, reveals the inconsistency of the measurements that we would expect if we could employ repeated measurements."; GARY GROTH-MARNAT, HANDBOOK OF PSYCHOLOGICAL ASSESSMENT 15 (5th ed. 2009) ("The logic behind the SEM is that test scores consist of both truth and error. Thus, there is always noise or error in the system, and the SEM provides a range to indicate how extensive that error is likely to be. The range depends on the test's reliability so that the higher the reliability, the narrower the range of error.").

^{215.} AAIDD 2010, *supra* note 65, at 36 ("The results of any psychometric assessment must be evaluated in terms of the accuracy of the instrument used and such is the case with the assessment of intelligence. An IQ score is subject to variability as a function of a number of potential sources of error, including variations in test performance, examiner's behavior, cooperation of test taker, and other personal and environmental factors. Thus, variation in scores may or may not represent the individual's actual or true level of intellectual functioning."). For individuals in (or near) the level of intellectual disability, measurement error on a particular instrument may be somewhat greater than is true for individuals of average intelligence. Keith F. Widaman, *Concepts of Measurement, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 55, 70 (Edward A. Polloway ed., 2015) ("Experts should also pay attention to estimates of standard error of measurement that might vary across the ability scale, because a finding that standard error of measurement is larger (yielding less accurate scores) in the lower tail of the distribution would not be surprising.").

^{216.} AAIDD, USER'S GUIDE 2007, *supra* note 140, at 12 ("[T]he assessment of intellectual functioning through the reliance on intelligence tests is fraught with the potential for misuse if consideration is not given to possible errors in measurement."); AAIDD, USER'S GUIDE 2012, *supra* note 65, at 22 (discussing the same phenomenon in terms of the "confidence interval" regarding the accuracy of testing results); Am. Psychological Ass'n, *APA's Guidelines for Test User Qualifications: An Executive Summary*, 56 AM. PSYCHOLOGIST 1099, 1101 (2001) ("[T]est users should understand the standard error of measurement, which presents a numerical estimate of the range of scores consistent with the individual's level of performance.").

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Nonetheless, there is a strong consensus among clinicians that the SEM must always be taken into account when assessing whether the results of an individual's testing satisfy the first prong of the definition of mental retardation.²¹⁸

Against the backdrop of that clear professional consensus, the Supreme Court's decision in *Hall v. Florida* addressed the constitutionality of a Florida rule barring consideration of the SEM in making *Atkins* adjudications.²¹⁹ Florida's statute, which was enacted one year before *Atkins*, made no mention of the SEM (and, indeed, had no IQ score mentioned in its text).²²⁰ However, the Florida Supreme Court had interpreted the statute to impose a strict IQ score ceiling of 70.²²¹ In

report the court receives regarding the first prong of the definition of intellectual disability should reflect the test's level of confidence. See, e.g., AAIDD, USER'S GUIDE 2007, supra note 140, at 12 ("[A]n IQ of 70 is most accurately understood not as a precise score, but as a range of confidence with parameters of at least 1 standard error of measurement (i.e., scores of about 66-74; 66% probability) or parameters of two standard errors of the mean (i.e., scores of 62-78; 95% probability).... This is a critical consideration underlying the appropriate use of intelligence tests and best practices and that must be a part of any decision concerning the diagnosis of mental retardation."); see also APA, DSM-5, supra note 65, at 37 ("Individuals with intellectual disability have scores of approximately two standard deviations or more below the population mean, including a margin for measurement error (generally +5 points). On tests with a standard deviation of 15 and a mean of 100, this involves a score of 65-75 (70 \pm 5)."). At least one state legislature has directly addressed this issue. See ARIZ. REV. STAT. ANN. § 13-753(K)(5) (2011) ("The court in determining the intelligence quotient shall take into account the margin of error for the test administered."). The importance of SEM is not limited to Atkins cases; it applies in any forum in which the diagnosis of intellectual disability is at issue. See, e.g., Walker v. Massanari, 149 F. Supp. 2d 843, 847 (S.D. Iowa 2001) (discussing the relevance of SEM in determining whether an applicant has mental retardation in the context of Social Security disability benefits).

^{218.} See, e.g., Macvaugh & Cunningham, Forensic Practice, supra note 83, at 147 ("Reports of IQ scores obtained by a capital defendant should include a description of these scores in light of the SEM at an identified confidence interval."); Everington & Olley, Defining and Diagnosing, supra note 15, at 6 ("There is no finite score that can represent one's intellectual functioning with 100% accuracy. There is always a measurement error."); Bonnie & Gustafson, Implementing Atkins, supra note 127, at 836 ("The main point here is that the SEM must always be taken into account when interpreting scores on IQ tests; failing to do so would be a clear departure from accepted professional practice in scoring and interpreting any kind of psychological test, including IQ tests."); see also Hall v. Florida, 134 S. Ct. 1986, 2000 (2014) ("By failing to take into account the SEM and setting a strict cutoff at 70, Florida goes against the unanimous professional consensus." (internal quotation omitted)).

^{219.} Hall v. Florida, 134 S. Ct. 1986 (2014); see James W. Ellis, Hall v. Florida: *The Supreme Court's Guidance in Implementing* Atkins, 23 WM. & MARY BILL OF RIGHTS J. 383 (2014).

^{220.} See FLA. STAT. ANN. § 921.137(1) (2014) ("[T]he term 'intellectually disabled' or 'intellectual disability' means significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the period from conception to age 18. The term 'significantly subaverage general intellectual functioning,' for the purpose of this section, 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 Persons with Disabilities.").

^{221.} Cherry v. State, 959 So. 2d 702, 713 (Fla. 2007) ("[T]wo standard deviations away from the mean of 100 is an IQ score of 70.").

Hall, the U.S. Supreme Court held that such an arbitrary cap violates the Eighth Amendment.²²²

Noting that "[a]n IQ score is an approximation, not a final and infallible assessment of intellectual functioning,"²²³ the Court rejected Florida's attempt to ascribe to it a level of precision that is unsupported by the scientific understanding of the phenomenon.²²⁴ After reviewing the scientific and clinical literature on error measurement, as well as surveying the handful of states that imposed or might impose such a ban, the Court concluded that it "agrees with the medical experts that when a defendant's IQ test score falls within the test's acknowledged and inherent margin of error, the defendant must be able to present additional evidence of intellectual disability, including testimony regarding adaptive deficits."²²⁵

After *Hall*, it is clear that lower courts cannot use IQ scores as a disqualifying factor by ignoring the SEM.²²⁶ This, in turn, will have the effect of increasing the number of cases in which courts will have to give careful evaluation to the defendant's claim of deficits in adaptive behavior.²²⁷

D. Factors Affecting the Accuracy of IQ Scores: The Practice Effect and the Norm Obsolescence ("Flynn") Effect

There are a number of practical considerations or conditions that can adversely affect the validity of an individual's IQ score, and courts need to be aware of them. These factors may produce a score that is either artificially high or artificially low, and evaluators and courts may need to adjust those scores to obtain a true picture of the defendant's intellectual functioning. However, it is important to keep in mind that "the presence of other sources of imprecision in administering the

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^{222. 134} S. Ct. at 2001 ("The Florida statute, as interpreted by its courts, misuses IQ score on its own terms; and this, in turn, bars consideration of evidence that must be considered in determining whether a defendant in a capital case has intellectual disability. Florida's rule is invalid under the Constitution's Cruel and Unusual Punishments Clause."); *see also* Moore v. Texas, 137 S. Ct. 1039, 1049 (2017) ("Florida, we concluded, had violated the Eighth Amendment by 'disregard[ing] established medical practice."" (quoting *Hall*, 134 S. Ct. at 1995)).

^{223.} Hall, 134 S. Ct. at 2000.

^{224.} *Id.* at 2001 ("Intellectual disability is a condition, not a number. . . . [A] State must afford these test scores the same studied skepticism that those who design and use the tests do, and understand that an IQ test score represents a range rather than a fixed number.").

^{225.} Id.

^{226.} *Moore*, 137 S. Ct. at 1049 ("*Hall* instructs that, where an IQ score is close to, but above, 70, courts must account for the test's standard error of measurement." (internal quotation omitted)).

^{227.} See Hall, 134 S. Ct. at 2001 ("Freddie Lee Hall may or may not be intellectually disabled, but the law requires that he have the opportunity to present evidence of his intellectual disability, including deficits in adaptive functioning over his lifetime.").

test to a particular individual cannot *narrow* the test-specific standard-error range."²²⁸

The Practice Effect. If an individual is given the same IQ test for a second time relatively soon after the first administration, the second result is likely to be artificially elevated, producing a misleadingly high score.²²⁹ This "*practice effect*," which has long been recognized in the clinical literature,²³⁰ can produce scores that vary significantly from the individual's actual IQ.²³¹ This phenomenon obviously has significant implications for *Atkins* evaluations.²³² It would appear that the practice effect, which is a result of familiarity, is experienced even when the second test is similar, but not identical to, the first test administered.²³³ There are also indications that the magnitude of the practice effect may

Keith F. Widaman, *Concepts of Measurement, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 55, 58 (Edward A. Polloway ed., 2015).

^{228.} Moore, 137 S. Ct. at 1049 (citation omitted).

^{229.} KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, *supra* note 93, at 163-64 ("With all tests, the effects of using the same instrument repeatedly introduce unwanted error into the analysis, a confounding known as *progressive error*."); AAIDD 2010, *supra* note 65, at 38 ("The practice effect refers to gains in IQ scores on tests of intelligence that result from a person being retested on the same instrument." (emphasis omitted)); Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 147-48; *id.* at 148 ("Gain scores, also called 'practice effects,' can be caused by repeated administrations of the same intelligence test in a short period of time.").

^{230.} See, e.g., Joseph D. Matarazzo, Timothy P. Carmody & Leo D. Jacobs, *Test-Retest Reliability and Stability of the WAIS: A Literature Review with Implications for Clinical Practice*, 2 J. CLINICAL NEUROPSYCHOLOGY 89 (1980) (and sources cited therein); Alan S. Kaufman, *Practice Effects, in 2* ENCYCLOPEDIA OF INTELLIGENCE, *supra* note 112, at 828.

^{231.} KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, *supra* note 93, at 164. One authority explained the practice effect in intelligence testing by comparing IQ tests to the use of a measuring tape to determine a person's height:

[[]W]hereas one could conceive of using the same instrument (e.g., a tape measure) an infinite number of times to measure the height of an individual, using the same instrument an infinite number of times to measure the intelligence of an individual would not be advised. Using the same tape measure a large number of times would not be likely to lead to any systematic bias over time when assessing height. But when assessing intelligence, using the same measuring instrument or test on numerous occasions might well lead to memory (or practice) effects that might, for example, enhance scores over time or lead to a fatigue effect that would serve to lower scores over time.

^{232.} Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 148 ("These gains reflect only exposure to the test, not valid improvements in intellectual ability. Accordingly, the impact of such gains can have critical implications in *Atkins* evaluations."); George S. Baroff, *Establishing Mental Retardation in Capital Cases: An Update*, 41 MENTAL RETARDATION 198, 199 (2003) ("Over a period of time, and in capital cases this can be a decade or more, the cognitively limited defendant may have been tested several times and, often, with the same test.").

^{233.} Alan S. Kaufman, *Practice Effects, in* 2 ENCYCLOPEDIA OF INTELLIGENCE, *supra* note 112, at 828 (*"Practice effects* refer to gains in scores on cognitive tests that occur when a person is retested on the same instrument, or tested more than once on very similar ones. These gains are due to the experience of having taken the test previously; they occur without the examinee being given specific or general feedback on test items, and they do not reflect growth or other improvement on the skills being assessed.").

be higher on the performance or nonverbal subparts of a test than on the verbal portions.²³⁴ The duration of the practice effect for a particular individual is not perfectly clear, but can last at least one year.²³⁵

To avoid diagnostic judgments distorted by the confounding impact of the practice effect, it has been recommended that clinicians should

[a]void administration of the same intellectual assessment within 12 months. Testing protocols should reflect verbatim responses from the examinee, allowing other professionals to reasonably scrutinize the findings and reduce the necessity of redundant assessments. Further, mental health experts should be prepared to analyze test scores in light of practice effects and carefully explain these considerations to legal professionals.²³⁶

^{234.} KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, supra note 93, at 164 ("Adults who are retested on the WAIS or WAIS-R after about a month will gain only about 2 to 3 points on the Verbal Scale, versus 8 to 9 points on the Performance Scale."); Macvaugh & Cunningham, Forensic Practice, supra note 83, at 147-48 ("Practice effects tend to be larger on performance (non-verbal) subtests, most likely because these types of tasks are only novel during their first administration, and they become more familiar on subsequent administrations because an examinee may recall the strategy used to solve the problems measured by the test items."); Bonnie & Gustafson, Implementing Atkins, supra note 127, at 839 ("Obviously, there are important individual variations. Some subjects gain more than others, and some subtests are more amenable to learning than others. For example, once the object assembly puzzles are solved, they are more easily solved the next time the test is administered. Particular trouble with this subtest would result in an aboveaverage practice effect."); Lisa J. Rapport et al., Full-Scale IQ as Mediator of Practice Effects: The Rich Get Richer, 11 CLINICAL NEUROPSYCHOLOGIST 375, 375 (1997) ("In the absence of factors adversely affecting cognitive or motivational status, scores increase with repeated exposure to the battery. In general, instruments that have a speeded component, require an infrequently-practiced response, or that have easily-conceptualized solutions are likely to result in significant practice effects.").

^{235.} See David DeMatteo et al., Capital Case Considerations, in American Psychological Association, 1 APA HANDBOOK OF FORENSIC PSYCHOLOGY 191, 203 (Brian L. Cutler & Patricia A. Zapf eds., 2015) ("As such, an interval of at least 1 to 2 years between tests is advisable. In states that allow the prosecution to rebut a defense finding of mental retardation with its own evaluation, a particular danger of practice effects exists, setting the stage for conflicting measurements between defense and prosecution experts."); KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, *supra* note 93, at 164 ("Even if the practice effect dissipates after a year or two and is smaller for elderly adults than young and middle-aged adults, this variable still looms large in longitudinal investigations."). For a discussion of the practice effect on children, see Gary L. Canivez & Marley W. Watkins, *Long-Term Stability of the Wechsler Intelligence Scale for Children—Third Edition*, 10 PSYCHOLOGICAL ASSESSMENT 285, 285 (1998) ("[P]ractice effects seemingly disappeared when the retest interval was greater than 1 year.").

^{236.} Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 148. AAIDD agrees with the recommendation for a twelve-month waiting period. AAIDD 2010, *supra* note 65, at 38 ("[E]stablished clinical practice is to avoid administering the same intelligence test within the same year to the same individual because it will often lead to an overestimate of the examinee's true intelligence.").

Other clinical experts have reached similar conclusions.²³⁷ Courts need to be vigilant to ensure that the practice effect does not distort *Atkins* evaluations, either with regard to the records of previous testing from the individual's childhood and earlier life, or in testing performed in the process of judicial evaluation.²³⁸

*The "Norm Obsolescence" Effect.*²³⁹ While the existence of the practice effect is intuitively obvious, at least when explained by psychologists, the norm obsolescence effect is not. Nonetheless, this well documented phenomenon has at least a comparable potential for skewing the assessment of an individual's intelligence. As a result, courts must take particular care to assure that it does not lead to false conclusions.

IQ scores may provide an inadequate picture of an individual's intellectual functioning, depending on the age of the test administered.

^{237.} AAIDD, USER'S GUIDE 2012, *supra* note 65, at 23 ("The established clinical best practice is to avoid administering the same intelligence test within a year to the same individual because it will often lead to an overestimation of the examinee's true intelligence."); *see also* AAIDD, USER'S GUIDE 2007, *supra* note 140, at 21 ("Practice effect gains occur even when the examinee has not been given any feedback on his performance regarding test items; nor do they reflect growth or other improvement on the skills being assessed. For example, the WAIS-III manual presents data illustrating the potential artificial increase in IQ scores when the same instrument is readministered within short time intervals." (citations omitted)).

^{238.} Concerns have been raised, in particular, when the process of *Atkins* assessment itself produces the administration of IQ tests with too short an interval. *See* Julie C. Duvall & Richard J. Morris, *Assessing Mental Retardation in Death Penalty Cases: Critical Issues for Psychology and Psychological Practice*, 37 PROF. PSYCHOLOGY: RESEARCH & PRACTICE 658, 663 (2006) ("[T]he question arises whether the legally mandated practices in many states involving a number of test administrations by different experts within a short period are consistent with the 'proper application' of the procedure for measuring IQ."). See also the American Psychological Association's Ethical Standard 9.02(a): "Psychologists administer, adapt, score, interpret, or use assessment techniques, interviews, tests, or instruments in a manner and for purposes that are appropriate in light of the research on or evidence of the usefulness and proper application of the techniques." Am. Psychologistal Ass'n, *Ethical Principles of Psychologists and Code of Conduct*, 57 AM. PSYCHOLOGIST 1060, 1071 (2002).

^{239.} This phenomenon is also sometimes called the "Flynn Effect," and is identified by differing names. The phenomenon was observed by others before Professor Flynn. *See, e.g.*, Read D. Tuddenham, *Soldier Intelligence in World Wars I and II*, 3 AM. PSYCHOLOGIST 54 (1948). More recently, other researchers have adopted other labels. *See* Robert L. Williams, *Overview of the Flynn Effect*, 41 INTELLIGENCE 753, 753 (2013) ("Some researchers choose to refer to the secular gain as the Lynn-Flynn effect... for the obvious reason that they feel Lynn has been somewhat slighted by not including his name."). Although the term "Flynn Effect" is still used by many, psychologists are increasingly using the term "Norm Obsolescence" or "Aging Norms," since the phenomenon has now been replicated and studied by a wide variety of scholars in the field. *See, e.g.*, Tassé et al., *Construct of Adaptive Behavior, supra* note 109, at 297 ("[C]orrections must be made... based on *aging norms* (i.e., the Flynn effect)" (emphasis added)); AAIDD, USER'S GUIDE 2012, *supra* note 65, at 21 Table 3.4 ("[I]n cases where a test with *aging norms* was used, a correction for the age of the norms was made." (emphasis added)); Kevin S. McGrew, *Norm Obsolescence: The Flynn Effect, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 155 (Edward A. Polloway ed., 2015).

As each version of an IQ test ages, the average score of individuals taking that test increases each year.²⁴⁰ This phenomenon, which has been widely recognized in the scholarly literature for a quarter of a century,²⁴¹ and which has been observed and measured in the populations of twenty different nations,²⁴² has been replicated and explained in numerous scientific publications.²⁴³ The publishers of the tests recognize this phenomenon, and use new norms when a new edition comes out.²⁴⁴ The

^{240.} AAIDD 2010, *supra* note 65, at 37 ("The Flynn Effect refers to the observation that every restandardization sample for a major intelligence test... from 1932 through 1978 resulted in a mean IQ that tended to increase over time." (citation omitted)); ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 207 ("Rising test norms from the 1930s or 1940s to the 1970s have also been found in other tests of general intellectual level.").

^{241.} See, e.g., James R. Flynn, The Mean IQ of Americans: Massive Gains 1932 to 1978, 95 PSYCHOLOGICAL BULLETIN 29 (1984).

^{242.} See, e.g., James R. Flynn, *IQ Gains Over Time*, *in* 1 ENCYCLOPEDIA OF INTELLIGENCE, *supra* note 112, at 617 ("In twenty countries, every one for which data exist, each generation outscores the previous generation on IQ tests The twenty countries are: Britain, Northern Ireland, Canada, the United States, New Zealand, and Australia; Norway, Sweden, and Denmark; France, Belgium, and the Netherlands; the former East and West Germanies, Austria, and Switzerland; Israel; Brazil; and China and Japan."); Ulric Neisser, *Introduction: Rising Test Scores and What They Mean, in* THE RISING CURVE: LONG-TERM GAINS IN IQ AND RELATED MEASURES 3 (Ulric Neisser ed., 1998) ("This rapid rise is not confined to the United States; comparable gains have occurred all over the industrialized world."). A more detailed explanation of the phenomenon, including review of the data from various nations, can be found at KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, *supra* note 93, at 37-42.

^{243.} See, e.g., Macvaugh & Cunningham, Forensic Practice, supra note 83, at 149 ("[T]he Flynn Effect is a well-established statistical phenomenon of intelligence tests and has gained general acceptance in the scientific community "); Frank M. Gresham & Daniel J. Reschly, Standard of Practice and Flynn Effect Testimony in Death Penalty Cases, 49 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 131, 131 (2011) ("The Flynn Effect is a well-established psychometric fact documenting substantial increases in measured intelligence test performance over time."); KAUFMAN & LICHTENBERGER, ASSESSING INTELLIGENCE, supra note 93, at 216 ("Because of the Flynn effect, which has demonstrated that the norms in the United States become outdated at the rate of $2\frac{1}{2}$ to 3 points per decade, newer norms are generally preferable to older ones." (citations omitted)); Bonnie & Gustafson, Implementing Atkins, supra note 127, at 838 ("[T]he data are highly convincing and the 0.3 point rate of increase holds true both at the mean and for low IQ scores." (internal quotation omitted)); Richard W. Woodcock, Norms, in 2 ENCYCLOPEDIA OF INTELLIGENCE, supra note 112, at 770, 774 ("Even if the norms were gathered in a similar way for both versions, the derived scores from the newer tests will tend to be lower than those from the earlier test." (citation omitted)); George S. Baroff, Establishing Mental Retardation in Capital Cases: An Update, 41 MENTAL RETARDATION 198, 201 (2003) ("The effect is to raise all scores over time such that the individual's IQ will be elevated relative to that of the population at the time that the test was standardized. This constitutes an unwarranted increase in IQ. Interestingly, it is estimated that the rate of increase is about one third of an IQ point per year. Thus, over the 16 years that the WAIS-R was employed, from 1981 to 1997, an individual's test score can be expected to have increased, on the average, by almost 5 points.").

^{244.} Tomoe Kanaya, Matthew H. Scullin & Stephen J. Ceci, *The Flynn Effect and U.S. Policies: The Impact of Rising IQ Scores on American Society Via Mental Retardation Diagnoses*, 58 AM. PSYCHOLOGIST 778, 778 (2003) ("[T]he Flynn effect causes IQ test norms to become obsolete over time. In other words, as time passes and IQ test norms get older, people perform better and better on the test, raising the mean IQ by several points within a matter of years. Once a test is

problem arises when courts encounter the results of an IQ test that was several years old at the time it was administered. Since the test was "old" when it was given, its scores will be artificially elevated by the passage of time, and as a result it will overstate the person's true intelligence.²⁴⁵

While there is some division of opinion about whether and how the Norm Obsolescence Effect should be used to adjust IQ scores in *Atkins* cases,²⁴⁶ the better view would appear to be the approach that takes it into account in assessing the actual level of an individual's mental impairment. As the Fourth Circuit concluded in *Walker v. True*, trial courts should consider the persuasiveness of evidence that a defendant's IQ score on a particular test is artificially inflated by the age of the particular version of the test that was administered.²⁴⁷ While it is important to assure that the scientific significance of the Norm Obsolescence data is not misunderstood or distorted,²⁴⁸ failing to adjust

renormed, which typically happens every 15-20 years, the mean is reset to 100, making the test harder and 'hiding' the previous gains in IQ scores." (citations omitted)).

^{245.} The problem is particularly egregious in those cases where an older version of an instrument was administered when a newer version was available. *See* MARK D. CUNNINGHAM, EVALUATION FOR CAPITAL SENTENCING 171 (2010) ("Because of well-established findings that IQ scores in the general population inflate over time (i.e., the Flynn effect), the version reflecting the most current standardization of the respective intelligence scale should be employed."); AMERICAN EDUCATIONAL RESEARCH ASSOCIATION, AMERICAN PSYCHOLOGICAL ASSOCIATION & NATIONAL COUNCIL ON MEASUREMENT IN EDUCATION, STANDARDS FOR EDUCATIONAL AND PSYCHOLOGICAL TESTING 93 std. 4.24 comment (2014) ("If an older version of a test is used when a newer version has been published or made available, test users are responsible for providing evidence that the older version is as appropriate as the new version for that particular test use.").

^{246.} See, e.g., Gresham & Reschly, supra note 243, at 138 ("Application of the Flynn Effect and score adjustments for obsolete norms clearly is supported by science and should be implemented by professional psychologists."); Mark D. Cunningham & Marc J. Tassé, Looking to Science Rather Than Convention in Adjusting IQ Scores When Death Is at Issue, 41 PROF. PSYCHOLOGY: RESEARCH & PRACTICE 413, 418 (2010) ("We find that a sufficient body of science supports interpreting obtained IQ scores in capital mental retardation hearings in reference to best estimates of norms that were contemporaneous to date of test administration, rather than historical standardization means."); Leigh D. Hagan, Eric Y. Drogin, & Thomas J. Guilmette, Science Rather Than Advocacy When Reporting IQ Scores, 41 PROF. PSYCHOLOGY: RESEARCH & PRACTICE 420, 423 (2010) ("We agree that mean IQ scores shift over time. However, the magnitude and direction of that shift are not predictable."). For additional clinical analysis of this issue, see infra notes 248-49.

^{247. 399} F.3d 315, 322 (4th Cir. 2005) ("[T]he relevant question is whether [the defendant] scored two standard deviations below the mean, a question which is directly addressed by [the defense expert's] opinion as to the Flynn Effect.").

^{248.} James R. Flynn, *Tethering the Elephant: Capital Cases, IQ, and the Flynn Effect*, 12 PSYCHOLOGY PUBLIC POLICY & LAW 170, 186 (2006) ("No prosecutor should be allowed to argue that because IQ scores are rising, a person tested 20 years ago (and who scored 70 against the norms of that time) would probably do better today and score 76. No defense attorney should be allowed a similar gambit: to argue that a person who today scores 71 (against current norms) would probably score 65 against the norms of 20 years hence."); *see also* Cecil R. Reynolds & Daneen A. Milam, *Challenging Intellectual Testing Results, in* COPING WITH PSYCHIATRIC AND PSYCHOLOGICAL TESTIMONY 311, 315-16 (David Faust ed., 6th ed. 2012).

an individual's obtained score to reflect it is unwarranted, and can result in an artificial inflation of the individual's true IQ.²⁴⁹

E. Motivation and Claims of Malingering

Issues surrounding a defendant's motivations, and their possible impact on clinical evaluation, sometimes arise in *Atkins* cases. Often this is because of a prosecution suggestion or argument that the results of an individual's testing should be disregarded or "adjusted" because of a suspicion that he might have intentionally underperformed in order to fabricate a false diagnosis.

The question of whether an individual could actually, as a practical matter, manipulate clinicians into reaching a false diagnosis of intellectual disability is one that had not been addressed by psychologists or other clinicians until relatively recently.²⁵⁰ A primary reason for this

^{249.} See AAIDD 2010, supra note 65, at 37 ("[B]est practices require recognition of a potential Flynn Effect when older editions of an intelligence test (with corresponding older norms) are used in the assessment or interpretation of an IQ score."); APA, DSM-5, supra note 65, at 37 ("Factors that may affect test scores include practice effects and the 'Flynn effect' (i.e., overly high scores due to out-of-date test norms)."); Macvaugh & Cunningham, Forensic Practice, supra note 83, at 151 ("Flynn-corrected IQ scores...should be reported in addition to observed scores. This recommendation is consistent with providing the court with scientific perspectives that will facilitate a more complete understanding of IQ scores."); AAIDD, USER'S GUIDE 2007, supra note 140, at 21 ("Thus the clinician needs to use the most current version of an individually administered test of intelligence and take into consideration the Flynn Effect as well as the standard error of measurement when estimating an individual's true IQ score."); Everington & Olley, Defining and Diagnosing, supra note 15, at 7 ("It is important to understand this 'Flynn effect,' because a person's IQ score may be artificially raised if an out-of-date test is given."); ANASTASI & URBINA, PSYCHOLOGICAL TESTING, supra note 106, at 207 ("The examiner should be aware of this possible artifact in interpreting scores."); Matthew H. Scullin, Large State-Level Fluctuations in Mental Retardation Classifications Related to Introduction of Renormed Intelligence Test, 111 AM. J. MENTAL RETARDATION 322, 332 (2006) ("Understanding the impact of the Flynn effect on IQs is especially relevant for death penalty cases in which the burden of providing the evidence for mental retardation falls on the defense."); Bonnie & Gustafson, Implementing Atkins, supra note 127, at 837-38 ("Courts interpreting IQ scores must take the Flynn effect into account if they are to reach accurate understandings of the meaning of an individual's score."); AAIDD, USER'S GUIDE 2012, supra note 65, at 23 ("Both the 11th edition of the [AAIDD] manual and this User's Guide recommend that in cases in which a test with aging norms is used as part of a diagnosis of ID, a corrected Full Scale IQ upward [adjustment] of 3 points per decade for age of the norms is warranted.").

^{250.} There has long been attention—and debate—among clinicians regarding whether individuals can successfully feign mental illness. See APA, DSM-5, supra note 65, at 726-27; DSM-IV-TR, supra note 80, at 739-40; see also Sanford L. Drob & Robert H. Berger, The Determination of Malingering: A Comprehensive Clinical-Forensic Approach, 15 J. PSYCHIATRY & LAW 519, 522-29 (1987) (discussing techniques for detecting the imitation of the classic signs and symptoms of mental illness); Michael J. Vitacco, Malingering: Forensic Evaluations, in 4 WILEY ENCYCLOPEDIA OF FORENSIC SCIENCE 1657 (Allan Jamieson & Andre Moenssens eds., 2009); Glenn G. Perry & Bill N. Kinder, The Susceptibility of the Rorschach to Malingering: A Critical Review, 54 J. PERSONALITY ASSESSMENT 47 (1990) (reviewing studies that found coached

appears to be the fact that the negative consequences of the label of mental retardation are such that clinicians simply did not encounter individuals who were *seeking* that designation.²⁵¹ Indeed, the opposite is true. It has long been recognized in the field that one of the most commonly encountered characteristics of individuals who have intellectual disability is their intense motivation to *mask* their limitations. This has been reflected in the clinical literature for decades,²⁵² and continues to be a prominent feature in the experience of clinicians today.²⁵³ The intense stigmatization that individuals

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experimental subjects could imitate the symptoms of mental illness on the so-called "inkblots" test); Rex Julian Beaber et al., *A Brief Test for Measuring Malingering in Schizophrenic Individuals*, 142 AM. J. PSYCHIATRY 1478 (1985) (finding that some undergraduate students who were coached to feign symptoms of schizophrenia could be detected by a specific test); JOHN PARRY & ERIC Y. DROGIN, CRIMINAL LAW HANDBOOK ON PSYCHIATRIC AND PSYCHOLOGICAL EVIDENCE AND TESTIMONY 175-79 (ABA 2000) (and sources cited therein); GARY B. MELTON ET AL., PSYCHOLOGICAL EVALUATIONS FOR THE COURTS: A HANDBOOK FOR MENTAL HEALTH PROFESSIONALS AND LAWYERS 56-61 (3d ed. 2007); Sanford L. Drob et al., *Clinical and Conceptual Problems in the Attribution of Malingering in Forensic Evaluations*, 37 J. AM. ACADEMY PSYCHIATRY & LAW 98, (2009) (recommending caution before attributing patient responses to malingering).

Attempts to evaluate whether a defendant was feigning mental illness have a substantial history. *See* Jeffrey L. Geller et al., *Feigned Insanity in Nineteenth-Century America: Tactics, Trials, and Truth,* 8 BEHAVIORAL SCIENCES & LAW 3, 22 (1990) ("If one traces the development of thinking on feigned insanity through the twentieth century one finds little in the handling of this condition that has advanced since the nineteenth century." (citations omitted)).

^{251.} Over the years, there has not been comparable clinical focus on the practical feasibility of successfully feigning intellectual disability. Everington & Olley, *Defining and Diagnosing, supra* note 15, at 15 ("It must be noted that there is a paucity of research regarding detection of malingered mental retardation.").

^{252.} See, e.g., ROBERT B. EDGERTON, THE CLOAK OF COMPETENCE: STIGMA IN THE LIVES OF THE MENTALLY RETARDED 148-49 (1st ed. 1967) (cataloguing the false stories told by previously institutionalized individuals in an effort to mask the fact that they had been confined in a mental retardation facility); JAMES R. DUDLEY, CONFRONTING THE STIGMA IN THEIR LIVES: HELPING PEOPLE WITH A MENTAL RETARDATION LABEL 74-76 (1997); Snell, *Characteristics, supra* note 77, at 222 ("[M]any individuals with intellectual disability with higher IQs attempt to hide their disability or attempt to pass as normal"); Ellis & Luckasson, *Defendants, supra* note 10, at 430-31; Jim L. Turner, Keith T. Kernan & Susan Gelphman, *Speech Etiquette in a Sheltered Workshop, in* LIVES IN PROCESS: MILDLY RETARDED ADULTS IN A LARGE CITY 43, 60-68 (Robert B. Edgerton ed., 1984) (noting that the most stinging insults used among the employees were those that referenced mental retardation).

^{253.} AAIDD 2010, *supra* note 65, at 52 (""[M]ental retardation' has been a particularly stigmatizing and pejorative label that leads most individuals with this label to fight hard not to be identified as 'MR."); *see also* ROBERT L. SCHALOCK & RUTH LUCKASSON, CLINICAL JUDGMENT 37 (2d ed. 2014) [hereinafter CLINICAL JUDGMENT 2014] ("[I]t is more common for individuals with ID to attempt to 'fake good' to hide their ID." Their intent is to convince others that they are "more competent than they are."); Snell, *Characteristics, supra* note 77, at 226 ("Today's motivation for denial by individuals with intellectual disability can come from attempting to avoid the possibility of being placed in self-contained, special education classrooms that are separated from the other students in the school or from being associated with activities or services that are openly linked to individuals with intellectual disability. Thus, denial of disability can emphasize

experience when someone suggests they may be "mentally retarded" has only increased over time.²⁵⁴

The depth and vehemence of this aversion to the label "mental retardation," when combined with the fact that generally there is not much advantage in our society for anyone to aspire to the label, means that any potential for malingering simply hasn't been perceived as a real-world problem in the field. For the small subset of individuals with intellectual disabilities who face capital prosecutions, *Atkins* may, at least theoretically, have altered that equation.²⁵⁵ As a result, the issue of malingering or "suboptimal effort"²⁵⁶ is beginning to attract some attention from clinicians and scholars in the field.²⁵⁷

It is important to begin with the fact that to be diagnosed as having intellectual disability, an individual must satisfy all three requirements of the definition, i.e., intellectual functioning two standard deviations below the mean, substantial impairment in adaptive functioning, and onset of the condition at birth or during childhood.²⁵⁸ So while some scholars who explore the theoretical possibility of malingering focus on IQ scores or adaptive behavior measures, a capital defendant could not

one's social isolation and restrict learning opportunities, but may appear to many people with intellectual disability and their families as a way to reduce the stigma they experience."); Nicole Ditchman et al., *Stigma and Intellectual Disability: Potential Application of Mental Illness Research*, 58 REHABILITATION PSYCHOLOGY 206, 208 (2013) ("[P]eople with ID are in fact aware of the public stigma of their disability and cope with its social consequences in their everyday lives.").

^{254.} Indeed, it is the intense negative reaction of people who have intellectual disabilities to the term "mental retardation," which many of them regard as a slur, which has led to its abandonment by many professionals and organizations in the field. *See supra* Part III.A.

^{255.} Nonetheless, courts would be surprised to learn how frequently, in the Authors' experience, capital defendants continue to insist that they do not have intellectual disability, and continue to exaggerate their mental and practical abilities. *See* Caroline Everington, *Challenges of Conveying Intellectual Disabilities to Judge and Jury*, 23 WM. & MARY BILL OF RIGHTS J. 467, 477 (2014) ("Defendants will frequently inflate accomplishments (faking good) to hide their disability."). Others have made the same observation. *See, e.g.*, Olley, *Death Penalty and Courts, supra* note 160, at 232 ("[T]hose not familiar with it [the 'cloak of competence' phenomenon] may assume that people will eagerly try to fake the condition of mental retardation in order to avoid the death penalty. In fact, this author has found that even with their lives at stake, many defendants will try to do their best on tests and often to exaggerate their accomplishments in order to avoid the stigma of mental retardation.").

^{256.} Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 172 ("The distinction between the terminology of 'suboptimum effort' and 'malingering' is an important one. Defendants who have mental retardation, as well as those who do not, may score lower on an intelligence test than they are capable. In such an instance, the defendant is not necessarily malingering mental retardation, but neither are the test results an accurate reflection of intellectual functioning.").

^{257.} See Everington & Olley, *Defining and Diagnosing, supra* note 15, at 15-18; Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 171-76.

^{258.} See supra Part IV.

succeed in fabricating an *Atkins* claim without satisfying *all three* requirements.²⁵⁹

Clinicians cannot automatically reject out of hand any possibility that suboptimal effort might be a factor in the evaluation of a particular defendant, but such a possibility becomes a real factor in clinical assessment only if it is grounded in the actual data revealed in the evaluation process.²⁶⁰

260. Concern about the potential for false claims of intellectual disability may be traced, at least in part, to a passage in Justice Scalia's dissenting opinion in *Atkins*: "One need only read the definitions of mental retardation adopted by the American Association on Mental Retardation and the American Psychiatric Association to realize that the symptoms of this condition can readily be feigned." Atkins v. Virginia, 536 U.S. 304, 353 (2002) (Scalia, J., dissenting) (citation omitted). Whether malingering is a serious problem is actually an empirical question, of course. The dissent cites to no authority for the assertion that successful malingering is possible, other than the opinion of Sir Matthew Hale published in 1736. *See id.* at 354 (Scalia, J., dissenting) (quoting Matthew Hale's PLEAS OF THE CROWN).

^{259.} The third prong of the definition, the age of onset, discussed supra Part IV.C, may have particular relevance in the practical approach to cases in which there has been a suggestion of malingering by a defendant. Bonnie & Gustafson, Implementing Atkins, supra note 127, at 854-55 ("[R]equiring onset before age eighteen . . . reduces the danger of malingering. . . . [So, a]lthough malingering that escapes detection by clinicians has not been found to be a significant concern in the diagnosis of mental retardation, the age-of-onset criterion should eliminate any concern that defendants may somehow be able to feign impaired cognitive functioning."). If the possibility of feigned symptoms is at issue, consideration of the manifestation of intellectual limitations earlier in life can have particular importance. See Karen L. Salekin & Bridget M. Doane, Malingering Intellectual Disability: The Value of Available Measures and Methods, 16 APPLIED NEUROPSYCHOLOGY 105, 111 (2009) ("[I]t is clear that historical factors should play a critical role in the assessment process because, unlike many disorders, ID does not have a sudden onset. By definition, ID is a condition that begins during the developmental period and persists into adulthood. In light of the developmental progression of the disorder, most individuals will have at least traces of the disorder existing prior to the age of 18....[C]ollateral data that is gleaned from multiple sources can assist in putting together the history of the individual that, when appropriately integrated, will lead to a clinical opinion that is formulated on a constellation of relevant information, rather than gut instinct or an over-emphasis on a few variables that do not capture the full clinical presentation."); Olley, Death Penalty and Courts, supra note 160, at 234 ("Fortunately, the requirement that the characteristics of ID be present in childhood serves to identify people who feign ID in adulthood but lack a history of impaired functioning."); CLINICAL JUDGMENT 2014, supra note 253, at 37 ("[T]o rule out faking, clinicians need to interview multiple individuals who know the person well and who have had the opportunity to directly observe the person engaging in his/her typical behavior across multiple contexts (i.e., home, community, school, and work).").

The dissent's concern about malingering was presented in the context of a prediction that the courts would now be flooded with false claims of mental retardation. *Id.* at 353 (Scalia, J., dissenting) ("This newest invention promises to be more effective than any of the others in turning the process of capital trial into a game."). Experience in the years following the *Atkins* decision does not bear out this fear of opening floodgates. *See* John H. Blume, Sheri Lynn Johnson & Christopher Seeds, *An Empirical Look at* Atkins v. Virginia *and its Application in Capital Cases*, 76 TENN. L. REV. 625, 628 (2009) ("[A]bout seven percent of all death row inmates have filed *Atkins* claims."); John H. Blume et al., *A Tale of Two (and Possibly Three)* Atkins: *Intellectual Disability and Capital Punishment Twelve Years After the Supreme Court's Creation of a Categorical Bar*, 23 WM. & MARY BILL OF RIGHTS J. 393, 396-400 (2014) (analyzing more recent statistics).

1. IQ Testing (Prong 1)

Notwithstanding the lack of clear evidence that there is a problem of malingering intellectual disability on IQ tests,²⁶¹ some courts have been persuaded to experiment with a "solution" of using tests that psychologists had designed to identify malingering in evaluations of *mental illness*. There have also been some suggestions that an individual's level of effort in intelligence testing could be evaluated, and potentially impeached, by employing psychometric instruments which were designed for other psychological purposes, which include an element for the detection of malingering (sometimes called a "validity scale" or "lie-scale"). Current research does not support the suggestion that these instruments can reliably detect malingering intellectual disability.²⁶²

^{261.} In reality, successfully feigning a lower level of intelligence on IQ tests is more difficult than some imagine. A major reason is the structure of the tests themselves. Philip J. Resnick & Michael R. Harris, *Retrospective Assessment of Malingering in Insanity Defense Cases, in* RETROSPECTIVE ASSESSMENT OF MENTAL STATES IN LITIGATION: PREDICTING THE PAST 101, 126 (Robert I. Simon & Daniel W. Shuman eds., 2002) ("During IQ testing, malingerers will frequently miss 'easy' questions but answer more difficult questions correctly. Their test results often show wide 'scatter' and inconsistent responding.").

^{262.} See, e.g., Paul Marshall & Maggie Happe, The Performance of Individuals with Mental Retardation on Cognitive Tests Assessing Effort and Motivation, 21 CLINICAL NEUROPSYCHOLOGIST 826, 837 (2007) ("A diagnosis of malingering certainly cannot be made with confidence based on these test results alone. There must also be a great deal of additional evidence of malingering from both other neuropsychological test results and the patient's self-report concerning their cognitive problems."); CLINICAL JUDGMENT 2014, *supra* note 253, at 37 ("[C]linicians need to use considerable caution when using tests that purportedly assess malingering. This caution is based on two factors. First, there is no research base supporting the accuracy of such tests for persons with ID. Second, there is a documented misuse of common malingering tests even when the test manual explicitly precludes use with individuals with ID." (citations omitted)).

Use of the MMPI in this context is particularly problematic. Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 176; *id.* at 177 ("Inspection of the descriptive characteristics of the *MMPI-2* standardization sample points to a near certainty that it included no individuals with mental retardation."); *id.* ("The MMPI-2 is not an appropriate instrument for any purpose in the assessment of persons who may be suspected to have mental retardation."); Denis William Keyes, *Use of the Minnesota Multiphasic Personality Inventory (MMPI) to Identify Malingering Mental Retardation*, 42 MENTAL RETARDATION 152, 152 (2004) ("Clearly, the authors of the MMPI-2 did not intend for this instrument to be administered to people with mental retardation."); Karen L. Salekin, Gilbert S. Macvaugh, III & Timothy J. Derning, *Relevance of Other Assessment Instruments, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 305, 313 (Edward A. Polloway ed., 2015) ("[P]ersonality testing is irrelevant to an evaluation of ID.").

Despite the absence of support in the clinical literature for the proposition that these unrelated psychometric instruments will reliably detect malingering on the issue of intellectual disability, some courts have required their administration. *See, e.g.*, Foster v. State, 848 So. 2d 172, 175 (Miss. 2003) ("We further hold that the Minnesota Multiphasic Personality Inventory–II (MMPI–II) is to be administered since its associated validity scales make the test best suited to detect malingering."); Chase v. State, 873 So. 2d 1013, 1028 n.19 (Miss. 2004) ("Although this Court has identified the MMPI–II as a test that should be given, we now clarify our position by

At present, there is insufficient support in the clinical literature for the reliability of these instruments in detecting potential malingering of individuals who may have intellectual disability.²⁶³ "The available standardized instruments designed to detect various forms of response bias that might assist in this differentiation are plagued by a number of psychometric limitations."²⁶⁴ In particular, clinicians have expressed concern about the substantial risk of false positives (i.e., individuals who are incorrectly identified as malingering).²⁶⁵ "[R]eview of the research in

265. See, e.g., AAIDD, USER'S GUIDE 2012, supra note 65, at 24 ("[R]ecent studies have

stating that the expert should use the MMPI–II, and/or any other tests and procedures permitted under the Mississippi Rules of Evidence, and deemed necessary to assist the expert and the trial court in forming an opinion as to whether the defendant is malingering."); *see also* Lynch v. State, 951 So. 2d 549, 556-57 (Miss. 2007).

Other instruments fare no better at detecting malingering of ID; studies have not produced consistent results. *Compare* Michael J. Simon, *Performance of Mentally Retarded Forensic Patients on the Test of Memory Malingering*, 63 J. CLINICAL PSYCHOLOGY 339, 342-43 (2007) (suggesting possible usefulness of this test, known as the TOMM), *with* Kolleen E. Hurley & William Paul Deal, *Assessment Instruments Measuring Malingering Used with Individuals Who Have Mental Retardation: Potential Problems and Issues*, 44 MENTAL RETARDATION 112, 116-17 (2006) (suggesting that the TOMM and other instruments produced false positives when used to detect malingering), Everington & Olley, *Defining and Diagnosing, supra* note 15, at 16 ("These results suggest that, in some cases, low scores obtained by defendants with mental retardation could be incorrectly classified as malingering when they are actually indications of true memory impairments."), *and* Jill S. Hayes, David B. Hale & Wm. Drew Gouvier, *Do Tests Predict Malingering in Defendants with Mental Retardation?*, 131 J. PSYCHOLOGY 575, 576 (1997) ("[T]he present battery of malingering tests seems to have nothing to contribute to the identification of malingering among defendants with mental retardation.").

^{263.} What is perhaps the most thorough review of the literature to date recommends "great caution [in concluding that an individual is malingering mental retardation] be used in effort test interpretation as the likelihood of false-positive error is probably quite high; individuals of borderline and MR levels of intelligence can fail on average one to four effort tests in a standard battery even when putting forth their full effort." Tara L. Victor & Kyle Brauer Boone, *Identification of Feigned Mental Retardation, in* ASSESSMENT OF FEIGNED COGNITIVE IMPAIRMENT: A NEUROPSYCHOLOGICAL PERSPECTIVE 310, 337 (Kyle Brauer Boone ed., 2007). Another source of concern is the likelihood of false-positive attributions of malingering because the tests fail to distinguish the potential effects of co-existing mental illness that the individual may also have. *See* David T. R. Berry & Lindsey J. Schipper, *Assessment of Feigned Cognitive Impairment Using Standard Neuropsychological Tests, in* CLINICAL ASSESSMENT OF MALINGERING AND DECEPTION 237, 250 (Richard Rogers ed., 3d ed. 2008) ("A weakness common to many procedures was limited or no investigation of the effects of psychiatric disorders on the feigning index."). Furthermore, as discussed *supra* Part V, many people with mental retardation also have a significant mental illness.

^{264.} Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 172; *see also* AAIDD, USER'S GUIDE 2012, *supra* note 65, at 24 ("Clinicians who . . . attempt to use specific 'malingering' tests in individuals with ID must use considerable caution because of two factors: (1) the lack of a research base supporting the accuracy of such tests for persons with ID; and (2) the documented misuse of common malingering tests even when the test manual explicitly precludes use with individuals with ID. Standardized assessment instruments used to inform the clinician whether the person is putting forth his or her best effort (i.e., malingering) have not, for the most part, been normed for persons with ID." (citations omitted)).

the assessment of malingered ID demonstrates that effort tests and indices of cognitive malingering are not working with this population, and that true cases can be misidentified as malingered."²⁶⁶

2. Adaptive Behavior (Prong 2)

The definition of intellectual disability also requires evidence of substantial deficits in adaptive behavior. As noted earlier, the assessment of an individual's adaptive deficits involves both the use of standardized instruments and inquiries from informants about the person's functioning in actual real-life settings.²⁶⁷ Clinicians should make efforts to assure that informants are providing reliable information. Good clinical practice indicates the value of interviewing third parties "independently and in detail regarding adaptive behavior, whether to complete a standardized adaptive behavior scale or to obtain anecdotal history."²⁶⁸

3. Role of Age of Onset (Prong 3)

Although the requirement that the disability have manifested during the developmental period does not create additional issues about the

documented unacceptable error rates (i.e., false positive for malingering) when used with persons with IQ scores from 50 to 78."); Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 172-73.

^{266.} Karen L. Salekin & Bridget M. Doane, *Malingering Intellectual Disability: The Value of Available Measures and Methods*, 16 APPLIED NEUROPSYCHOLOGY 105, 111 (2009).

^{267.} See supra Part IV.B.

^{268.} Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 176. Recent research indicates that the adaptive behavior instruments that are most commonly employed may differ from one another in their susceptibility to potential malingering, at least in experiments in which the subjects were undergraduate university students. *See, e.g.*, Bridget M. Doane & Karen L. Salekin, *Susceptibility of Current Adaptive Behavior Measures to Feigned Deficits*, 33 LAW & HUMAN BEHAVIOR 329, 337 (2009) (finding that the ABAS-II could be more vulnerable to feigned deficits than the SIB-R). For a discussion of these instruments, see *infra* Part VII.A.

Another significant finding of the research was that experimental attempts to "coach" participants on how to feign deficits proved ineffective:

[[]C]oaching, at least by the provision of written information regarding the condition of mental retardation, does not have a meaningful effect on performance on standardized adaptive functioning measures. Specifically, the lack of significant differences among the conditions' domain/cluster and composite standard scores on the ABAS-II and the SIB-R strengthens the clinician's confidence that the coaching of a collateral source prior to an evaluation may not significantly jeopardize the outcome of the measures.

Doane & Salekin, *supra*, at 340; *see id.* at 333 (discussing how participants in the study differed in significant demographic particulars from the individuals who are most frequently encountered in capital prosecutions, in that the sample was more than 67% female, 75% "White/Caucasian Not Hispanic," and had completed an average of one year of college); J. Gregory Olley, *Knowledge and Experience Required for Experts in* Atkins *Cases*, 16 APPLIED NEUROPSYCHOLOGY 135, 138 (2009) [hereinafter Olley, *Qualifications*] ("[M]alingering requires a degree of sophistication that would be difficult for someone with a very low IQ.").

possibility of malingering, evidence of significant limitations during childhood undercuts any contention that a capital defendant is now pretending to have intellectual disability.²⁶⁹ If such reliable evidence exists in an individual case, it would be inconsistent with a claim of malingering since, by definition, the manifestation of the condition must have pre-dated the crime with which the defendant is charged.²⁷⁰ As two experienced clinicians in the field of intellectual disability have observed:

Inferences regarding whether a capital defendant is making a suboptimum effort in an *Atkins* assessment are greatly assisted by the presence of intellectual assessment results that predate the capital charges. The stability of results from repeated intellectual assessments that are separated by years, whether before or after the capital charge, is also of inferential benefit. Though we are aware of no longitudinal research investigating this premise, it would seem to be a task of improbable complexity to "dial in" a performance consistent with mild mental retardation on multiple test administrations separated by years, particularly when different test instruments have been employed.²⁷¹

Given all of these concerns, it should be the standard practice of clinical evaluators to "consider the possibility of suboptimum effort in intellectual testing and falsification of third party data."²⁷² But the clinical literature does not support the reliability of any external

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^{269.} See supra note 268.

^{270.} See Roper v. Simmons, 543 U.S. 551, 578 (2005) (excluding from the death penalty crimes committed before the age of 18, which is generally taken as the boundary for the developmental period in intellectual disability assessments).

^{271.} Macvaugh & Cunningham, Forensic Practice, supra note 83, at 175; see supra notes 133-42; see also CLINICAL JUDGMENT 2014, supra note 253, at 37 ("First, the elements required for a diagnosis of ID must have been present from an early age. Thus, in a valid retrospective diagnosis, the clinician should almost always find a documented lifetime history, usually beginning at birth or early childhood and extending through the school years."); Karen L. Salekin, J. Gregory Olley & Krystal A. Hedge, Offenders with Intellectual Disability: Characteristics, Prevalence, and Issues in Forensic Assessment, 3 J. MENTAL HEALTH RESEARCH IN INTELLECTUAL DISABILITIES 97, 108 (2010) ("In short, those who challenge the idea that ID can be feigned in the criminal justice system base their belief on the notion that people do not feign this disorder during a time in which there is no incentive to do so.").

It is noteworthy that much of the experimentation that has been done about malingering has involved individuals with diagnoses such as traumatic brain injury (TBI), which include no age of onset requirement. See David T.R. Berry & Lindsey J. Schipper, Assessment of Feigned Cognitive Impairment Using Standard Neuropsychological Tests, in CLINICAL ASSESSMENT OF MALINGERING AND DECEPTION 237, 250 (Richard Rogers ed., 3d ed. 2008) ("[T]he large majority of neurological patient groups focused on TBL").

^{272.} Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 176; *see also* Olley, *Death Penalty and Courts, supra* note 160, at 235 ("[O]ne must rely on the defendant's history of functioning since childhood and trust the examiner's judgment about how much effort the defendant put into the testing.").

"measures,"²⁷³ and the danger of relying on mere hunches or suspicions is clear. The risk and likelihood of false positives should require great caution before any accusation of malingering is leveled or credited in an *Atkins* case.²⁷⁴

VII. ISSUES IN EVALUATING ADAPTIVE BEHAVIOR

A. Measurement: AB Scales and Other Information

As previously noted,²⁷⁵ the second prong of the definition of intellectual disability asks whether the individual has significant limitations in adaptive behavior.²⁷⁶ The purpose of this element of the definition is to make sure that the impairment indicated in psychometric tests actually has a real-world impact on the individual's life and thus is a disabling condition rather than merely a testing anomaly. This requirement arose from concerns about the potentially inappropriate labeling of school children, some of whom might not have had limitations in functioning in everyday life.²⁷⁷

The requirement that the individual have deficits in adaptive behavior has been phrased in somewhat different terms with successive formulations of the definition of intellectual disability.²⁷⁸ As a result, some state statutes merely require "deficits in adaptive behavior," while others provide a list of adaptive skill areas and require deficits in two areas from the list.²⁷⁹ The most recent formulation of the definition from

^{273.} See, e.g., Macvaugh & Cunningham, Forensic Practice, supra note 83, at 171-77.

^{274.} See AAIDD, USER'S GUIDE 2012, supra note 65, at 24 ("Claims of faking ID in an individual should be addressed by a clinician in ID conducting a thorough evaluation for ID using the diagnostic and clinical strategies outlined in the 11th edition of the AAIDD manual and this User's Guide."); Bonnie & Gustafson, Implementing Atkins, supra note 127, at 855 n.191 ("Because malingering is so difficult to carry out successfully, such cases should be rare.").

^{275.} See supra Part IV.B.

^{276.} AAIDD 2010, *supra* note 65, at 43-44; *see also* AIKEN, ASSESSMENT OF INTELLECTUAL FUNCTIONING, *supra* note 106, at 217 ("Adaptive behavior is determined by the degree to which a person can function independently and has the ability to meet personal and cultural demands."); APA, DSM-5, *supra* note 65, at 33 ("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.").

^{277.} Kazuo Nihira, *Adaptive Behavior: A Historical Overview*, in Schalock, ADAPTIVE BEHAVIOR, *supra* note 114, at 7-12.

^{278.} See supra notes 95-96, 119 and accompanying text.

^{279.} For an overview of the various state statutes, see the Appendix to the Petitioner's Brief on the merits in *Hall v. Florida*. Brief for Petitioner app. B at 11a -52a Hall v. Florida, 134 S. Ct. 1986 (2014) (No. 12-10882), http://www.americanbar.org/content/dam/aba/publications/supreme_court _preview/briefs-v2/12-10882_pet.pdf.

AAIDD requires "significant limitations... in adaptive behavior as expressed in conceptual, social, and practical adaptive skills."²⁸⁰ These three categories of adaptive functioning are referred to as "domains," and for a diagnosis of intellectual disability, the individual must either have a significant impairment in any one of the domains or a significant impairment overall.²⁸¹

One tool in the evaluation of any deficits in an individual's adaptive functioning is usually the administration and interpretation of a standardized "adaptive behavior scale"²⁸² by a professionally trained

^{280.} AAIDD 2010, *supra* note 65, at 1. This formulation has also been adopted by some courts in states whose legislatures have not enacted an *Atkins* statute. *See, e.g.*, Chase v. State, 171 So.3d 463, 471 (Miss. 2015) ("We now adopt the 2010 AAIDD and 2013 APA definitions of intellectual disability as appropriate for use to determine intellectual disability in the courts of this state in addition to the definitions promulgated in *Atkins* and *Chase*."). Other courts have also referred to this definition. *See, e.g.*, Coleman v. State, 341 S.W.3d 221, 244 (Tenn. 2011); *see also* Moore v. Texas, 137 S. Ct. 1039, 1049 (2017) ("We relied on the most recent (and still current) versions of the leading diagnostic manuals—the DSM-5 [*supra* note 65] and AAIDD-11 [AAIDD 2010, *supra* note 68].").

^{281.} AAIDD 2010, *supra* note 65, at 46 ("For a person with [intellectual disability], adaptive behavior limitations are generalized across the domains of conceptual, social, and practical skills."). As discussed in Part IV.B, *see supra* note 121, earlier versions of the definition described the requisite adaptive deficits in terms of 10 skill areas rather than the current description of three domains. The shift to a description of three domains occurred in the 2002 edition. AAMR 2002, *supra* note 95, at 81. The change from skill areas to domains has no practical importance for *Atkins* courts, since both are designed to encompass individuals with essentially the same level of functioning. *Id.* at 82 (Table 5.2 illustrating the direct relationship between each of the previous "skill areas" and the skills encompassed by the "conceptual," "social" and "practical" domains).

Experienced clinicians have observed that for individuals functioning at the level of most *Atkins* defendants, "deficits are often found in social and conceptual skill areas, rather than . . . practical skills" Everington & Olley, *Defining and Diagnosing, supra* note 15, at 8; *see also* Gary N. Siperstein & Melissa A. Collins, *Intellectual Disability in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY, 21, 26 (Edward A. Polloway ed., 2015) ("Most individuals with ID at the upper end of the spectrum do not experience problems in the practical skills measured by adaptive behavior scales, such as dressing oneself or using the telephone. However, they typically display significant deficits in adaptive skills in the social and conceptual domains.").

^{282.} Keith F. Widaman, *Concepts of Measurement, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 55, 60 (Edward A. Polloway ed., 2015) ("When assessing adaptive behavior, for example, ratings on items are often collected on a scale such as 0 = cannot perform behavior, 1 = can perform but only with substantial support, 2 = can perform with minimal support, and 3 = can perform without support. Values on this 0-3 scale clearly reflect different levels of facility in performing the behavior. However, it would be difficult to say whether the movement from 0 to 1 on this rating scale is a smaller, equal, or larger change than that represented by movement from 2 to 3. A technical feature of scoring involving AB scales can arise here. Because subscale scores on adaptive behavior measures are moderately correlated, a generalized deficit is assumed *even if the score on only one domain meets the operational criterion* of being approximately two standard deviations below the mean. A total score of two standard deviations below the mean from an instrument that measures conceptual, social, and practical skills will also meet the operational definition of a significant limitation in adaptive behavior." (emphasis added)); AAMR 2002, *supra* note 95, at 79 ("Significant limitations in adaptive behavior are identified by a score of at least two standard deviations below the mean *on one or more scores* representing

clinical evaluator.²⁸³ Although these scales are also standardized instruments, they differ dramatically from IQ tests, and these differences have particular importance for courts adjudicating *Atkins* cases.²⁸⁴

The most fundamental difference between IQ tests and adaptive behavior scales is that IQ instruments are administered directly to the person whose intellectual functioning is being evaluated. By contrast, adaptive behavior scales most frequently involve obtaining information from other individuals who know or have known the person and who have observed his functioning in everyday life.²⁸⁵

There are four well-established instruments for measuring deficits in adaptive behavior that are in widespread use,²⁸⁶ and another published

285. Macvaugh and Cunningham offer this practice recommendation:

When undertaking a reasonably contemporaneous assessment of adaptive functioning, utilize a standardized instrument for the assessment of adaptive behavior. This involves *independently* querying a number of third parties who have had close observation of the defendant. When scores on standardized measures are not available, the presence or absence of significant deficits may be reflected in the extent to which a defendant has needed assistance in order to function adequately.

Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 160; *see also* J. Gregory Olley, *Adaptive Behavior Instruments, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 187, 190 (Edward A. Polloway ed., 2015) ("Although some earlier AB measures were simple checklists, contemporary measures emphasize using an interview format to complete rating scales [I]n *Atkins* evaluations, it is preferred that AB scales be administered as part of a face-to-face interview, which allows the examiner to clarify items when needed. This clarification is useful, because even teachers can misunderstand items or be influenced by their feelings toward the individual.") (We believe that courts will find this recent review and explanation of AB scales by Dr. Olley to be particularly helpful.).

286. Tassé et al., *Construct of Adaptive Behavior, supra* note 109, at 293-95; *id.* at 293 ("Currently, four comprehensive individualized, standardized, and psychometrically sound adaptive

conceptual, social, or practical skills on a standardized measure of adaptive behavior *or on the total score*, taking the standard error of measurement into account." (emphasis added)).

^{283.} AAIDD 2010, *supra* note 65, at 43-55 (Chapter 5: "Adaptive Behavior and Its Assessment"). See generally Schalock, ADAPTIVE BEHAVIOR, *supra* note 114. It should also be noted that, perhaps even more than is the case with IQ testing, it is important to exclude impressionistic biases on the part of the evaluator. Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 157 ("Though clinical judgment has an important role in the interpretation of intellectual assessment scores and the integration of adaptive behavior findings, examiners are cautioned against setting aside findings from standardized instruments in favor of idiosyncratic assertions of what is normative."). For a list of "best practices" for clinicians assessing an individual's adaptive behavior deficits, see CLINICAL JUDGMENT 2014, *supra* note 253, at 30.

^{284.} Although adaptive behavior instruments have significant differences from IQ tests, they have some common characteristics which they share with other psychometric instruments. For example, evaluating an individual's score must take into account the standard error of measurement. Tassé et al., *Construct of Adaptive Behavior, supra* note 109, at 293 (noting "the importance of considering the instrument's standard error of measurement when interpreting the individual's obtained adaptive behavior score."); AAIDD 2010, *supra* note 65, at 48 ("The established procedure in psychological measurement, in which standardized measures are used, is to report results using a statistical confidence interval around the obtained score(s)....[T]he standard error of measurement, which varies by test, subgroup, and age group, is used to estimate this statistical confidence interval."); *see* discussion *supra* Part VI.C.

more recently.²⁸⁷ The first of the established instruments is the *Adaptive Behavior Scale – School, Second Edition* (ABS-Schools), published by AAIDD.²⁸⁸ As its name indicates, it is for use with children, and thus is

behavior scales are available that have been normed on a representative U.S. sample of the general population and have been developed specifically for the purpose of ruling in or out a diagnosis of ID."); *id.* at 295 ("Generally speaking, any of these four instruments would be an adequate choice [for clinical evaluators] to use in assessing an individual's adaptive behavior for the purpose of ruling in or out a diagnosis of ID."); Jeffrey Ditterline & Thomas Oakland, *Relationships Between Adaptive Behavior and Impairment, in* ASSESSING IMPAIRMENT: FROM THEORY TO PRACTICE 31, 38-42 (Sam Goldstein & Jack A. Naglieri eds., 2009) (reviewing ABAS-II, SIB-R, and Vineland II); PAUL J. FRICK, CHRISTOPHER T. BARRY & RANDY W. KAMPHAUS, CLINICAL ASSESSMENT OF CHILD AND ADOLESCENT PERSONALITY AND BEHAVIOR 319 Table 14.1, 322-31 (3d ed. 2010) [hereinafter FRICK ET AL., CLINICAL ASSESSMENT] (reviewing Vineland II, SIB-R, and ABAS-II); J. Gregory Olley, *Adaptive Behavior Instruments, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 187-200 (Edward A. Polloway ed., 2015).

In addition to their use in diagnosing intellectual disability, the adaptive behavior scales are also sometimes used in diagnosing other disabilities, and in designing special education curricula and supportive services for individuals with ID. *See, e.g.*, Steve Woolf, Christine Merman Woolf & Thomas Oakland, *Adaptive Behavior Among Adults With Intellectual Disabilities and Its Relationship to Community Independence*, 48 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 209 (2010); Hyojeong Seo et al., *The Impact of Medical/Behavioral Support Needs on the Supports Needed by Adolescents With Intellectual Disability to Participate in Community Life*, 122 AM. J. ON INTELLECTUAL & DEVELOPMENTAL DISABILITIES 173 (2017); FRICK ET AL., CLINICAL ASSESSMENT, *supra*, at 318 (individual education plans (IEPs) and "classroom intervention planning"); *id.* at 316 (autism); Ditterline & Oakland, *supra*, at 44 (attention deficit/hyperactivity disorder).

^{287.} The most recent test is the Diagnostic Adaptive Behavior Scale (DABS), released in 2017 by AAIDD. MARC J. TASSÉ ET AL., AMERICAN ASSOCIATION ON INTELLECTUAL & DEVELOPMENTAL DISABILITIES, DIAGNOSTIC ADAPTIVE BEHAVIOR SCALE USER'S MANUAL (2017). Intended for ages 4 to 21, the DABS is designed specifically for diagnostic purposes. See Marc J. Tassé et al., Development and Standardization of the Diagnostic Adaptive Behavior Scale: Application of Item Response Theory to the Assessment of Adaptive Behavior, 121 AM. J. ON INTELLECTUAL & DEVELOPMENTAL DISABILITIES 79, 82 (2016); Giulia Balboni et al., The Diagnostic Adaptive Behavior Scale: Evaluating Its Diagnostic Sensitivity and Specificity, 35 RESEARCH IN DEVELOPMENTAL DISABILITIES 2884 (2014).

The DABS is not to be confused with the similarly named Adaptive Behavior Diagnostic Scale, (ABDS) which was also published recently and is also intended for measuring adaptive behavior during the developmental period (ages 2 to 21). *See* Marc J. Tassé, *Adaptive Behavior, in* HANDBOOK OF POSITIVE PSYCHOLOGY IN INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 201, 207 (Karrie A. Shogren, Michael L. Wehmeyer, & Nirbay N. Singh eds., 2017).

^{288.} Tassé et al., *Construct of Adaptive Behavior, supra* note 109, at 293-94. (There is another version of the Adaptive Behavior Scales, the Residential and Community Edition, or ABS-RC:2. This instrument has clinical value when used to establish intervention goals for individuals already diagnosed as having ID, but was only normed on people with intellectual disability, and therefore should not be used to assess adaptive behavior to diagnose the condition. Tassé, *Adaptive Behavior and Diagnosis, supra* note 87, at 117; *see also* NATIONAL RESEARCH COUNCIL, MENTAL RETARDATION: DETERMINING ELIGIBILITY FOR SOCIAL SECURITY BENEFITS 269 (Daniel J. Reschly et al. eds., 2002) ("Because standard scores and percentile ranks do not indicate standing relative to people without developmental disabilities, and because the norming sample is probably not representative of the population of adults with developmental disabilities, the ABS-RC:2 may not fit the psychometric criteria used in determining a diagnosis of mental retardation according to AAMR requirements.").)

unlikely to be encountered in the contemporary evaluation of capital defendants (although there may be records of an administration of this scale from earlier in the defendant's life). The second is the Adaptive Behavior Assessment System - Third Edition (known as the ABAS-3), which has different instruments for individuals of different age ranges. including an "adult form" for individuals who are between sixteen and eighty-nine years old.²⁸⁹ The ABAS-3 is designed to be completed by an informant who knows the individual and/or by the individual himself or herself, with the latter being particularly problematic in Atkins cases.²⁹⁰ The third instrument is the Scales of Independent Behavior - Revised (known as the SIB-R).²⁹¹ Like the ABAS-II, the SIB-R has versions for different age groups. However, particular skepticism is warranted when encountering the so-called "short form" of the SIB-R.²⁹² The fourth instrument (which is the oldest, having been first published in the 1930s) is the Vineland Adaptive Behavior Scales – Third Edition (known as the Vineland-3). This latest edition was published in 2016. The earlier edition, the Vineland II, has been reviewed extensively in the clinical literature.293

^{289.} See J. Gregory Olley, Adaptive Behavior Instruments, in THE DEATH PENALTY AND INTELLECTUAL DISABILITY 187, 191 (Edward A. Polloway ed., 2015). Courts are likely to continue to see earlier reports based on the previous version of the ABAS, known as the ABAS-II. Ditterline & Oakland, *supra* note 286, at 40 ("The ABAS-II is considered to be theoretically sound and among the most clinically valid measures of adaptive behavior."); Tassé et al., *Construct of Adaptive Behavior, supra* note 109, at 294. For a discussion of the ABAS-II see FRICK ET AL., CLINICAL ASSESSMENT, *supra* note 286, at 330-31 (discussing the ABAS-II and its strengths and weaknesses). See generally ADAPTIVE BEHAVIOR ASSESSMENT SYSTEM–II: CLINICAL USE AND INTERPRETATION (Thomas Oakland & Patti L. Harrison eds., 2008).

^{290.} Tassé et al., *Construct of Adaptive Behavior, supra* note 109, at 294 ("It should be noted that the ABAS-II self-report has many advantages when using the adaptive behavior information for the purposes of programming and intervention planning, but self-report data should be used very cautiously, if at all, when the purpose is to rule in or out a diagnosis of ID."). For fuller discussion of the issues implicated by reliance on self-reporting, see *infra* notes 312-15 and accompanying text.

^{291.} FRICK ET AL., CLINICAL ASSESSMENT, *supra* note 286, at 328-30 (discussing the SIB-R and its strengths and weaknesses); J. Gregory Olley, *Adaptive Behavior Instruments, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 187, 190-91 (Edward A. Polloway ed., 2015) (same). For a more in-depth discussion of the SIB-R, see ESTHER STRAUSS, ELISABETH M. S. SHERMAN & OTFRIED SPREEN, A COMPENDIUM OF NEUROPSYCHOLOGICAL TESTS: ADMINISTRATION, NORMS, AND COMMENTARY 1134-40 (3d ed. 2006).

^{292.} Tassé et al., *Construct of Adaptive Behavior*, *supra* note 109, at 294 ("Although the reliability and validity for the comprehensive form are adequate, the psychometric properties of the Short Form and Developmental Form are questionable."). *See* discussion *supra* Part VI.B (regarding the problems surrounding short forms of IQ tests).

^{293.} Tassé et al., *Construct of Adaptive Behavior, supra* note 109, at 295 ("The Vineland II has extensive representative normative data. It also has strong psychometric properties."); FRICK ET AL., CLINICAL ASSESSMENT, *supra* note 286, at 322-25 (discussing the Vineland II and its strengths and weaknesses); J. Gregory Olley, *Adaptive Behavior Instruments, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 187, 192 (Edward A. Polloway ed., 2015) ("The Vineland II has the

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Although many more instruments to measure adaptive behavior have been published (particularly in the last three or four decades),²⁹⁴ most lack the requisite norming and testing standards (such as scientifically demonstrated statistical reliability and validity) required for diagnosing intellectual disability,²⁹⁵ particularly in the context of an *Atkins* case²⁹⁶ where the consequence of misdiagnosis can be so momentous. Courts should be aware of the attributes of the specific adaptive behavior instruments they encounter in an *Atkins* adjudication.²⁹⁷

297. Similarly, evaluators should select an instrument based on its individual properties. *See* Tassé et al., *Construct of Adaptive Behavior, supra* note 109, at 297 ("[C]linicians also should be aware of the best practice guidelines that have emerged in the field for selecting adaptive instruments. According to these guidelines, clinicians should (a) select an instrument that is a comprehensive measure of conceptual, social, and practical adaptive skills and is applicable to the population in question; (b) rely only on instruments that are normed on the general population, including individuals with and without disabilities; (c) determine, based on the publisher's specifications and state and professional regulations, who should administer the instrument and who are the preferred respondents; (d) determine that the selected instrument has acceptable reliability and validity for its intended purpose; and (e) determine whether scoring software has been 'error trapped' to prevent the entering of impossible answers or to control for circumstances such as

advantage of containing items that reflect more current community functioning than the previously mentioned scales."); *id.* ("The Expanded Interview Form contains more items within the same four domains and allows an opportunity to explore adaptive functioning in greater depth.").

^{294.} Scott Spreat, *Psychometric Standards for Adaptive Behavior Assessment, in* Schalock, ADAPTIVE BEHAVIOR, *supra* note 114, at 103 ("The widespread popularity of the adaptive behavior construct has spawned the development of well over 200 scales, each purporting to measure adaptive behavior.").

^{295.} See AAIDD 2010, supra note 65, at 49. (AAIDD specifically recommends that "[t]he selected measure should provide robust standard scores across the three domains of adaptive behavior: conceptual, social, and practical adaptive skills. The preferred adaptive behavior instrument should have current norms developed on a representative sample of the general population.") see Tassé et al., Construct of Adaptive Behavior, supra note 109, at 295-97.

^{296.} One instrument that has proven particularly problematic in Atkins cases is the "Street Skills Survival Questionnaire" ("SSSQ"). See J. Gregory Olley, Adaptive Behavior Instruments, in THE DEATH PENALTY AND INTELLECTUAL DISABILITY 187, 189 (Edward A. Polloway ed., 2015) ("The [SSSQ] has an appealing name, but it is essentially a nonverbal picture test of practical skills. It was designed as part of a larger battery of vocational assessments and is not an adequate standalone test of AB. The SSSQ reveals some knowledge of everyday practical functioning, but it does not measure actual AB in conceptual, social or practical areas. The test is a good example of the difference between knowledge of adaptive behavior and actual behavior and is an inappropriate test for the diagnosis of ID." (citation omitted)); Caroline Everington, Challenges of Conveying Intellectual Disabilities to Judge and Jury, 23 WM. & MARY BILL OF RIGHTS J. 467, 475 (2014) ("The SSSQ is a multiple choice test which presents the examinee pictures of common objects or actions. It is designed to measure the individual's knowledge of areas of adult living with an emphasis on practical skills. It does not yield a valid assessment of adaptive functioning because it only measures knowledge; whereas, adaptive functioning assessment requires a rating of actual performance in community settings." (footnotes omitted)); Olley, Qualifications, supra note 268, at 137 ("The ability to answer questions or point to pictures correctly is not the same as community functioning, and tests using this format, such as the Street Skills Survival Questionnaire are not appropriate for the diagnosis of mental retardation." (citation omitted)).

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Adaptive behavior scales are not the only tool that should be employed in assessing whether an individual defendant satisfies the diagnostic requirement of significant deficits in adaptive functioning, and, in some cases, their use may be inappropriate.²⁹⁸ In any event, evaluators certainly should not rely on a single source of information.²⁹⁹ Among the sources that can often provide relevant information are

298. Tassé, *Adaptive Behavior and Diagnosis, supra* note 87, at 120 ("There may be instances when completing a standardized adaptive behavior scale is not possible. It might be that there is no one alive or available to participate as a respondent. Another reason might be that the respondents available are not able to provide a comprehensive picture of the individual's adaptive behavior such that they can complete all the information needed on a standardized scale. It is important for the clinician to use his or her clinical judgment in determining when it is viable to conduct a standardized adaptive behavior scale and when it is not. In the latter case, it is possible to conduct a series of semi-structured interviews with multiple respondents who have reliable information about specific periods of time (e.g., when he was in elementary school) or have knowledge of the individual in one specific context (e.g., when he worked at the local car wash). This information, along with case records, can be helpful in contributing to developing a report regarding the individual's adaptive behavior.").

299. AAIDD 2010, supra note 65, at 47 ("Obtaining information from multiple respondents and other relevant sources (e.g., school records, employment history, previous educations) is essential to providing corroborating information that provides a comprehensive picture of the individual's functioning."); Olley & Cox, Assessment of Adult Behavior, supra note 116, at 387 ("Many writers on this topic have emphasized that no single source of information or test score should be the sole source of information to determine whether a significant impairment in adaptive behavior exists."); Tassé et al., Construct of Adaptive Behavior, supra note 109, at 295-97 (discussing importance of using "multiple informants and multiple contexts"); AAIDD, USER'S GUIDE 2012, supra note 65, at 18 ("The use of multiple respondents, consistent with this standard, will ensure greater reliability of the information obtained, and provide a broader coverage of adaptive behavior across settings."); Tassé, Adaptive Behavior and Diagnosis, supra note 87, at 121 ("The information obtained from standardized adaptive behavior scales should be corroborated with information from other sources, such as interviews with other informants and a thorough review of records and previous evaluations."); Keith F. Widaman & Gary N. Siperstein, Assessing Adaptive Behavior of Criminal Defendants in Capital Cases: A Reconsideration, 27 AM. J. FORENSIC PSYCHOLOGY, no. 2, 2009, at 5, 28 ("We urge courts and experts not to rely solely on any one type of evidence. Courts and experts might be tempted to center virtually all of their attention on standardized scores obtained from intelligence tests and adaptive behavior instruments.... However, test scores gain meaning and interpretability only in the presence of more anecdotal evidence consistent with the scores.").

missing data that may yield errors."); *see also* AAIDD, USER'S GUIDE 2012, *supra* note 65, at 10-11 Table 2.2 ("Professional Responsibilities in Diagnosis: Assessment of Adaptive Behavior").

An issue has been raised by some clinical experts regarding the adequacy of the scales' focus on commonly encountered behavioral deficits in individuals with intellectual disability, such as "social competence, gullibility, naïveté, and lack of wariness." Tassé, *Adaptive Behavior and Diagnosis, supra* note 87, at 116; *see also* Sharon A. Borthwick-Duffy, *Adaptive Behavior, in* HANDBOOK OF INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 279, 282 (John W. Jacobson, James A. Mulick, & Johannes Rojahn eds., 2007) ("Current measures of adaptive behavior omit the sometimes subtle, and possibly even immeasurable, characteristics that differentiate persons with and without mental retardation and reflect the person-environment interaction that is understood to be adaptive behavior. One of the most distinguishing features of mental retardation is a limitation in the ability to understand people and social processes."). These deficiencies should be addressed by other information-gathering methods in the course of evaluative assessment.

interviews³⁰⁰ of the defendant's family and friends, school teachers, employers, former neighbors, as well as "archival information, such as school and other juvenile records."³⁰¹

School records sometimes prove to be pivotal, including a determination about whether an individual satisfies the age of onset requirement for a diagnosis of intellectual disability.³⁰² Such records may also be relevant in evaluating whether the results of later-in-life IQ testing were influenced by lack of maximum effort or malingering.³⁰³ But documentation of intellectual disability, or, more particularly the

303. See supra Part VI.E.

^{300.} Actual interviews with knowledgeable individuals, where possible, are often preferable to acquiring information by having the informant fill out a form or answer written questions. See J. Gregory Olley, Adaptive Behavior Instruments, in THE DEATH PENALTY AND INTELLECTUAL DISABILITY 187, 193 (Edward A. Polloway ed., 2015) ("[E]xaminers can complement the administration of an adaptive behavior scale in which the informant is asked to rate the individual's behavior at a specific time before the crime with interviews that also focus on the relevant areas of adaptive functioning."); Tassé et al., Construct of Adaptive Behavior, supra note 109, at 295-96 ("Conducting an adaptive behavior assessment via an interview (as opposed to having the respondent complete the scale directly) also provides valuable clinical information that assists one in determining the reliability of the respondent, because the interview provides an opportunity to observe the respondent's cadence, response consistency, and thought given before responding to items.").

Since the informant who knew the defendant in a family, school, or work setting may also have intellectual disability or at least substantial limitations himself or herself, particular care must be taken in acquiring and interpreting information from such individuals. *See* Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 161 ("Persons whose intellectual abilities are deficient, whether in the mentally retarded or borderline categories, may have difficulty with abstract concepts, including retrospective and hypothetical queries. Evaluators also should be cognizant of the fact that people with mental retardation have a strong tendency to acquiesce and present with a 'cloak of competence' in [an] attempt to hide their disability in order to appear normal. During the clinical interview, therefore, forensic examiners should be careful not to use leading questions." (citation omitted)); *see also* Olley & Cox, *Assessment of Adult Behavior, supra* note 116, at 391 ("Items [on an adaptive behavior scale] should be read as they appear, and they may be repeated to assure understanding. If the informant does not understand the wording, it is permissible to paraphrase the item. However, it is essential not to change the meaning of the item or to include wording that suggests an answer. Clarification is helpful, but coaching in any form is not permissible.").

^{301.} Olley & Cox, Assessment of Adult Behavior, supra note 116, at 387; see also AAIDD 2010, supra note 65, at 50 (noting other possible archival sources "may include medical evaluations, school records, prior psychoeducational evaluations, Social Security Administration records, employment history, and family history"); Reschly, *Documenting Origins, supra* note 83, at 125-26 ("Several sources of information originating by age 18 are potentially relevant to an adult diagnosis of MR. These sources of information include records from settings such as schools, social services, medical, and psychological. In addition, reports from significant others are useful, including parents, teachers, siblings, classmates, relatives and, friends.").

^{302.} See Reschly, Documenting Origins, supra note 83, at 126 ("Schools more often diagnose MMR [mild mental retardation] than any other community agency or service provider."). This requirement is discussed supra Part IV.C. For an overview of school records for individuals with intellectual disability, see James R. Patton, *Educational Records, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 293-304 (Edward A. Polloway ed., 2015).

apparent absence of such documentation in a particular case, must be evaluated with considerable care.³⁰⁴ As discussed above,³⁰⁵ whether a child was placed in special education classes or not was frequently influenced by a variety of considerations—considerations unrelated to the individual's diagnosis—which may not be readily apparent at first blush in a retrospective analysis.³⁰⁶ Educational practices and terminology concerning such placements vary substantially from state to state,³⁰⁷ from district to district within a state, and from school to school

^{304.} One problem encountered with increasing frequency is that the relevant school records may have been destroyed or are otherwise unavailable. Reschly, *Documenting Origins, supra* note 83, at 126 ("The information retained [about an individual student] may or may not reveal whether or not the student was diagnosed with a disability, the name of the disability, and the amount and kind of special education participation."); *see also id.* (discussing the process and common practices involving the actual destruction of individual records—typically within "three to five years after the student has left the school").

^{305.} See supra Part IV.C.

^{306.} See CLINICAL JUDGMENT 2014, supra note 253, at 37-38 (discussing the possible reasons for absence of a diagnosis in an individual's earlier records, including school records); Donald L. MacMillan et al., The Labyrinth of IDEA: School Decisions on Referred Students with Subaverage General Intelligence, 101 AM. J. ON MENTAL RETARDATION 161, 161 (1996) (documenting and discussing "a 38% decline (a reduction of over 335,000 children) in the number of students ages 6 to 21 served in the public schools who were classified as having mental retardation"); Joan F. Goodman, Reluctance to Refer the Mildly Retarded Child: Implications for Labelling, 29 EARLY CHILD DEVELOPMENT & CARE 331, 331-32 (1987) (discussing reluctance of pediatricians to diagnose possible mental retardation); Gary N. Siperstein & Melissa A. Collins, Intellectual Disability, in THE DEATH PENALTY AND INTELLECTUAL DISABILITY 21, 29 (Edward A. Polloway ed., 2015) ("Despite the importance of early intervention, there is often reluctance to diagnose a child with ID, as parents do not perceive their child's impairment to be significant enough to warrant diagnosis."); see also Eva Z. Abrams & Joan F. Goodman, Diagnosing Developmental Problems in Children: Parents and Professionals Negotiate Bad News, 23 J. PEDIATRIC PSYCHOLOGY 87 (1998); Moore v. Texas, 137 S. Ct. 1039, 1052 (2017) (criticizing the lower court's overemphasis on defendant's education in "normal classrooms during his school career"). For additional resources regarding school records and placement in special education, see supra note 140

^{307.} Snell, Characteristics, supra note 77, at 222 ("The trend in national figures ... over the past 25 years, indicates little overall variability in the percentage of the school-aged population identified as receiving special education services under the category of 'mental retardation' (0.9%), but great variability from state to state." (emphasis added)); Edward A. Polloway et al., Mild Intellectual Disabilities: Legacies and Trends in Concepts and Educational Practices, 45 EDUC. & TRAINING IN AUTISM & DEVELOPMENTAL DISABILITIES 54, 57 (2010) ("The most compelling finding related to prevalence in the field of intellectual disabilities is the significant variance across states."); Reschly, Documenting Origins, supra note 83, at 127 ("Although all states are committed to meeting the IDEA legal requirements and to serve the children in the 13 disabilities defined at 34 C.F.R. 300.8, significant state discretion is permitted regarding the names and classification criteria for specific disabilities."); Caroline Everington, Challenges of Conveying Intellectual Disabilities to Judge and Jury, 23 WM. & MARY BILL OF RIGHTS J. 467, 472 (2014) ("Generally, school records will display evidence of academic difficulties and often special education placement. However, special education placement may not have been in a setting for students with ID."); see, e.g., Donald MacMillan et al., The Role of Assessment in Qualifying Students as Eligible for Special Education: What Is and What's Supposed to Be, 30(2) FOCUS ON EXCEPTIONAL CHILDREN, Oct. 1997, at 1, 6

within a district.³⁰⁸ Similarly, grading practices vary widely from school to school.³⁰⁹ In addition, the attitudes and sophistication of individual teachers may have been pivotal.³¹⁰ As a result, courts must inquire carefully into such placement and grading practices before evaluating the relevance of a defendant's school records.³¹¹

^{(&}quot;It is evident that the public schools of California are not using the diagnostic category of 'mental retardation' for many students with mild mental retardation.").

^{308.} Reschly, Documenting Origins, supra note 83, at 127-28; id. at 127 ("Changes in [state education agency] definitions and criteria for MR necessitate determining the criteria actually in effect at the time an adult with MMR [mild mental retardation] was evaluated in a school setting and whether or not the criteria used are consistent with the current definition of MR established for death penalty appeals."); Keith F. Widaman & Gary N. Siperstein, Assessing Adaptive Behavior of Criminal Defendants in Capital Cases: A Reconsideration, 27 AM. J. FORENSIC PSYCHOLOGY, no. 2, 2009, at 5, 15 ("In certain instances, euphemisms such as mental delay are used instead of the more pejorative label of mental retardation, despite the fact that these terms mean the same thing."); Reschly, Documenting Origins, supra note 83, at 128 ("Parents and school professionals clearly prefer SLD [specific learning disability] to MMR and often admit to using the latter even when the former is more appropriate due to parental acceptability."); Donald MacMillan et al., The Role of Assessment in Qualifying Students as Eligible for Special Education: What Is and What's Supposed to Be, 30(2) FOCUS ON EXCEPTIONAL CHILDREN, October 1997, at 1, 10 ("LD [learning disability] seems to be the 'diagnosis of choice' for a nonspecific and undifferentiated category of children that general education teachers view as 'difficult to teach,' with a disregard for eligibility criteria for State-sanctioned disability categories."); RUTH COLKER, DISABLED EDUCATION: A CRITICAL ANALYSIS OF THE INDIVIDUALS WITH DISABILITIES EDUCATION ACT 217-18, 228-33 (2013).

^{309.} See Reschly, Documenting Origins, supra note 83, at 128-30; see also J. Gregory Olley, *The Assessment of Adaptive Behavior in Adult Forensic Cases: Part 3: Sources of Adaptive Behavior Information*, 33(1) PSYCHOLOGY IN MENTAL RETARDATION AND DEVELOPMENTAL DISABILITIES, Summer 2007, at 3, 5 ("[S]chool records are often partially or completely missing after several years, and the help of a person from the local school system may be needed to interpret the meaning of certain records."); Keith F. Widaman & Gary N. Siperstein, *Assessing Adaptive Behavior of Criminal Defendants in Capital Cases: A Reconsideration*, 27 AM. J. FORENSIC PSYCHOLOGY, no. 2, 2009, at 5, 14-15 ("[A]n examiner must know the history of judicial rulings and/or school directives to interpret correctly many aspects of a defendant's school records. Failure to find evidence of special school placements cannot be used to justify a conclusion that the school system never recognized problems related to school failure during the defendant's developmental period."); Everington & Olley, *Defining and Diagnosing, supra* note 15, at 12 ("Even when school records are available, the information in them may be difficult to interpret. For example, just because a person has been placed in a classroom for children with learning disabilities does not preclude a mental retardation diagnosis.").

^{310.} For an analysis of teacher attitudes, see Gary N. Siperstein, Jennifer Norins & Amanda Mohler, *Social Acceptance and Attitude Change, in* HANDBOOK OF INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 133, 142-46 (John W. Jacobson, James A. Mulick, & Johannes Rojahn eds., 2007) and the sources cited therein; *see also* Cindy L. Praisner, *Attitudes of Elementary School Principals Toward the Inclusion of Students With Disabilities*, 69 EXCEPTIONAL CHILDREN 135, 140-42 (2003).

^{311.} In addition to school records, there may also be valuable information in other records, particularly those created during the individual's developmental period. *See* Reschly, *Documenting Origins, supra* note 83, at 132 ("Social services and medical records may exist that reveal useful information about the onset of MMR [mild mental retardation] during the developmental period. Medical conditions should be reviewed to identify conditions and diseases associated with MMR. Many families of persons with MMR are at least periodically on public support and, for various

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One potential source of information about adaptive behavior that is widely disfavored among clinicians is information provided by the individual himself or herself. Numerous studies and clinical experience have made clear that individuals with intellectual disabilities are notoriously unreliable in describing or assessing their own abilities.³¹² Clinicians have long recognized that these self-reports and selfassessments are extremely flawed and inaccurate.³¹³ In the context of Atkins litigation, courts may have an understandable concern that defendants might understate their adaptive functioning. But the experience of clinicians indicates that the larger problem is individuals with intellectual disabilities overstating their abilities and

reasons, have extensive child social services records.").

Even more clearly, evidence of school failure or academic problems cannot be used as an *alternative* to intellectual disability as an explanation of an individual's limitations. *See Moore*, 137 S. Ct. at 1051 ("The CCA furthermore concluded that Moore's record of academic failure, along with the childhood abuse and suffering he endured, detracted from a determination that his intellectual and adaptive deficits were related. Those traumatic experiences, however, count in the medical community as '*risk factors*' for intellectual disability. Clinicians rely on such factors as cause to explore the prospect of intellectual disability further, not to counter the case for a disability determination." (quoting AAIDD 2010, *supra* note 65, at 59-60)).

^{312.} See, e.g., Tassé et al., Construct of Adaptive Behavior, supra note 109, at 296.

^{313.} See, e.g., AAIDD 2010, supra note 65, at 51 ("Self-ratings of individuals—especially those individuals with higher tested IQ scores [within the intellectual disability range] may contain a certain degree of bias and should be interpreted with caution when determining an individual's level of adaptive behavior."); L. W. Heal & C. K. Sigelman, *Response Biases in Interviews of Individuals with Limited Mental Ability*, 39 J. INTELLECTUAL DISABILITY RESEARCH 331 (1995); Tassé et al., *Construct of Adaptive Behavior, supra* note 109, at 294 ("[S]elf-report data should be used very cautiously, if at all, when the purpose is to rule in or out a diagnosis of ID.") Olley, *Death Penalty and Courts, supra* note 160, at 237 (noting that "substantial research on interviewing people with low intelligence should make one very cautious in interpreting" self-reports of defendants); Keith F. Widaman & Gary N. Siperstein, *Assessing Adaptive Behavior of Criminal Defendants in Capital Cases: A Reconsideration*, 27 AM. J. FORENSIC PSYCHOLOGY, no. 2, 2009, at 5, 26-27 ("Therefore, we recommend that self-report measures of adaptive behavior for defendants in prison not be used, particularly when these measures are relied upon to make a diagnosis of mental retardation.").

Another difficulty frequently encountered in seeking self-reports from individuals with intellectual disability is the widely documented phenomenon of so-called bias responding or "acquiescence." See W. M. L. Finlay & E. Lyons, Acquiescence in Interviews with People Who Have Mental Retardation, 40 MENTAL RETARDATION 14 (2002) (and the many sources cited therein); Caroline Everington & Solomon M. Fulero, Competence to Confess: Measuring Understanding and Suggestibility of Defendants with Mental Retardation, 37 MENTAL RETARDATION 212 (1999); Tassé, Adaptive Behavior and Diagnosis, supra note 87, at 120. This phenomenon has been documented and studied in the clinical literature for decades. See, e.g., Carol K. Sigelman et al., When in Doubt, Say Yes: Acquiescence in Interviews with Mentally Retarded Persons, 19 MENTAL RETARDATION 53, 54-57 (1981); see also W. M. L. Finlay & E. Lyons, Methodological Issues in Interviewing and Using Self-Report Questionnaires with People with Mental Retardation, 13 PSYCHOLOGICAL ASSESSMENT 319, 330 (2001) ("The difference between expressive and receptive abilities should be recognized because professionals may often overestimate the comprehension of people who appear to have good expressive language abilities.").

accomplishments,³¹⁴ either now or in the past. As a result, there is a widespread consensus that warns against reliance on self-reports in assessing adaptive functioning for purposes of diagnosing intellectual disability.³¹⁵

B. Challenges of an Accurate Retrospective Diagnosis

In most ordinary clinical situations, a mental disability professional who is asked to evaluate whether an individual has intellectual disability will focus on the individual's mental status at the time of the evaluation. In such instances, estimating the individual's mental status at an *earlier* time would be of very limited assistance (perhaps useful only for establishing that the definition's age of onset requirement had been satisfied, and that issue is seldom contentious). Evaluations for the purpose of school placement, social services, or even forensic assessment of an issue like current competence to stand trial appropriately focus on contemporaneous functioning and prospective needs.

^{314.} See, e.g., Tassé et al., Construct of Adaptive Behavior, supra note 109, at 296 ("This qualification [of the reliability of self-report versus third-party respondents] is important because individuals may have a tendency to overestimate their competence and adaptive skills in an effort to appear more capable than they may actually be."); Snell, Characteristics, supra note 77, at 226 ("This denial of limitations may be accompanied by the tendency to exaggerate one's abilities. Individuals with intellectual disability may go to great lengths to hide their limitations, consuming significant effort to attempt to appear as their often-mistaken image of competent."); Macvaugh & Cunningham, Forensic Practice, supra note 83, at 161 ("Evaluators also should be cognizant of the fact that people with mental retardation have a strong tendency to acquiesce and present with a 'cloak of competence' in [an] attempt to hide their disability in order to appear normal." (citation omitted)); CLINICAL JUDGMENT 2014, supra note 253, at 31 ("[S]elf-ratings have a high risk of error"); AAIDD 2010, supra note 65, at 52 ("Based on these considerations, the authors of this Manual caution against relying heavily only on the information obtained from the individual himself or herself when assessing adaptive behavior for the purpose of establishing a diagnosis of ID."). See generally ROBERT B. EDGERTON, THE CLOAK OF COMPETENCE (rev. & updated ed. 1993).

^{315.} Tassé et al., *Construct of Adaptive Behavior*, *supra* note 109, at 296 ("[V]irtually all experts in the assessment of adaptive behaviors agree with this position.").

However, interviewing the defendant serves other purposes. Olley, *Qualifications, supra* note 268, at 137 ("The expert in an *Atkins* proceeding should, of course, meet with the defendant, interview him, and engage him in whatever activities might help to determine his understanding of his current situation, his ability to report on factual aspects of his history, and his ability to relate to others. *However, the defendant's assessment of his own functioning is not a valid source of data on which to form a diagnosis.*" (emphasis added)); Olley, *Death Penalty and Courts, supra* note 160, at 232 ("Although an interview of the defendant is a customary part of an *Atkins* evaluation or any evaluation related to the diagnosis of ID, one must be aware of many ways in which the self-report of the defendant (e.g., difficulty understanding the questions, particularly those of a conceptual nature, or difficulty responding to open-ended questions) or the tendency to try to hide one's limitations (i.e., the cloak of competence).").

By contrast, clinical evaluations in *Atkins* cases will focus on whether the defendant had intellectual disability at the time of the commission of the offense. This is because the constitutional protection afforded by *Atkins* is fundamentally about the level of the individual's culpability for his actions.³¹⁶ As a result, evaluators in these cases will need to focus on the defendant's mental status at an earlier point in time, and in some of the cases (such as post-conviction proceedings), a significantly earlier point in time. As one noted clinician has observed, "*Atkins* evaluations are, by their nature, retrospective. Experts are being asked to determine intellectual functioning in childhood, at the time of the crime, and, in some cases, currently."³¹⁷

There is one very important sense in which this does *not* matter: people who had intellectual disability earlier or later in their lives almost certainly had it at the time of the offense. Unlike many forms of mental *illness*, intellectual disability is neither a cyclical nor an episodic occurrence. By contrast, mental illness symptoms may be present at one point in a person's life and not at another, or may have substantially differing levels of severity over time.³¹⁸ In addition, some

^{316.} See Atkins v. Virginia, 536 U.S. 304, 317 (2002) ("This consensus unquestionably reflects widespread judgment about the relative culpability of mentally retarded offenders, and the relationship between mental retardation and the penological purposes served by the death penalty.").

^{317.} Olley, Death Penalty and Courts, supra note 160, at 235.

^{318.} Some forms of mental illness are, or can be, impermanent features of the affected individual's life. For example, the American Psychiatric Association now includes three separate diagnostic categories-Brief Psychotic Disorder, Schizophreniform Disorder, and Schizophreniawithin the "schizophrenia spectrum"; these categories are distinguished from one another, in large part, by their duration. APA, DSM-5, supra note 65, at 87, 89; id. at 94 ("The essential feature of brief psychotic disorder is a disturbance that involves the sudden onset of ... psychotic symptoms An episode of the disturbance lasts at least 1 day but less than 1 month, and the individual eventually has a full return to the premorbid level of functioning"); id. at 96; id. at 97 ("The characteristic symptoms of schizophreniform disorder are identical to those of schizophrenia Schizophreniform disorder is distinguished by its difference in duration: the total duration of the illness ... is at least 1 month but less than 6 months"); id. at 99; id. at 101 ("[For a diagnosis of schizophrenia, some] signs of the disturbance must persist for a continuous period of at least 6 months"); id. at 102 ("The onset [of schizophrenia] may be abrupt or insidious, but the majority of individuals manifest a slow and gradual development of a variety of clinically significant signs and symptoms.... The predictors of course and outcome are largely unexplained, and course and outcome may not be reliably predicted. ... [A] small number of individuals are reported to recover completely."). Similarly, there is also substantial variability among individuals with bipolar or other affective disorders. See, e.g., id. at 123; id. at 129 ("Mood [in Bipolar I Disorder] may shift very rapidly [from a manic episode] to anger or depression. Depressive symptoms may occur during a manic episode and, if present, may last moments, hours, or, more rarely, days,"); id. at 183 ("Short-duration depressive episode (4-13 days)"); id. at 168 ("[Symptoms of Persistent Depressive Disorder (Dysthymia) include:]Depressed mood for most of the day, for more days than not, as indicated by either subjective account or observation by others, for at least 2 years.").

forms of mental illness may be alleviated or masked by the effect of treatment.³¹⁹

As a result, courts confronting an issue of mental *illness* will frequently need to inquire about the individual's symptoms and functioning at a particular point in time. For example, in civil cases, challenges to the mental capacity of a testator will focus on the specific point in time in which he or she executed a will.³²⁰ Similarly, actions for damages caused by a traumatic brain injury require a determination of the plaintiff's mental capacity at the time of the injury.³²¹

In criminal cases, there are also time-specific questions about a defendant's mental illness that call for expert testimony. For example, competence to stand trial and other competence determinations usually

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^{319.} See, e.g., Thomas R.E. Barnes & Stephen R. Marder, *Principles of Pharmacological Treatment in Schizophrenia, in* SCHIZOPHRENIA 515, 515 (Daniel R. Weinberger & Paul J. Harrison eds., 3d ed. 2011) ("The important effect of antipsychotic medications in schizophrenia is their ability to reduce and sometimes eliminate psychotic thought processes."); T. Scott Stroup et al., *Pharmacotherapies, in* TEXTBOOK OF SCHIZOPHRENIA 303, 303 (Jeffrey A. Lieberman et al. eds., 2006) ("Pharmacological treatments are an essential component of a comprehensive approach to the treatment of schizophrenia. Rational pharmacotherapies can contribute greatly to symptom relief and to a broader psychosocial recovery for affected individuals. However, antipsychotic drugs do not cure schizophrenia."); Norman Sussman, *General Principles of Psychopharmacology, in* 2 KAPLAN & SADOCK'S COMPREHENSIVE TEXTBOOK OF PSYCHIATRY 2965 (9th ed. 2009) ("In a reversal of positions, psychoanalytic theory, which once served to define the practice of psychiatry, has been supplanted by psychopharmacology as the most widely used form of treatment for psychiatric disorders.").

The Supreme Court has taken note of the use of drugs for the treatment of mental illness. *See, e.g.*, Washington v. Harper, 494 U.S. 210, 214 (1990) ("Antipsychotic drugs, sometimes called 'neuroleptics' or 'psychotropic drugs,' are medications commonly used in treating mental disorders such as schizophrenia. As found by the trial court, the effect of these and similar drugs is to alter the chemical balance in the brain, the desired result being that the medication will assist the patient in organizing his or her thought processes and regaining a rational state of mind." (citation omitted)). Such treatments, particularly psychotropic medications, may also have side effects that influence the trial process. *See* Riggins v. Nevada, 504 U.S. 127, 142 (1992) (Kennedy, J., concurring) ("The drugs can prejudice the accused in two principal ways: (1) by altering his demeanor in a manner that will prejudice his reactions and presentation in the courtroom, and (2) by rendering him unable or unwilling to assist counsel.").

^{320.} WILLIAM M. MCGOVERN, SHELDON F. KURTZ & DAVID M. ENGLISH, WILLS, TRUSTS AND ESTATES 317 (4th ed. 2010) ("[T]he appropriate inquiry is whether the decedent was lucid and rational at the time the will was made." (emphasis added) (quoting *In re* Estate of Schlueter, 994 P.2d 937, 940 (Wyo. 2000)); Robert I. Simon, *Retrospective Assessment of Mental States in Criminal and Civil Litigation: A Clinical Review, in* RETROSPECTIVE ASSESSMENT OF MENTAL STATES IN LITIGATION: PREDICTING THE PAST 21, 28-30 (Robert I. Simon & Daniel W. Shuman eds., 2002) ("Competence to Execute a Will"); *id.* at 29 ("Sorting out these cases often entails piecing together the testimony of lay and non-mental health care professionals who observed the testator.").

^{321.} See David Faust, David C. Ahern & Ana J. Bridges, *Neuropsychological (Brain Damage) Assessment, in* COPING WITH PSYCHIATRIC AND PSYCHOLOGICAL TESTIMONY 363, 414 (David Faust ed., 6th ed. 2012) ("Determining whether an injury has produced a loss or decline in functioning requires knowledge of an individual's baseline or prior cognitive capacities.").

focus on the present moment.³²² But, determining whether a defendant is entitled to a defense of insanity or whether he or she had the requisite mens rea for a conviction focuses on mental condition at the time of the offense.³²³ Evaluations by mental health professionals in criminal cases where the issue concerns a defendant's condition at a particular time in the past are recognized to be more demanding than evaluations about the individual's current condition.³²⁴ As a consequence, it has even been

^{322.} See, e.g., Dusky v. United States, 362 U.S. 402, 402 (1960) (per curiam) ("[The test for competence to stand trial] must be whether he has sufficient present ability to consult with his lawyer with a reasonable degree of rational understanding—and whether he has a rational as well as factual understanding of the proceedings against him." (emphasis added)); ABA MENTAL HEALTH STANDARDS 1988, *supra* note 8, std. 7-4.1(b) ("The test for determining mental competence to stand trial should be whether the defendant has sufficient *present* ability to consult with defendant's lawyer with a reasonable degree of rational understanding and otherwise to assist in the defense, and whether the defendant has a rational as well as factual understanding of the proceedings." (emphasis added)); ABA MENTAL HEALTH STANDARDS 2016, *supra* note 8, std. 7-4.1(b) (same). Of course, appellate or post-conviction evaluation of whether a defendant had been competent at the time of an *earlier trial* is, by its nature, retrospective. *See, e.g.*, Pate v. Robinson, 383 U.S. 375, 387 (1966) ("[W]e have previously emphasized the difficulty of retrospectively determining an accused's competence to stand trial.").

On the issue of competence to be *executed*, the relevant focus is on mental condition at the time that execution is imminent. *See* ABA MENTAL HEALTH STANDARDS 1988, *supra* note 8, std.7-5.7(a) ("Whenever a correctional official, other state official, the prosecution, or counsel for the convict have reason to believe that a convict who has been sentenced to death may be *currently* incompetent,," (emphasis added)); *id.* at (f) ("[I]f the court finds, by a preponderance of the evidence, that the convict is currently incompetent, it should stay the order of execution for the duration of the convict's incompetence."); ABA MENTAL HEALTH STANDARDS 2016, *supra* note 8, std. 7-9.9(a), (e); Panetti v. Quarterman, 551 U.S. 930, 934 (2007) ("Prior findings of competency do not foreclose a prisoner from proving he is incompetent to be executed because of his *present* mental condition." (emphasis added)); *see also* Ford v. Wainwright, 477 U.S. 399, 407 (1986) ("[I]f, after judgment, he becomes of nonsane memory, execution shall be stayed...." (quoting 4 WILLIAM BLACKSTONE, COMMENTARIES ON THE LAWS OF ENGLAND 24 (Oxford, Clarendon Press 1769))); Daniel W. Shuman, *Competence and Mental Impairment, in* RETROSPECTIVE ASSESSMENT OF MENTAL STATES IN LITIGATION: PREDICTING THE PAST, *supra* note 261, at 425-43.

^{323. 18} U.S.C. § 17(a) (2012) ("It is an affirmative defense to a prosecution under any Federal statute that, at the time of the commission of the acts constituting the offense, the defendant, as a result of a severe mental disease or defect, was unable to appreciate the nature and quality or the wrongfulness of his acts." (emphasis added)); ABA MENTAL HEALTH STANDARDS 1988, *supra* note 8, std. 7-6.1(a) ("A person is not responsible for criminal conduct if, at the time of such conduct, and as a result of mental disease or defect, that person was unable to appreciate the wrongfulness of such conduct." (emphasis added)); ABA MENTAL HEALTH STANDARDS 2016, *supra* note 8, std. 7-6.1(a) ("A person is not responsible for criminal conduct if, at the time of such conduct, and as a result of mental disorder, that person was unable to appreciate the wrongfulness of such conduct." (emphasis added)); MODEL PENAL CODE § 4.01(1) (AMERICAN LAW INSTITUTE 1985) ("A person is not responsible for criminal conduct if at the time of such conduct." (emphasis added)); MODEL PENAL CODE § 4.01(1) (AMERICAN LAW INSTITUTE 1985) ("A person is not responsible for criminal conduct if at the time of such conduct." (emphasis added)); MODEL PENAL CODE § 4.01(1) (AMERICAN LAW INSTITUTE 1985) ("A person is not responsible for criminal conduct if at the time of such conduct." (emphasis added)); MODEL PENAL CODE § 4.01(1) (AMERICAN LAW INSTITUTE 1985) ("A person is not responsible for criminal conduct if at the time of such conduct as a result of mental disease or defect he lacks substantial capacity either to appreciate the criminality [wrongfulness] of his conduct or to conform his conduct to the requirements of law." (alteration in original) (emphasis added)).

^{324.} See, e.g., Ronald Roesch, Jodi L. Viljoen & Irene Hui, Assessing Intent and Criminal Responsibility, in HANDBOOK OF FORENSIC PSYCHOLOGY: RESOURCES FOR MENTAL HEALTH AND LEGAL PROFESSIONALS 157 (William T. O'Donohue & Eric R. Levensky eds., 2004) ("Criminal

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recommended that the qualifications of expert witnesses with regard to retrospective mental health status be more demanding than the credentials required for contemporaneous evaluation of a defendant's mental condition.³²⁵

By contrast, intellectual disability is a condition manifested either at birth or during childhood (most frequently early in childhood), and which essentially remains throughout the individual's life.³²⁶ As a result, the mental *illness* concerns about substantial changes or fluctuations in mental state over time do not have a direct analogue regarding intellectual disability. In that sense, retrospective evaluations of intellectual disability do not present the same challenges as mental illness issues such as those that arise in insanity defense cases.

But the retrospective aspect of the *Atkins* determination of whether a defendant had intellectual disability earlier in life does raise issues on two narrower points. The first issue involves the third prong of the definition, whether the disability was manifested during the developmental period.³²⁷ As noted earlier, unless there was a brain injury or comparable event during adulthood, it is extremely likely that an

responsibility evaluations can be extremely challenging for evaluators. One unique and complicating feature is that they require a *retrospective* evaluation of a defendant's mental state at the time of the alleged offense."); GARY B. MELTON ET AL., PSYCHOLOGICAL EVALUATIONS FOR THE COURTS: A HANDBOOK FOR MENTAL HEALTH PROFESSIONALS AND LAWYERS 249 (3d ed. 2007) ("[U]nlike the focus of most other forensic assessments, the focus of the MSO [mental state at offense] evaluation is retrospective. Having to ascertain the inner workings of an individual weeks or months prior to the evaluation limits the applicability of many traditional clinical procedures and creates concern about the possible impact of intervening events."); JOHN PARRY & ERIC Y. DROGIN, CRIMINAL LAW HANDBOOK ON PSYCHIATRIC AND PSYCHOLOGICAL EVIDENCE AND TESTIMONY 159 (ABA 2000) ("A key factor that all diminished culpability standards share is that each determination is based on an assessment of a defendant's mental or unconscious state at the time of the alleged crime, rather than at trial. Thus, all of these assessments are retrospective and usually cover an extended period of time.").

^{325.} ABA MENTAL HEALTH STANDARDS 1988, *supra* note 8, std. 7-3.12(c)(ii); *see id.* commentary ("Paragraph (c) assumes that assessments of competency or other issues of present mental condition may be made more easily than those requiring a reconstruction of mental condition at the time of an alleged crime"); ABA MENTAL HEALTH STANDARDS 2016, *supra* note 8, std. 7-3.8; *see also* Snell, *Characteristics, supra* note 77, at 227 ("[T]he need for supports in individuals with intellectual disability [is] an enduring rather than a temporary characteristic." (citing James R. Thompson et al., *Conceptualizing Supports and the Support Needs of People with Intellectual Disability*, 47 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 135, 136-37 (2009))).

^{326.} See, e.g., MARC J. TASSÉ & JOHN H. BLUME, INTELLECTUAL DISABILITY AND THE DEATH PENALTY 4-5 (2018) ("Although intensive educational and therapeutic interventions received in infancy and early childhood may alleviate some of the child's deficits in intellectual functioning and adaptive behavior, intellectual disability is generally considered a lifelong condition."); J. Gregory Olley, *Time at Which Disability Must Be Shown in* Atkins *Cases, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 213, 214 (Edward A. Polloway ed., 2015) ("If the condition was established in childhood, it was likely to have continued to the time of the crime.").

^{327.} See supra Part IV.C for a discussion of this prong.

individual who meets the measured intelligence and adaptive limitations prongs of the definition acquired the disability during the developmental period.³²⁸

The second (and methodologically more nuanced) issue is evaluating whether, at the time of the criminal act, the defendant had the requisite deficits in adaptive functioning to meet the second prong of the definition.³²⁹ This arises from the challenges inherent in retrospective measurement of adaptive behavior.

The starting point in addressing this difficulty is acknowledging that the problem is, indeed, inherent in the nature of the diagnostic process and the needs of the judicial system in *Atkins* cases. The courts need to know about the defendant's functioning level at an earlier time in his life. Unfortunately, the primary methodology that ordinarily would be used in non-forensic settings—ascertaining his current functioning level and extrapolating backward in time—is methodologically unsound in this context. Because the individual is likely to be in prison (an artificial environment which masks deficits), this approach is extremely likely to produce an inaccurate assessment.³³⁰

Therefore, the diagnostician in *Atkins* evaluations is left with two principal sources of information. The first is whatever reliable evidence is available about the individual's functioning earlier in life (i.e., before being incarcerated). The second source of information is the use of adaptive behavior scales, and other documentary and interview data. But some caution is necessary regarding the interpretation of results from the behavior scales in this context. Ascertaining whether an individual had significant deficits in adaptive behavior at the time of the offense is substantially different from evaluating his current level of functioning. The evaluative instruments, while they remain valuable, were not designed to perform this particular task.³³¹ While techniques have been

^{328.} See supra notes 135-42, 146 and accompanying text.

^{329.} CLINICAL JUDGMENT 2014, *supra* note 253, at 36 ("A valid retrospective diagnosis of ID requires the demonstration of significant limitations in adaptive behavior during the developmental (up to age 18) period. This requirement typically involves using scores from previously administered adaptive behavior instruments."); *id.* at 36 (listing six specific standards for retrospective adaptive behavior assessments that clinicians need to weigh); Gilbert S. Macvaugh, III, Karen L. Salekin & J. Gregory Olley, *Mental Retardation: Death Penalty, in* 4 WILEY ENCYCLOPEDIA OF FORENSIC SCIENCE 1730, 1734 (Allan Jamieson & Andre Moenssens eds., 2009) ("[C]oncerns exist regarding the validity of retrospective assessments of adaptive behavior."); Caroline Everington et al., *Challenges in the Assessment of Adaptive Behavior of People Who Are Incarcerated, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 201, 203 (Edward A. Polloway ed., 2015) ("Retrospective evaluations present unique challenges that can threaten the reliability and validity (the trustworthiness) of the AB assessment results.").

^{330.} See supra notes 125-28 and accompanying text.

^{331. &}quot;No adaptive behavior rating scale was normed with such a long-term retrospective

suggested to minimize the difficulties in obtaining reliable information from the retrospective administration of adaptive behavior scales,³³² caution is warranted against overestimating the precision these instruments can achieve in retrospective evaluations.³³³

While there are problems with each source of retrospective information³³⁴—adaptive behavior scales and other historical data—it is essential that they be gathered and analyzed rigorously. The AB scales, as previously discussed,³³⁵ were not designed for this specific task, but, if properly administered and interpreted, they have some value.³³⁶ Information from individuals who knew the defendant prior to his incarceration carries the fallibility attendant to any reliance on human memory.³³⁷ School and social services records do not present this

335. See supra Part VII.A.

administration. In other words, no standardization procedure used in norming any adaptive behavior rating scale requires raters to think back and remember how the target person behaved during the developmental period or at time years earlier." Kay B. Stevens & J. Randall Price, *Adaptive Behavior, Mental Retardation, and the Death Penalty*, 6 J. FORENSIC PSYCHOLOGY PRACTICE, no. 3, 2006, at 1, 15; *see also* J. Gregory Olley, *The Assessment of Adaptive Behavior in Adult Forensic Cases: Part 1, supra* note 126, at 3 ("This retrospective use of adaptive behavior scales is not the way that the tests were standardized."); Tassé et al., *Construct of Adaptive Behavior, supra* note 109, at 296 ("[T]here is no research available examining the reliability or error rate of adaptive behavior assessments obtained retrospectively.").

^{332.} See, e.g., Olley, *The Assessment of Adaptive Behavior in Adult Forensic Cases: Part 1, supra* note 126, at 3 ("Thus, the challenge is not to find the perfect single measure but to find the most acceptable adaptation of customary methods. By such a standard, the problems of retrospective reports can be minimized by selecting respondents who knew the defendant well at the time they are describing and who are generally reliable.").

^{333.} All authorities recognize the substantial difficulty in retrospective evaluation of adaptive deficits. However, there is not complete agreement about precisely how that difficulty should be addressed. *See, e.g.*, Bonnie & Gustafson, *Implementing* Atkins, *supra* note 127, at 849 ("A final limitation of adaptive behavior measurement is that they cannot be administered retrospectively and thus can only measure the defendant's current functioning."); *id.* at 859 ("In particular, the construct of adaptive behavior should be emphasized [in testimony by experts] in light of the uncertainties surrounding its measurement."); James R. Patton & Denis W. Keyes, *Death Penalty Issues Following* Atkins, 14 EXCEPTIONALITY 237, 249 (2006) ("Sometimes it is necessary to administer a standardized instrument retrospectively. Although this is not a preferred or recommended way of administration, it may be the only option."); Olley & Cox, *Assessment of Adult Behavior, supra* note 116, at 389 ("Although all adaptive behavior testing relies on accurate memory, reliance on memory from the distant past is a departure from the standardized procedure. Nevertheless, information obtained in this way can contribute to a valid conclusion.").

^{334.} See, e.g., Macvaugh & Cunningham, Forensic Practice, supra note 83, at 160-61; *id.* at 160 ("Concerns exist regarding the validity of retrospective assessments of adaptive behavior."); see also Everington & Olley, *Defining and Diagnosing, supra* note 15, at 8-10.

^{336.} Olley & Cox, *Assessment of Adult Behavior, supra* note 116, at 387 ("The question is not whether the test or interview procedure is valid for this purpose. The question is whether the totality of the available information is sufficient for the expert to make a well-founded and ethical clinical judgment about the question at hand.").

^{337.} Id. at 386 ("When using informant information, the validity of the expert's conclusion relies heavily upon the memories of the individuals who provide the information."); id. at 389

problem, of course, but involve potential difficulties of their own,³³⁸ and may be unavailable.³³⁹ In most cases, the best approach will be to examine and evaluate as wide an array of valid information as possible.³⁴⁰ Clinical experts who have participated in *Atkins* cases have offered specific guidance in dealing with individual informants in a retrospective interview.³⁴¹ Similarly, there are recommendations for "best practices" regarding the overall process of evaluating adaptive behavior in a retrospective setting.³⁴²

Although the retrospective nature of most *Atkins* evaluations involves considerable challenges, both for clinicians and for the courts, it is important to remember that the lifelong nature of intellectual disability minimizes the need for precision in determining the exact characteristics of a defendant's limitations at the time of the crime. Those limitations,

341. See, for example, Tassé, Adaptive Behavior and Diagnosis, supra note 87, at 120:

- Identify a clear time period during which you want the respondent to focus their report of the individual's adaptive behavior. For example, you might instruct the respondent to recall the assessed individual before he was incarcerated.
- Build rapport with the respondent and ask them to think about where the assessed person was living at that specific time, working, etc. These points of reference will be important to assist the respondent to recall that time period.
- Periodically, remind the respondent that they are assessing the individual's adaptive behavior in that specific time period.

342. See, e.g., AAIDD, USER'S GUIDE 2012, *supra* note 65, at 21 & Table 3.4; Tassé et al., *Construct of Adaptive Behavior, supra* note 109, at 296-97; Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 160-61; *see also supra* note 329.

^{(&}quot;Although all adaptive behavior testing relies on accurate memory, reliance on memory from the distant past is a departure from the standardized procedure. Nevertheless, information obtained in this way can contribute to a valid conclusion."); *see also* Everington & Olley, *Defining and Diagnosing, supra* note 15, at 9 ("In other words, the informant must report on the performance of the defendant at some time in the past and that reliance on memory is likely to compromise the validity of the assessment to some unknown degree.").

^{338.} See supra notes 140, 302-11 and accompanying text.

^{339.} See supra notes 140, 304.

^{340.} Everington & Olley, *Defining and Diagnosing, supra* note 15, at 11 ("A valid assessment of adaptive skills should be based on information from several sources (e.g., standardized measures of adaptive skills, interviews, school and work records, and other archival data).... A thorough assessment of adaptive skills requires some detective work"); Tassé et al., *Construct of Adaptive Behavior, supra* note 109, at 296 ("For such a diagnosis, the clinician must use multiple sources of information, including any data that can be obtained (e.g., school records, work records) to develop as complete a picture of the person's history of adaptive *Behavior Instruments, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 187, 193 (Edward A. Polloway ed., 2015) ("The examiner must draw information from as many sources as possible and give each source its appropriate weight, using clinical judgment to arrive at a diagnostic conclusion."). A term commonly used to describe this approach is "convergent validity." *See, e.g.*, Reschly, *Documenting Origins, supra* note 83, at 132-33; Caroline Everington, *Challenges of Conveying Intellectual Disabilities to Judge and Jury*, 23 WM. & MARY BILL OF RIGHTS J. 467, 483 (2014) ("A process of convergent validity is used to combine information from across a number of informatis.").

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therefore, can be viewed and evaluated in a more comprehensive assessment, rather than a technical and purely quantitative computation.

C. Strengths and Weaknesses

As discussed in the previous Subparts, the assessment of adaptive behavior differs from the assessment of intellectual functioning in several crucial ways.³⁴³ One of the principal differences is that the diagnostic evaluation of adaptive behavior focuses on the individual's weaknesses, and does not "balance" them against those things that the individual actually can do.³⁴⁴ This singular focus on the debit side of the ledger may, at first blush, seem counterintuitive, but this principle is universally recognized among clinicians in the field, and evaluators must adhere to it in all *Atkins* cases.³⁴⁵

But the diagnostic focus of the second prong on adaptive deficits does not deny that adaptive skills may also be present. The central

^{343.} See supra Parts VI, VII.A-B.

^{344.} See Moore v. Texas, 137 S. Ct. 1039, 1050 (2017) ("But the medical community focuses the adaptive-functioning inquiry on adaptive *deficits.*" (citing AAIDD 2010, *supra* note 65, at 47; APA, DSM-5, *supra* note 65, at 33, 38; and Brumfield v. Cain, 135 S. Ct. 2269, 2281 (2015)).

^{345.} For decades, the professional and clinical definitions of intellectual disability have focused solely on deficits. See, e.g., AAIDD 2010, supra note 65, at 1 ("[S]ignificant limitations ... in adaptive behavior as expressed in conceptual, social, and practical adaptive skills."); AAMR 2002, supra note 95, at 1 ("Mental retardation is a disability characterized by significant *limitations* both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills."); AAMR 1992, supra note 84, at 5 ("It is characterized by significantly subaverage intellectual functioning, existing concurrently with related limitations in two or more of the following applicable skill areas"); AAMD 1983, supra note 80, at 11 ("Mental retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior "); AMERICAN ASSOCIATION ON MENTAL DEFICIENCY, MANUAL ON TERMINOLOGY AND CLASSIFICATION IN MENTAL RETARDATION 11 (rev. 1973) ("[E]xisting concurrently with *deficits* in adaptive behavior"); AMERICAN ASSOCIATION ON MENTAL DEFICIENCY, A MANUAL ON TERMINOLOGY AND CLASSIFICATION IN MENTAL RETARDATION 3 (2d ed. 1961) ("Mental retardation refers to subaverage general intellectual functioning which originates during the developmental period and is associated with impairment in adaptive behavior."); APA, DSM-5, supra note 65, at 33 ("Deficits in adaptive functioning "); APA, DSM-IV-TR, supra note 80, at 41 ("[A]ccompanied by significant limitations in adaptive functioning "); AMERICAN PSYCHIATRIC ASSOCIATION, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS: DSM-III-R 32 (3d ed. rev. 1987) ("Concurrent deficits or impairments in adaptive functioning"); MANUAL OF DIAGNOSIS AND PROFESSIONAL PRACTICE IN MENTAL RETARDATION 13 (John W. Jacobson & James A. Mulick eds., American Psychological Association, 1996) ("significant limitations in adaptive functioning") (all emphases added).

While an individual's strengths are relevant and important to assess in planning for education or planning services, the same is not true in the *diagnosis* of intellectual disability in *Atkins* cases. Olley, *Death Penalty and Courts, supra* note 160, at 233 ("[I]t is important to note that a clinical evaluation emphasizes strengths in order to plan services that capitalize upon those strengths to promote success. An evaluation for the court is focused on deficits because its purpose is to determine a diagnosis, and an ID is, by definition, a condition characterized by deficits.").

reason for focusing on deficits in adaptive functioning begins with the universally recognized fact that every individual who has intellectual disability also has things that he or she has learned to do, and can do whether with or without assistance. The presence of such abilities cannot preclude the diagnosis of ID.³⁴⁶ The functional impairments experienced by people with ID are not uniform across the class, and the diagnostic process does not require such uniformity. As discussed earlier, the purpose of requiring deficits in adaptive functioning was to assure that the cognitive impairment that satisfies the first prong of the definition is accompanied by actual functional limitations (and is not merely an

^{346.} See, e.g., AAIDD 2010, supra note 65, at 1 ("Within an individual, limitations often coexist with strengths."); AAMR 2002, supra note 95, at 1 (same); AAMR 1992, supra note 84, at 5 ("Specific adaptive limitations often co-exist with strengths in other adaptive skills or other personal capabilities"); Snell, Characteristics, supra note 77, at 220 ("[A]ll individuals with intellectual disability typically demonstrate strengths in functioning along with relative limitations."); Olley, Death Penalty and Courts, supra note 160, at 233 ("[P]eople with mild ID are a heterogeneous group with individual profiles of relative strengths and weaknesses. One cannot argue that the presence of a particular strength rules out ID, particularly if it is a strength shared with others with ID."); Caroline Everington, Challenges of Conveying Intellectual Disabilities to Judge and Jury, 23 WM. & MARY BILL OF RIGHTS J. 467, 471 (2014) ("Interpretation of these findings requires an understanding of typical behavioral expectations of individuals who function in the mild range of ID. For example, the presence of a defendant's strengths in some areas . . . is to be expected and does not preclude a diagnosis of ID."); see also Brumfield, 135 S. Ct. at 2281 ("[I]ntellectually disabled persons may have 'strengths in social or physical capabilities, strengths in some adaptive skill areas, or strengths in one aspect of an adaptive skill in which they otherwise show an overall limitation." (quoting AAMR 2002, supra note 95, at 8)). Such abilities are sometimes described as "splinter skills" or "islands of competence." See, e.g., Katherine T. Rhodes et al., Testing Math or Testing Language? The Construct Validity of the KeyMath-Revised for Children with Intellectual Disability and Language Difficulties, 120 AM. J. ON INTELLECTUAL & DEVELOPMENTAL DISABILITIES 542, 543 (2015) ("[I]n addition to exhibiting a general pattern of lower than average performance across a variety of broad abilities, children with ID may also be characterized by heterogeneous performances (sometimes termed 'splinter skills') across broad abilities and a variety of ability profiles.").

Indeed, the presence of isolated skills—such as reading above expected grade-levels—that are not within the typical range for people with ID does not preclude a diagnosis under the adaptive behavior prong. *See* Karen L. Salekin, Gilbert S. Macvaugh, III & Timothy J. Derning, *Relevance of Other Assessment Instruments, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 305, 311 (Edward A. Polloway ed., 2015) ("The appropriate scientific fact is that for any IQ score there is a symmetrical range of possible expected achievement scores which, whether reported in terms of standard scores or GE's [grade equivalents], can be large. Achievement scores that are above predicted levels based on measured IQ scores will occur with some degree of regularity for individuals with mild MR/ID." (internal quotation omitted)).

Evaluators also need to be watchful for the possibility of hidden supports in the person's life. In determining the things that an individual may or may not be able to do, it is also important to be alert to the possibility that some actions may actually have depended on the involvement of others. *See* Olley, *Qualifications, supra* note 268, at 138 ("[Often,] the individual depends on a parent or girlfriend or neighbor as a 'benefactor' or has acquaintances who try to exploit him for money, labor, drugs, or other resources."); *see also* Kelli A. Sanderson et al., *Who Helps? Characteristics and Correlates of Informal Supporters to Adults with Disabilities*, 122 AM. J. ON INTELLECTUAL & DEVELOPMENTAL DISABILITIES 492 (2017).

anomaly or artifact of the IQ testing process).³⁴⁷ As a result, it is essential for courts adjudicating prong 2 of the definition in *Atkins* cases to follow the practice of clinicians and focus on deficits in adaptive functioning.³⁴⁸

D. Relevance of the Facts of the Crime

An issue has arisen in some *Atkins* cases about the relevance of the facts of the crime for which the defendant has been charged (or, in appeals and post-conviction cases, the crime of which he has been convicted). In these cases, it is asserted that the crime involved some level of planning or knowledge, or that the defendant attempted to avoid detection or capture, and that these facts (if true) are inconsistent with the defense's claim of intellectual disability.³⁴⁹ Since there is no direct analogue to this contention outside the criminal justice system, it must be addressed within the context of more general principles of diagnosing intellectual disability.

Courts may be tempted to assume that the facts of the crime are part of the evaluation of the defendant's entitlement to *Atkins* relief. This assumption might seem natural, since the details of the crime are so pivotal in determining a defendant's claim to a defense of insanity or diminished capacity. In such cases, the court must inquire not just whether the defendant had the claimed mental "disease or defect," but also whether it had a particular effect on his *conduct* at the time of the offense.³⁵⁰ Similarly in those jurisdictions that recognize "diminished

^{347.} See supra notes 111-15 and accompanying text.

^{348.} See James R. Patton & Denis W. Keyes, *Death Penalty Issues Following* Atkins, 14 EXCEPTIONALITY 237, 250 (2006) ("All professional definitions of mental retardation stress that relative strengths can coexist with deficits in adaptive behavior, as indicated by the fact that deficits do not have to be found in all adaptive skill areas. Nevertheless, certain strengths (e.g., reading at the sixth grade level, driving a car, or having a girlfriend) are often [erroneously] used to discredit the claim that a person has mental retardation."); Everington & Olley, *Defining and Diagnosing*, *supra* note 15, at 8 ("If a defendant has a job, drives a car, fixes engines, and/or is married, he/she is improperly declared to have no deficits in adaptive skills."); Cecil R. Reynolds & Daneen A. Milam, *Challenging Intellectual Test Results, in* COPING WITH PSYCHIATRIC AND PSYCHOLOGICAL TESTIMONY 311, 330 (David Faust ed., 6th ed. 2012) ("Therefore, a mentally retarded individual cannot be disqualified from a diagnosis of mental retardation based upon scattered strengths or skills."); *see Moore*, 137 S. Ct. at 1050 ("In concluding that Moore did not suffer significant adaptive deficits, the CCA overemphasized Moore's perceived adaptive strengths. The CCA recited the strengths it perceived, among them, Moore lived on the streets, mowed lawns, and played pool for money.").

^{349.} See, e.g., Ex parte Sosa, 364 S.W.3d 889, 894 (Tex. Crim. App. 2012).

^{350.} See, e.g., MODEL PENAL CODE § 4.01(1) (AMERICAN LAW INSTUTE 1985) (providing that the inquiry is whether, "at the time of such conduct as a result of mental disease or defect he lacks substantial capacity either to appreciate the criminality [wrongfulness] of his conduct or to conform his conduct to the requirements of law." (alteration in original)).

capacity^{"351} or "extreme emotional disturbance^{"352} as relevant to criminal responsibility, the connection between the mental state and the act is central, as it is whenever the impediment to conviction is an individual's lack of the requisite mens rea.³⁵³ In each of these areas, the facts surrounding the crime are directly relevant to the legal issue of the defendant's criminal responsibility.

Atkins cases are entirely different. The details of the crime have no independent relevance to the diagnostic issue of whether a defendant has intellectual disability. As Professor Bonnie has noted:

One particularly striking feature of *Atkins* is that it enunciated a constitutional rule that turns explicitly and entirely on a clinical diagnosis. Although clinical diagnoses often serve as a threshold requirement in legal "tests" of incompetence, non-responsibility, and disability, they are almost never sufficient to establish that the legal criteria are satisfied.³⁵⁴

The clear holding of *Atkins* is that no individual with intellectual disability can be executed.³⁵⁵ Therefore, there can be no constitutional warrant to inquire about the specific impact of a defendant's disability on any aspect of the crime for which he has been charged.

Furthermore, the facts of the criminal offense offer no insight into whether the individual's measured intellectual functioning falls within the range of intellectual disability, and no insight into whether the disability manifested during the developmental period of his life. The only conceivable relevance would be on the issue of adaptive behavior, and as noted earlier, the existence of purported strengths or abilities is not the proper focus of that inquiry.³⁵⁶

From a clinical perspective, the use of the facts of the criminal offense is a thinly disguised form of stereotyping.³⁵⁷ Its purported logic

^{351.} See, e.g., Hensel v. State, 604 P.2d 222, 232 (Alaska 1979) ("The inquiry in such cases is whether the defendant's mental capacity was so diminished that he was incapable of deliberating or premeditating the killing, . . . or incapable of harboring malice aforethought ").

^{352.} See, e.g., N.Y. PENAL LAW § 125.25(1)(a) (McKinney 2006) (recognizing extreme emotional disturbance as an affirmative defense to murder in the second degree).

^{353.} See JOSHUA DRESSLER, UNDERSTANDING CRIMINAL LAW § 26.02 at 364-69 (7th ed. 2015) ("Diminished Capacity: *Mens Rea* Defense"); PARRY, ABA REFERENCE MANUAL, *supra* note 10, at 138-40.

^{354.} Bonnie & Gustafson, Implementing Atkins, supra note 127, at 813; see also Richard J. Bonnie, The American Psychiatric Association's Resource Document on Mental Retardation and Capital Sentencing: Implementing Atkins v. Virginia, 32 J. AM. ACADEMY PSYCHIATRY & LAW 304 (2004).

^{355.} Atkins v. Virginia, 536 U.S. 304, 321 (2002).

^{356.} See supra Part VII.C.

^{357.} See infra Part VII.E; see also Carol S. Steiker & Jordan M. Steiker, Atkins v. Virginia: Lessons from Substance and Procedure in the Constitutional Regulation of Capital Punishment, 57

is essentially: "Defendant did [x], and since no one with intellectual disability is capable of doing [x], defendant cannot be a person with intellectual disability."³⁵⁸ As indicated in the next Subpart, the problem with that argument is that there is no list of things that "no person with intellectual disability" is capable of doing.³⁵⁹ As a result, such an assertion cannot be part of any clinically acceptable assessment.³⁶⁰

But just as the facts of the crime should not be used by *prosecutors* to argue that a defendant lacked deficits in adaptive behavior, neither should they be used by the *defense* as a substitute for evidence that the individual *has* such deficits. It is sometimes suggested that the very fact that the defendant engaged in criminal activity is sufficient evidence of

DEPAUL L. REV. 721, 727-28 (2008).

^{358.} Despite the clear consensus among clinicians, the tendency to draw conclusions about an individual's diagnosis from the facts of the crime appears to be shared by many potential jurors. See Marcus T. Boccaccini et al., Jury Pool Members' Beliefs About the Relation Between Potential Impairments in Functioning and Mental Retardation: Implications for Atkins-Type Cases, 34 LAW & PSYCHOLOGY REV. 1, 19 (2010) [hereinafter Jury Pool Beliefs] ("These findings suggest that jurors are more likely to determine that a defendant is a person with MR when there is a clear nexus between his criminal behavior and MR, a finding that is consistent with the limited research [about jurors] conducted in this area."). See generally Margaret C. Reardon et al., Deciding Mental Retardation and Mental Illness in Capital Cases: The Effects of Procedure, Evidence, and Attitudes, 13 PSYCHOLOGY CRIME & LAW 537 (2007) (discussing mock juror verdicts on whether a capital defendant has intellectual disability).

^{359.} See infra notes 380-85 and accompanying text.

^{360.} Attempts to use the facts of the criminal offense with which the defendant is charged as part of the assessment process, either by clinical testimony or by prosecutorial argument, raise the suspicion that their true purpose is to shift attention away from the clinical issue and onto the horrible facts of a particular crime. This can be true whether the determination about intellectual disability is made by a different trier of fact than the criminal adjudication (as in pretrial procedures or in post-conviction settings) or before the same judge or jury. When this arises as an evidentiary question, since there is no clinical support for the assertion, its prejudicial effect clearly outweighs any probative value. *See* FED. R. EVID. 403 ("The court may exclude relevant evidence if its probative value is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence.").

AAIDD has specifically disapproved of using facts of the crime in the diagnostic process. AAIDD, USER'S GUIDE 2012, *supra* note 65, at 20 ("Do not use past criminal behavior or verbal behavior to infer level of adaptive behavior. The diagnosis of intellectual disability is based on meeting three criteria: significant limitations in intellectual functioning; significant limitations in adaptive behavior as expressed in conceptual, social, and practical adaptive skills; and age of onset prior to age 18. The diagnosis of ID is not based on the person's 'street smarts', behavior in jail or prison, or 'criminal adaptive functioning.").

behavioral deficits.³⁶¹ This represents a misunderstanding of the adaptive behavior component of the definition.

It is widely recognized among clinicians that, as with criminal behavior, "maladaptive behavior" is also not synonymous with "deficits in adaptive behavior."³⁶² As AAIDD has concluded: "There is general agreement that the presence of clinically significant levels of problem behavior found on adaptive behavior scales does not meet the criterion of significant limitations in adaptive functioning."³⁶³ Therefore, maladaptive behavior should not be taken as a substitute for evidence of deficits in adaptive behavior.³⁶⁴

364. As one of the psychological experts on the AAIDD classification committee has written: Some confusion once existed regarding problem behavior and adaptive behavior, largely because of the misnomer "maladaptive behavior" that was once used to designate problem behaviors such as self-injurious behavior, aggression, stereotypies, destruction of property, etc. "Maladaptive behavior" is a separate and independent construct of adaptive behavior. The presence or absence of "maladaptive behaviors" has little

^{361.} Macvaugh & Cunningham, Forensic Practice, supra note 83, at 168-69; id. at 169 ("Evaluators are discouraged from utilizing criminal behavior to ascertain the presence or absence of deficits in adaptive functioning."); George S. Baroff, Establishing Mental Retardation in Capital Cases: A Potential Matter of Life and Death, 29 MENTAL RETARDATION 343, 347 (1991) ("I am inclined to reject criminal behavior as grounds for an adaptive impairment associated with retardation unless there are other noncriminal and intellectually-related difficulties (e.g., a poor work history, poor money management skills, inability to maintain an independent adult adjustment)." (emphasis omitted)); Olley & Cox, Assessment of Adult Behavior, supra note 116, at 386 ("If the crime required sophisticated thinking and behavior, the remainder of the defendant's life also should illustrate high levels of adaptive behavior in order to rule out mental retardation.").

^{362.} Maladaptive behavior, sometimes referred to as problem behavior, divides into two broad categories: personal, such as self-injurious behavior, hyperactivity, and repetitive movements, and social, such as aggression, resistiveness, fits of anger, destruction of property. *See* Keith F. Widaman & Kevin S. McGrew, *The Structure of Adaptive Behavior, in* AMERICAN PSYCHOLOGICAL ASSOCIATION, MANUAL OF DIAGNOSIS AND PROFESSIONAL PRACTICE IN MENTAL RETARDATION, 97, 105 (John W. Jacobson & James A. Mulick eds., American Psychological Association 1996).

^{363.} AAIDD 2010, supra note 65, at 49. Indeed, the statistical correlation between maladaptive behavior and deficits in adaptive behavior is generally low, particularly for individuals at the higher end of the intellectual disability spectrum (which describes individuals who are likely to be encountered in Atkins cases). Id.; see also Sharon A. Borthwick-Duffy, Adaptive Behavior, in HANDBOOK OF INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 279, 283 (John W. Jacobson, James A. Mulick, & Johannes Rojahn eds. 2007) (discussing maladaptive behavior); Keith F. Widaman & Kevin S. McGrew, The Structure of Adaptive Behavior, in AMERICAN PSYCHOLOGICAL ASSOCIATION, MANUAL OF DIAGNOSIS AND PROFESSIONAL PRACTICE IN MENTAL RETARDATION, 97, 100 (John W. Jacobson & James A. Mulick eds., American Psychological Association 1996) (same); AAIDD, USER'S GUIDE 2012, supra note 65, at 18 ("Distinguish between adaptive behavior and problem behavior(s). They are independent constructs and not opposite poles of a continuum. Information regarding problem behavior does not inform the clinician regarding the person's adaptive behavior."); Olley, Death Penalty and Courts, supra note 160, at 236; AAIDD, USER'S GUIDE 2007, supra note 140, at 13 ("[P]roblem behavior that is 'maladaptive' is not a characteristic or a dimension of adaptive behavior, even though it often influences the acquisition and performance of adaptive behavior and thus may be important in the interpretation of adaptive behavior scores").

E. Stereotypes About People with Intellectual Disability³⁶⁵

An accurate and fair evaluation of an *Atkins* claim may be impeded by persistent stereotyped views³⁶⁶ about what constitutes intellectual disability.³⁶⁷ Such stereotypes contribute to negative attitudes toward people with a variety of disabilities,³⁶⁸ but the history of

Many researchers have found that individuals with intellectual disability with higher IQs are vulnerable to risks due to their sometimes inadequate response systems, interpersonal competence, social judgment, or decision-making skills. These challenges are linked to reduced intellectual and adaptive abilities that make it difficult to problem solve and to be flexible in thinking; both limitations create susceptibility to dangers that is shared among members of this group.

Snell, *Characteristics, supra* note 77, at 225 (citations omitted); *see also id.* at 227 ("[The principal characteristic is] found not in the relative absence of especially routine skills but in the relative inability, especially under conditions of ambiguity or stress, to figure out when and how to apply those skills." (citation omitted)).

365. The Supreme Court has recently noted the difficulties posed by stereotypes in the adjudication of *Atkins* cases. *See* Moore v. Texas, 137 S. Ct. 1039, 1052 (2017) ("[T]he medical profession has endeavored to counter lay stereotypes of the intellectually disabled.").

366. There is now a considerable body of literature on the psychological mechanisms of bias in perceptions and decision-making. *See generally, e.g.*, Anthony G. Greenwald & Linda Hamilton Krieger, *Implicit Bias: Scientific Foundations*, 94 CALIF. L. REV. 945 (2006).

367. See PRESIDENT'S COMMITTEE ON MENTAL RETARDATION, A BETTER PLACE: THE CONTRIBUTION OF AMERICANS WITH MENTAL RETARDATION TO OUR NATION'S WORKFORCE: 1998 REPORT TO THE PRESIDENT 42 (1998) ("Discrimination continues to occur based on outdated attitudes and stereotypes."); Nicole Ditchman et al., *Stigma and Intellectual Disability: Potential Application of Mental Illness Research*, 58 REHABILITATION PSYCHOLOGY 206, 207 (2013) ("Although there has been notable progress and increased stigma change efforts over the past decades, social stigma continues to result in prejudice and discrimination").

368. Scholars have long recognized the persistence of negative attitudes toward people with mental and physical disabilities. *See generally, e.g.*, Hanoch Livneh, *On the Origins of Negative Attitudes Toward People with Disabilities*, 43 REHABILITATION LITERATURE 338 (1982); Richard LeMoine Wright & Julia Miele Rodas, *Stereotypes, in* 3 ENCYCLOPEDIA OF AMERICAN DISABILITY HISTORY 865 (2009); PAUL K. LONGMORE, *Screening Stereotypes: Images of Disabled People in Television and Motion Pictures, in* WHY I BURNED MY BOOK AND OTHER ESSAYS ON DISABILITY 131 (2003); CHARLES A. RILEY, II, DISABILITY AND THE MEDIA: PRESCRIPTIONS FOR CHANGE (2005); OTTO F. WAHL, MEDIA MADNESS: PUBLIC IMAGES OF MENTAL ILLNESS (1995); FLOYD MATSON, BLIND JUSTICE: JACOBUS TENBROEK AND THE VISION OF EQUALITY (2005) (blindness);

relationship to an individual's adaptive functioning. . . . "Maladaptive behaviors" are not part of the diagnostic criteria of mental retardation.

Tassé, Adaptive Behavior and Diagnosis, supra note 87, at 114-15 (citations omitted). In clinical parlance, "stereotypies"—not to be confused with "stereotypes"— are repetitive movements or utterances which are associated with some forms of disability. See James W. Bodfish et al., Compulsions in Adults with Mental Retardation: Prevalence, Phenomenology, and Comorbidity with Stereotypy and Self-Injury, 100 AM. J. ON MENTAL RETARDATION 183, 183-84 (1995); James W. Bodfish, Stereotypy, Self-Injury, and Related Abnormal Repetitive Behaviors, in HANDBOOK OF INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 481 (John W. Jacobson, James A. Mulick, & Johannes Rojahn eds., 2007).

Although "maladaptive behavior" is not a clinically appropriate focus for diagnosticians under the second prong of the definition, it is widely recognized that many individuals with ID often exhibit functional deficits related to a reduced ability to understand situations and to adopt an appropriate response:

such stereotypes regarding people with intellectual disability is particularly dramatic.³⁶⁹

Throughout our history, stereotypes about "mental retardation" have bedeviled the lives of individuals who have the disability.³⁷⁰ Such stereotypes were central to the development and implementation of the infamous eugenics policies in the first half of the twentieth century.³⁷¹

HARLAN LANE, THE MASK OF BENEVOLENCE: DISABLING THE DEAF COMMUNITY (1992).

These negative attitudes have produced, or at least exacerbated, a wide variety of categories of discrimination against people with disabilities. *See, e.g.*, Americans with Disabilities Act, 42 U.S.C. § 12101(a)(3) (2012) ("The Congress finds that... discrimination against individuals with disabilities persists in such critical areas as employment, housing, public accommodations, education, transportation, communication, recreation, institutionalization, health services, voting, and access to public services"); RUTH COLKER, THE LAW OF DISABILITY DISCRIMINATION: CASES AND MATERIALS 3-6 (1995); SAMUEL R. BAGENSTOS, DISABILITY RIGHTS LAW: CASES AND MATERIALS 1-7 (2d ed. 2014) (discussing the development of disability rights law in the United States).

^{369.} Public attitudes toward people with intellectual disability have been the subject of scholarly study for decades. See, e.g., Jay Gottlieb & Gary N. Siperstein, Attitudes Toward Mentally Retarded Persons: Effects of Attitude Referent Specificity, 80 AM. J. MENTAL DEFICIENCY 376 (1976). The stigmatization of individuals with intellectual disabilities and its impact on public attitudes are phenomena found in other countries as well. See, e.g., Katrina Scior, Public Awareness, Attitudes and Beliefs Regarding Intellectual Disability: A Systematic Review, 32 RESEARCH IN DEVELOPMENTAL DISABILITIES 2164, 2177 (2011); Shirli Werner et al., Stigma and Intellectual Disability: A Review of Related Measures and Future Directions, 33 RESEARCH IN DEVELOPMENTAL DISABILITIES 748 (2012); D. Morin et al., Public Attitudes Towards Intellectual Disability: A Multidimensional Perspective, 57 J. INTELLECTUAL DISABILITY RESEARCH 279 (2013).

^{370.} See, e.g., Parnel Wickham, Idiocy and Early Modern Law: Intellectual Disability in Early Modern Times (1500 $_{CE}$ to 1799 $_{CE}$), in The Story of Intellectual Disability: An Evolution of Meaning, Understanding, and Public Perception 63, 63-77 (Michael L. Wehmeyer ed., 2013).

^{371.} There is now a substantial and growing body of historical scholarship on the connection between the fearful stereotyping of people with intellectual disability and the development of eugenic sterilization policies. See, e.g., JAMES W. TRENT, JR., INVENTING THE FEEBLE MIND: A HISTORY OF MENTAL RETARDATION IN THE UNITED STATES 131-224 (1994); LEILA ZENDERLAND, MEASURING MINDS: HENRY HERBERT GODDARD AND THE ORIGINS OF AMERICAN INTELLIGENCE TESTING 143-221 (1998); EDWIN BLACK, WAR AGAINST THE WEAK: EUGENICS AND AMERICA'S CAMPAIGN TO CREATE A MASTER RACE (2003); PAUL A. LOMBARDO, THREE GENERATIONS, NO IMBECILES: EUGENICS, THE SUPREME COURT, AND BUCK V. BELL (2008); ADAM COHEN, IMBECILES: THE SUPREME COURT, AMERICAN EUGENICS, AND THE STERILIZATION OF CARRIE BUCK (2016); J. DAVID SMITH & MICHAEL L. WEHMEYER, GOOD BLOOD, BAD BLOOD: SCIENCE, NATURE, AND THE MYTH OF THE KALLIKAKS (2012); HARRY BRUINIUS, BETTER FOR ALL THE WORLD: THE SECRET HISTORY OF FORCED STERILIZATION AND AMERICA'S QUEST FOR RACIAL PURITY (2006); NICOLE HAHN RAFTER, CREATING BORN CRIMINALS (1997); MENTAL RETARDATION IN AMERICA: A HISTORICAL READER (Steven Noll & James W. Trent, Jr. eds., 2004); A CENTURY OF EUGENICS IN AMERICA: FROM THE INDIANA EXPERIMENT TO THE HUMAN GENOME ERA (Paul A. Lombardo ed., 2011); J. David Smith, Steven Noll & Michael L. Wehmeyer, Isolation, Enlargement, and Economization: Intellectual Disability in Late Modern Times (1930 CF to 1950 CF), in THE STORY OF INTELLECTUAL DISABILITY: AN EVOLUTION OF MEANING, UNDERSTANDING, AND PUBLIC PERCEPTION 157, 157-85 (Michael L. Wehmeyer ed., 2013). See generally VICTORIA F. NOURSE, IN RECKLESS HANDS: SKINNER V. OKLAHOMA AND THE NEAR TRIUMPH OF AMERICAN EUGENICS

Those policies were the outgrowth of a widespread belief that people with mental retardation were a (if not *the*) major source of social problems in this country.³⁷² Support for such policies extended into many professions³⁷³ and to all areas of the country,³⁷⁴ and produced

The feeble-minded... are by definition a burden rather than an asset, not only economically but still more because of their tendencies to become delinquent or criminal. To provide them with costly instruction for a few years, and then turn them loose upon society as soon as they are ripe for reproduction and crime, can hardly be accepted as an ultimate solution of the problem. The only effective way to deal with the hopelessly feeble-minded is by permanent custodial care.

LEWIS M. TERMAN, THE INTELLIGENCE OF SCHOOL CHILDREN 132-33 (1919).

Another leader, Walter Fernald (who served as President of the organization that is now AAIDD), raised a similar alarm:

The past few years have witnessed a striking awakening of professional and popular consciousness of the widespread prevalence of feeble-mindedness and its influence as a source of wretchedness to the patient himself and to his family, and as a causative factor in the production of crime, prostitution, pauperism, illegitimacy, intemperance and other complex social diseases. . . . The feeble-minded are a parasitic, predatory class, never capable of self-support or of managing their own affairs. The great majority ultimately become public charges in some form. They cause unutterable sorrow at home and are a menace and danger to the community.

W. E. Fernald, *The Burden of Feeblemindedness*, 17 J. PSYCHO-ASTHENICS 87, 87-90 (1912); *see also* STANLEY POWELL DAVIES, SOCIAL CONTROL OF THE MENTALLY DEFICIENT 121-31 (1930) (discussing the policy of lifelong segregation).

373. See, e.g., CHRISTINE ROSEN, PREACHING EUGENICS: RELIGIOUS LEADERS AND THE AMERICAN EUGENICS MOVEMENT (2004); W.E.D. STOKES, THE RIGHT TO BE WELL BORN: HORSE BREEDING IN ITS RELATION TO EUGENICS (1917) (the author was listed as President of the Patchen Wilkes Stock Farm in Lexington, Kentucky); DAVID STARR JORDAN, THE HEREDITY OF RICHARD ROE: A DISCUSSION OF THE PRINCIPLES OF EUGENICS (1911) (the author was President of Stanford University); see also Buck v. Bell, 274 U.S. 200, 207 (1927) ("It is better for all the world, if instead of waiting to execute degenerate offspring for crime, or to let them starve for their imbecility, society can prevent those who are manifestly unfit from continuing their kind. . . . Three generations of imbeciles are enough."). A discussion of the history of the Supreme Court's attitudes and rhetoric about people with intellectual disability may be found at James W. Ellis, *Disability Advocacy and* Atkins, 57 DEPAUL L. REV. 653 (2008).

374. See, e.g., STEVEN NOLL, FEEBLE-MINDED IN OUR MIDST: INSTITUTIONS FOR THE MENTALLY RETARDED IN THE SOUTH, 1900-1940 (1995); NANCY L. GALLAGHER, BREEDING BETTER VERMONTERS: THE EUGENICS PROJECT IN THE GREEN MOUNTAIN STATE (1999); Molly Ladd-Taylor, *The "Sociological Advantages" of Sterilization: Fiscal Policies and Feeble-Minded*

^{(2008);} THE OXFORD HANDBOOK OF THE HISTORY OF EUGENICS (Alison Bashford & Philippa Levine eds., 2010). But, lest the reader conclude that historical mistreatment of persons with intellectual disability invariably met with unanimous approval, see J. David Smith & Edward A. Polloway, *Before Itard: Intellectual Disability and the Enlightened Voice of Daniel Defoe*, 52 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 470 (2014).

^{372.} See, e.g., ERNEST BRYANT HOAG & EDWARD HUNTINGTON WILLIAMS, CRIME, ABNORMAL MINDS AND THE LAW 62 (1923) ("As long as the feeble-minded are freely permitted to pass their taint along, they will be with us always. Poor seed yields poor fruitage; and this is just as true of the human plant as it is of the vegetable kingdom. The sterilization of the socially unfit is therefore not only morally permissible but socially obligatory."). Many of the alarmists were, in fact, leaders in the field of mental retardation at the time. For example, Lewis M. Terman, one of the early developers of IQ testing, believed that individuals with mental retardation should be identified for lifelong segregation:

some of the most egregious legislation in our history.³⁷⁵

Unfortunately, the abandonment of the harshest stereotype —people with mental retardation as a social threat—was followed by the embrace by many of an image of people with intellectual disabilities as "eternal children." This stereotype, which insistently denied the adulthood of adults with intellectual disability, was quite prevalent in the middle of the twentieth century, and found its way into popular culture through a number of avenues.³⁷⁶ Much like the social menace stereotype that preceded it, this distorted image of individuals with intellectual disabilities has been thoroughly rejected in the field of intellectual disability.³⁷⁷

377. See, e.g., WOLF WOLFENSBERGER, THE PRINCIPLE OF NORMALIZATION IN HUMAN

Women in Interwar Minnesota, in MENTAL RETARDATION IN AMERICA: A HISTORICAL READER 281, 282 (Steven Noll & James W. Trent, Jr. eds., 2004) ("Prior to 1946, more 'feeble-minded' persons were sterilized in Minnesota and Michigan than in all the southern states combined."). By far the largest numbers of eugenic sterilizations were performed in California. *See* RICHARD W. FOX, SO FAR DISORDERED IN MIND: INSANITY IN CALIFORNIA, 1870-1930, at 27-36 (1978); PAUL POPENOE & ROSWELL HILL JOHNSON, APPLIED EUGENICS 192 (1918) ("California applied her law to all inmates (not voluntary) of state hospitals for the insane and the state home for the feeble-minded, and all recidivists in the state prisons. The motive is partly eugenic, partly therapeutic, partly punitive. . . . For several years California had the distinction of being the only state where sterilization was actually being performed in accordance with the law."). This history of the treatment of people with intellectual disabilities has been characterized by five Justices of the Supreme Court of the United States as "grotesque." City of Cleburne v. Cleburne Living Ctr., 473 U.S. 432, 454 (1985) (Stevens, J., concurring); *id.* at 461 (Marshall, J., concurring in part and dissenting in part).

^{375.} See, e.g., 1929 Mich. Pub. Acts 689, 689-90, Act of May 22, 1929, No. 281, § 1 ("It is hereby declared to be the policy of the state to prevent the procreation and increase in number of feeble-minded, insane and epileptic persons, idiots, imbeciles, moral degenerates, and sexual perverts, likely to become a menace to society or wards of the state. The provisions of this act are to be liberally construed to accomplish this purpose."); 1920 Miss. Laws 288, 294, Act of April 3, 1920, No. 126, § 17 ("That the chancery courts have jurisdiction in all cases of legal inquiry in regard to feeblemindedness, including idiocy, imbecility, and the higher grades and varieties of mental inferiority which render the subjects *unfit for citizenship*." (emphasis added)); *see also* DANIEL J. KEVLES, IN THE NAME OF EUGENICS: GENETICS AND THE USES OF HUMAN HEREDITY 99-100 (1985) (noting the influence of the eugenics movement on both sterilization statutes and laws prohibiting interracial marriage); ARTHUR H. ESTABROOK & IVAN E. MCDOUGLE, MONGREL VIRGINIANS: THE WIN TRIBE (1926).

^{376.} For example, there were particularly popular family memoirs by novelist Pearl Buck and by western actress Dale Evans. *See* PEARL S. BUCK, THE CHILD WHO NEVER GREW (1950); DALE EVANS ROGERS, ANGEL UNAWARE (1953); *see also* Michael L. Wehmeyer & Robert L. Schalock, *The Parent Movement: Late Modern Times (1950* _{CE} to 1980 _{CE}), in THE STORY OF INTELLECTUAL DISABILITY: AN EVOLUTION OF MEANING, UNDERSTANDING, AND PUBLIC PERCEPTION 187, 188-92 (Michael L. Wehmeyer ed., 2013); Katherine Castles, "*Nice, Average Americans*": *Postwar Parents' Groups and the Defense of the Normal Family, in* MENTAL RETARDATION IN AMERICA: A HISTORICAL READER 351, 359-60 (Steven Noll & James W. Trent eds., 2004) ("[In the 1950s,] parents' groups encouraged the old idea that individuals with mental retardation were eternal children, possessing childlike qualities of innocence, simplicity, and emotional dependence regardless of their chronological age."); Janice Brockley, *Rearing the Child Who Never Grew, in* MENTAL RETARDATION IN AMERICA: A HISTORICAL READER, *supra*, at 130-64.

The central fallacy of all these stereotypes begins with their assumption that all individuals with intellectual disability are essentially identical. As noted earlier, this is clearly untrue.³⁷⁸ But the impulse to measure actual individuals against our own, conjured vision of what people with intellectual disability are like remains remarkably strong.³⁷⁹ These images are often accompanied by an invented "list" of things that people with intellectual disability cannot do. But there is no such list in the scholarly literature on intellectual disability, nor is there such a list in the experience of clinicians who deal with individuals with intellectual disability every day.³⁸⁰ Stereotyped expectations and preconceptions

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SERVICES 23-24 (1972) ("Generally those who hold the eternal child role perception do not place strong or even reasonable developmental and adaptational demands upon the person so perceived."); Brian J. Linn & Lesly A. Bowers, *The Historical Fallacies Behind Legal Prohibitions of Marriages Involving Mentally Retarded Persons—The Eternal Child Grows Up*, 13 GONZAGA L. REV. 625, 654-55 (1978). An integral feature of the image of the perpetual child was an attribution of categorical moral innocence. WOLF WOLFENSBERGER, THE ORIGIN AND NATURE OF OUR INSTITUTIONAL MODELS 14-15 (1975) ("Retarded persons, and possibly those with other handicaps as well, have occasionally been perceived as the special children of God. As such, they are usually seen as incapable of committing evil voluntarily "); *see also* HEATHER E. KEITH & KENNETH D. KEITH, INTELLECTUAL DISABILITY: ETHICS, DEHUMANIZATION, AND A NEW MORAL COMMUNITY 12-18 (2013). The "eternal child" or "holy innocent" stereotypical view of people with intellectual disability may be particularly prejudicial in capital cases, since a juror who harbors such an image, even unconsciously, will often find it dramatically inconsistent with the alleged or observed behavior of the defendant, and may conclude that this dissonance disproves the clinical evidence that the individual does, in fact, meet the diagnostic criteria of intellectual disability.

^{378.} See supra note 318 and accompanying text; Everington & Olley, Defining and Diagnosing, supra note 15, at 8 ("The argument is often made that if a person has certain practical skill strengths, the person cannot have mental retardation, when, in fact, all of the major professional definitions of mental retardation allow for intraindividual difference in adaptive behavior."); see also Tiffany J. McCaughey & Douglas C. Strohmer, Prototypes as an Indirect Measure of Attitudes Toward Disability Groups, 48 REHABILITATION COUNSELING BULLETIN 89, 90 (2005) ("[E]xtensive research has demonstrated that attitudes [towards the mentally disabled] can include beliefs that all individuals with disabilities are dependent, isolated, and emotionally unstable.").

^{379.} Reschly, *Documenting Origins, supra* note 83, at 133 ("Multiple examples of apparently adequate social role performance do not necessarily rule out the MMR [mild mental retardation] diagnosis. For example, the fact that the person can drive, has a driver's license, holds an entry-level unskilled job, and lives in the community with the occasional help of a benefactor is not inconsistent with MMR."). There is evidence in the clinical literature that, at least for jurors, driving and personal relationships may be central to the stereotyped view of people with intellectual disability. *Jury Pool Beliefs, supra* note 358, at 18 ("The failure of jury pool members to recognize severe deficits in functioning as indicators of MR was especially pronounced for the ability to form and maintain a romantic/sexual relationship and the ability to operate a motor vehicle."). There are similar indications of preconceived views of jurors regarding independent living and school performance. *Id.* at 15, 16; *see* Janis Chadsey, *Adult Social Relationships, in* ODOM, HANDBOOK OF DD, *supra* note 92, at 449-68.

^{380.} The clinical literature helpfully describes the daily functioning of individuals with intellectual disability in their communities. *See, e.g.*, Snell, *Characteristics, supra* note 77, at 222-27; Gary N. Siperstein & Melissa A. Collins, *Intellectual Disability*, in THE DEATH PENALTY AND INTELLECTUAL DISABILITY 21, 26-27 (Edward A. Polloway ed., 2015); Roger J. Stancliffe & K.

about people with intellectual disability often involve the subjects of managing daily life,³⁸¹ employment,³⁸² and personal relationships.³⁸³

Although unemployment is a serious problem for many (see Neeta P. Fogg, Paul E. Harrington & Brian T. McMahon, *The Impact of the Great Recession Upon the Unemployment of*

Charlie Lakin, *Independent Living*, *in* ODOM, HANDBOOK OF DD, *supra* note 92, at 429, 430 ("Seminal studies have documented the ability of many people with ID to live reasonably successfully in the community with relatively modest formal support" (citations omitted)). These empirically based observations stand in sharp contrast to many of the stereotypes often held by laypeople. *See, e.g.*, Siperstein & Collins, *supra*, at 27 ("[R]esearch has demonstrated their ability to master independent living skills, such as using ATMs, cooking, and making financial decisions. Many can use computers, the Internet, and other technologies, and navigate urban settings, or ride public transportation." (citations omitted)).

^{381.} See Michael L. Wehmeyer & Susan B. Palmer, Adult Outcomes for Students with Cognitive Disabilities Three-Years After High School: The Impact of Self-Determination, 38 EDUC. & TRAINING IN DEVELOPMENTAL DISABILITIES 131, 139 (2003) (maintaining a bank account and paying for the person's own groceries); David Mank, Employment, in ODOM, HANDBOOK OF DD, supra note 92, at 390, 392 (noting that research as early as the 1960s "focused on the skills of daily living: doing laundry, cooking, handling money, and so forth"). Some laypeople also believe that individuals with intellectual disability are incapable of driving or obtaining a driver's license, but that stereotyped generalization is also inaccurate. See Reschly, Documenting Origins, supra note 83, at 133 ("Most are capable of driving competently and many can pass the written driver's license examination."); Stephen A. Richardson et al., Patterns of Leisure Activities of Young Adults with Mild Mental Retardation, 97 AM. J. ON MENTAL RETARDATION 431 (1993); GEORGE S. BAROFF, MENTAL RETARDATION: NATURE, CAUSE, AND MANAGEMENT 43 (3d ed. 1999) ("Persons with mild mental retardation function in all adult roles-they are members of families, have friends, work, marry, and have children."). But the stereotypes persist. See Olley, Death Penalty and Courts, supra note 160, at 236 ("[E]vidence of isolated examples of adaptive functioning does not disprove ID. Although the American Association on Intellectual and Developmental Disabilities manual ... clearly stated that people with mild ID are likely to have areas of adequate functioning, courts have mistakenly accepted examples of competent functioning to show that the defendant does not have an ID. Examples include knowing what days of the week the defendant could have visitors, having long-term gainful employment, being able to drive, passing the driver's test, and even being able to steal a television." (citation omitted)).

^{382.} Professionals in the field have long recognized that individuals with intellectual disability often can and do perform many of the tasks in the workplace that may seem, to some, inconsistent with preconceived stereotypes about them. *See, e.g.*, ROY DEVERL WILLEY & KATHLEEN BARNETTE WAITE, THE MENTALLY RETARDED CHILD: IDENTIFICATION, ACCEPTANCE, AND CURRICULUM 229-31 (1964) (showing a chart of "the kinds of work in which the mentally retarded have succeeded"); DARYL PAUL EVANS, THE LIVES OF MENTALLY RETARDED PEOPLE 215 (1983) (discussing job categories); David Mank, *Employment, in* ODOM, HANDBOOK OF DD, *supra* note 92, at 390, 391 ("[I]t is becoming increasingly clear that people with developmental disabilities have the ability to be gainfully employed."); *id.* at 395-96 (People with intellectual disabilities can be "productive on work tasks," and "work productively in integrated job settings." They can also "be supported in community job settings with a combination of paid supports and natural supports," they can "earn significant money and be fully integrated into the culture of the workplace," and may even "own or run income-producing businesses.").

Nonetheless, it is commonly assumed by many laymen, and even potential employers, that people with intellectual disability cannot hold jobs, at least outside of settings like sheltered workshops. *See* Joanne Kersh, *Attitudes About People with Intellectual Disabilities: Current Status and New Directions*, *in* 41 INTERNATIONAL REVIEW OF RESEARCH ON DEVELOPMENTAL DISABILITIES 199, 214 (Robert M. Hodapp ed., 2011) ("Negative stereotypes about workers with disabilities tend to elicit fear in potential employers.").

The persistence of these stereotypes about people with intellectual disability can be a serious problem for the courts in a number of ways.

383. It is often assumed that marriage or romantic social relationships are inconsistent with a diagnosis of intellectual disability. Yet this stereotype is also often inaccurate. *See, e.g.*, ROBERT MEYERS, LIKE NORMAL PEOPLE (1978) (written by a Washington Post reporter, describing the marriage of the author's brother); MARTHA A. FIELD & VALERIE A. SANCHEZ, EQUAL TREATMENT FOR PEOPLE WITH MENTAL RETARDATION: HAVING AND RAISING CHILDREN (1999); ALLISON C. CAREY, ON THE MARGINS OF CITIZENSHIP: INTELLECTUAL DISABILITY AND CIVIL RIGHTS IN TWENTIETH-CENTURY AMERICA 172 (2009) ("Studies found that people with mental retardation . . . placed a high value on relationships and marriage."); Karen L. Salekin, J. Gregory Olley & Krystal A. Hedge, *Offenders with Intellectual Disability: Characteristics, Prevalence, and Issues in Forensic Assessment*, 3 J. MENTAL HEALTH RESEARCH IN INTELLECTUAL DISABILITIES 97, 100 (2010) ("Once out of school, individuals with IQs at the high end of the mild ID range often blend into the general population; they have friends, marry, have children, and only need assistance during periods of personal or economic stress."); *see also* MARGARET EDDS, AN EXPENDABLE MAN: THE NEAR-EXECUTION OF EARL WASHINGTON JR. 208-12 (2003).

Americans with Disabilities, 33 J. VOCATIONAL REHABILITATION 193 (2010)), many others with intellectual disability hold "trade jobs like plumbing and carpentry. Other commonly held jobs include maintenance, food service, and retail positions." Snell, Characteristics, supra note 77, at 223; see Gary N. Siperstein, Robin C. Parker & Max Drascher, National Snapshot of Adults with Intellectual Disabilities in the Labor Force, 39 J. VOCATIONAL REHABILITATION 157, 161 (2013) (the most frequent employment categories included customer service, retail, restaurant work, office work, and manufacturing); id. ("Of the adults with ID employed in a competitive setting, over half (62%) have been at their current job for 3 years or more."); Robert R. Moran, Suzanne McDermott & Stanley Butkus, Getting a Job, Sustaining a Job, and Losing a Job for Individuals with Mental Retardation, 16 J. VOCATIONAL REHABILITATION 237, 241 (2001) (discussing job retention rates for categories such as food preparation, janitorial/laundry/cleaning, cashier, and lawn care.); id. ("[T]here was no difference in IO scores in any of the job categories between those who lost jobs and those who sustained them."); Michael Brickey & Ken Campbell, Fast Food Employment for Moderately and Mildly Mentally Retarded Adults: The McDonald's Project, 19 MENTAL RETARDATION 113, 113-116 (1981) (reporting lower attrition rate than for nondisabled employees); Reschly, Documenting Origins, supra note 83, at 133 ("Many can secure employment and economic self-support, typically in low-level jobs that do not require complex reasoning and decision making."); Rosemary Lysaght, Hélène Ouellette-Kuntz & Cheng-Jung Lin, Untapped Potential: Perspectives on the Employment of People with Intellectual Disability, 41 WORK 409, 413 (2012) ("[M]any of these individuals [have the ability] to reliably perform a variety of routine work tasks ... that typically detract from the productivity of highly paid professionals"); MANUAL OF DIAGNOSIS AND PROFESSIONAL PRACTICE IN MENTAL RETARDATION 18 (John W. Jacobson & James A. Mulick eds., American Psychological Association 1996) ("This designation implies variation in academic skills, and for a large proportion of these adults, persistent low academic skill attainment limits their vocational opportunities. However, these people are generally able to fulfill all expected adult roles."); Kiyoshi Yamaki & Glenn T. Fujiura, Employment and Income Status of Adults with Developmental Disabilities Living in the Community, 40 MENTAL RETARDATION 132, 138 (2002) ("[W]e found a more diversified employment profile."); PRESIDENT'S COMMITTEE ON MENTAL RETARDATION, A BETTER PLACE: THE CONTRIBUTION OF AMERICANS WITH MENTAL RETARDATION TO OUR NATION'S WORKFORCE: 1998 REPORT TO THE PRESIDENT 6 (1998) ("Today, however, hundreds of thousands of individuals with mental retardation are able to earn significant wages in integrated community settings."); see also Deborah Olson et al., Employers' Perceptions of Employees with Mental Retardation, 16 J. VOCATIONAL REHABILITATION 125 (2001).

HOFSTRA LAW REVIEW

One issue of stereotyping may arise when evaluators use outside informants in assessing deficits in a defendant's adaptive behavior.³⁸⁴ The interviewer must avoid relying on the informant's informal (and perhaps unarticulated) estimation of whether the individual had intellectual disability.³⁸⁵ Reliance on a lay individual's conclusory impression has the potential of merely reflecting the informant's assumptions about people with "mental retardation."³⁸⁶ If that informant's stereotype of mental retardation envisions people with the more severe levels of impairment, or if that person thinks of another individual of his or her acquaintance who has Down Syndrome³⁸⁷ or some other particular, identifiable mental disability, there is a risk of a

^{384.} The problem of informant stereotypes can be compounded, of course, if the clinician allows his or her own stereotypes to enter into his or her own professional evaluation. *See* CLINICAL JUDGMENT 2014, *supra* note 253, at 38 ("Clinicians are not necessarily free of the historical stereotypes that have accompanied individuals with ID. Indeed, most individuals or groups who are perceived as different on some basis are stereotyped based on the perceiver's mental model or image of such persons or groups.").

^{385.} Olley, *Death Penalty and Courts, supra* note 160, at 237 ("Although the best source of information is not always clear, sometimes the worst source is. It is inappropriate and clearly invalid to ask a family member, friend, or other lay witness, 'Do you think he has mental retardation?'"); see Moore v. Texas, 137 S. Ct. 1039, 1052 (2017) (criticizing overreliance on defendant's "father's reactions to his academic challenges, and his sister's perceptions of Moore's intellectual abilities").

^{386.} See Tassé, Adaptive Behavior and Diagnosis, supra note 87, at 121 ("Most individuals with mental retardation will have strengths and areas of ability. These strengths may confound a layperson or a professional with limited clinical experience with individuals who have mild mental retardation. These laypersons may erroneously interpret these pockets of strengths and skills as inconsistent with mental retardation because of their misconceptions regarding what someone with mental retardation can or cannot do." (citation omitted)).

^{387.} AAIDD, USER'S GUIDE 2012, supra note 65, at 25-26 ("Physical appearance can also contribute to stereotypes as reflected in the statement that 'if you don't have the look (as in Down syndrome) then you are not intellectually disabled.' It should be noted that the vast majority of persons with an ID have no dysmorphic feature and generally walk and talk like persons without an ID."); Snell, Characteristics, supra note 77, at 220 ("Most of these individuals [in the range of mild mental retardation] are physically indistinguishable from the general population because no specific physical features are associated with intellectual disability at higher IQs."); Reschly, Documenting Origins, supra note 83, at 125 ("Persons with MMR do not exhibit the physical characteristics of many persons with MR at more severe levels, and they are not comprehensively impaired in the sense of requiring assistance with nearly all social roles and functions."); Karen L. Salekin, J. Gregory Olley & Krystal A. Hedge, Offenders with Intellectual Disability: Characteristics, Prevalence, and Issues in Forensic Assessment, 3 J. MENTAL HEALTH RESEARCH IN INTELLECTUAL DISABILITIES 97, 110 (2010) ("In fact, we cannot 'see' the offender with ID any more obviously than we can 'see' the offender without ID. There are no labels on their backs, and there are often no obvious signs that they are impaired enough to warrant attention. That said, underneath what appear to be typical offenders lie true differences in cognitive abilities that can dramatically affect their ability to function within the criminal justice system. By contrast, see Curtis K. Deutsch, Down Syndrome, in 1 ENCYCLOPEDIA OF INTELLIGENCE, supra note 112, at 357; Nancy F. Roizen, Down Syndrome (Trisomy 21), in CHILDREN WITH DISABILITIES, 307-18 (Mark L. Batshaw, Nancy Roizen & Gaetano R. Lotrecchiano eds., 7th ed. 2013) (discussing the obvious facial characteristics of people with Down Syndrome, who are usually moderately to severely impaired).

misleading assessment.³⁸⁸ Interviewers should focus on specific, concrete observations of what limitations there were in the defendant's functioning. Otherwise, there is a substantial risk that the assessment is built on a stereotype about intellectual disability of which the evaluator (and the court) may be unaware.³⁸⁹

Even more serious concerns arise if the court itself imposes its own stereotypes about the abilities and behaviors that characterize people with intellectual disability. Indulging in such stereotypes is not only unsupported by the clinical literature, it is inconsistent with the Supreme Court's holdings in *Atkins*, *Hall*, and *Moore*.

One way in which stereotyping may infect the *Atkins* adjudication process occurs when a state's procedures provide for a jury determination of whether the defendant has intellectual disability. Most states provide for bench determinations of *Atkins* claims,³⁹⁰ and, rejecting arguments from defense counsel in a number of states, courts have been nearly unanimous in finding that there is no constitutional requirement that the determination be made by juries.³⁹¹ But where juries are entrusted with the decision, there is a substantial risk that jurors will—consciously or unconsciously—base their decision on their own stereotyped views of intellectual disability³⁹² and compare the defendant to their predetermined image of what a person with "mental retardation" would look like or what skills that person might possess or lack.³⁹³

^{388.} See Olley, *Death Penalty and Courts, supra* note 160, at 231 ("[T]he public generally misunderstands mild ID and expects that such individuals are easy to identify by their physical appearance, their speech, or other readily apparent characteristics.").

^{389.} See Joanne Kersh, Attitudes About People with Intellectual Disabilities: Current Status and New Directions, in 41 INTERNATIONAL REVIEW OF RESEARCH IN DEVELOPMENTAL DISABILITIES 199, 220 (Robert M. Hodapp ed., 2011) ("Additionally, a lack of familiarity with people with ID may lead to a reliance on common misperceptions and stereotypes in order to make judgments and decisions about individuals."). Of course, the opposite may also prove to be true: if an individual has only had contact with a person who has a more severe condition of intellectual disability, there may be a tendency to draw conclusions about the defendant based on the fact that his disability appears to be substantially less severe.

^{390.} See Legislative Guide, supra note 3, at 15.

^{391.} See, e.g., State v. Flores, 93 P.3d 1264, 1267-68 (N.M. 2004); Arbelaez v. State, 898 So. 2d 25, 43 (Fla. 2005); State v. Grell, 135 P.3d 696, 706 (Ariz. 2006) (en banc).

^{392.} Explanations by expert witnesses of the clinical definition of intellectual disability may encounter resistance among jurors. *See Jury Pool Beliefs, supra* note 358, at 4 ("However, these criteria may not resonate with fact finders. Fact finders may not understand why certain behaviors, such as social skills, are important for official diagnosis while others, such as behavior during a crime, are not even considered." (footnote omitted)).

^{393.} See supra note 396; Jury Pool Beliefs, supra note 358, at 4; Joanne Kersh, Attitudes About People with Intellectual Disabilities: Current Status and New Directions, in 41 INTERNATIONAL REVIEW OF RESEARCH IN DEVELOPMENTAL DISABILITIES 199, 219 (Robert M. Hodapp ed., 2011) ("In general, research suggests that people tend to underestimate the capabilities of persons with ID, largely as a consequence of a lack of exposure and information.").

Courts can address this problem in two ways.³⁹⁴ First, they can use the voir dire process to attempt to identify such stereotypes and prejudices³⁹⁵ before the trial or hearing begins.³⁹⁶ In jurisdictions where the standard procedure of the courts is to limit the participation of counsel in questioning individual potential jurors,³⁹⁷ there may be reason to relax those rules or otherwise increase the likelihood that such prejudices can be uncovered in a timely manner. Second, courts in such jurisdictions have reason to be particularly vigilant that the parties not be allowed to encourage such latent prejudices, either in the presentation of evidence or in arguments to the jury. There is reason to be skeptical about whether either of these approaches—or both—will be sufficient to completely keep stereotypes about mental retardation out of the jurors' deliberations, but every effort should certainly be made.³⁹⁸

It is at least equally disturbing when the courts themselves engage in stereotyping about people with intellectual disability. This can occur, of course, in individual adjudications involving particular defendants, but it can also take the form of the systematic imposition of stereotyped images of intellectual disability adopted by appellate courts. This can, of course, have even greater impact because such stereotypes are then imposed on all lower courts in that jurisdiction.

^{394.} For a discussion of issues that arise when juries consider *Atkins* cases, see John H. Blume et al., *A Tale of Two (and Possibly Three)* Atkins: *Intellectual Disability and Capital Punishment Twelve Years After the Supreme Court's Creation of a Categorical Bar*, 23 WM. & MARY BILL OF RIGHTS J. 393, 409-12 (2014).

^{395.} Stereotypes and prejudices can, of course, derive from popular culture, attitudes conveyed within the family, and from a particular potential juror's school experiences. A discussion of this can be found in Gary N. Siperstein, Jennifer Norins & Amanda Mohler, *Social Acceptance and Attitude Change, in* HANDBOOK OF INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 133, 133-54 (John W. Jacobson, James A. Mulick, & Johannes Rojahn eds., 2007).

^{396.} See Andrea D. Lyon, But He Doesn't Look Retarded: Capital Jury Selection for the Mentally Retarded Client Not Excluded After Atkins v. Virginia, 57 DEPAUL L. REV. 701, 713-17, Appendix at 718-19 (2008) (including sample questionnaire).

^{397.} See id. at 709-10.

^{398.} Another potential source of stereotyping in *Atkins* cases may come from clinical witnesses who insert their own scientifically-unsupported prejudices into their evaluations of a defendant. For an example of such testimony and its legal consequences, see Caroline Everington, *Challenges of Conveying Intellectual Disabilities to Judge and Jury*, 23 WM. & MARY BILL OF RIGHTS J. 467, 476-78 (2014) (discussing testimony and publications by Dr. George Denkowski); Keith F. Widaman & Gary N. Siperstein, *Assessing Adaptive Behavior of Criminal Defendants in Capital Cases: A Reconsideration*, 27 AM. J. FORENSIC PSYCHOLOGY, no. 2, 2009, at 5, 10-13 (same); John H. Blume & Karen L. Salekin, *Analysis of* Atkins *Cases, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 37, 48-49 (Edward A. Polloway ed., 2015) (describing sanctions imposed against Dr. Denkowski by the Texas Board of Examiners in Psychology); Brandi Grissom, *Psychologist Who Cleared Death Row Inmates Is Reprimanded by Board*, N.Y. TIMES, Apr. 15, 2011, at A19 (describing methods used by Dr. Denkowski in his evaluations of death row inmates and instances where these methods were questioned by courts).

The most notable example of such stereotyping occurred in the state of Texas. In the case of Ex Parte Briseno, 399 the state Court of Criminal Appeals adopted a collection of such stereotypes.⁴⁰⁰ The *Briseno* case was on appeal from a trial court's rejection of a post-conviction petition for Atkins relief on the ground that the defendant had mental retardation.⁴⁰¹ After expressing considerable skepticism about whether the same definition should apply in Atkins cases that is used in other contexts,402 the Court of Criminal Appeals announced that it was adopting the AAMR definition of mental retardation, as it had done previously in other cases (and as the Texas Legislature had done for other purposes).⁴⁰³ The court then focused exclusively on the second prong of the definition, observing (without any citation to the clinical literature about adaptive behavior assessment or acknowledgement of the existence of adaptive behavior scales⁴⁰⁴) that "[t]he adaptive behavior criteria are exceedingly subjective, and undoubtedly experts will be found to offer opinions on both sides of the issue in most cases."405 As if in response to this perceived subjectivity and anticipated difference of opinion, the court then offered seven "other evidentiary factors which factfinders in the criminal trial context might also focus upon in weighing evidence as indicative of mental retardation or

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^{399. 135} S.W.3d 1 (Tex. Crim. App. 2004), *abrogated by* Moore v. Texas, 137 S. Ct. 1039 (2017).

^{400.} See id. at 8-9. Although the Supreme Court has unanimously rejected the Texas courts' use of the *Briseno* factors (*Moore*, 137 S. Ct. at 1044, 1054 (Roberts, C.J., dissenting)), presentation of the underlying issues and the clinical literature addressing them may prove helpful to courts in dealing with comparable issues involving adaptive functioning.

^{401.} Briseno, 135 S.W.3d at 3.

^{402.} *Id.* at 8 ("Some might question whether the same definition of mental retardation that is used for providing psychological assistance, social services, and financial aid is appropriate for use in criminal trials to decide whether execution of a particular person would be constitutionally excessive punishment."); *see Moore*, 137 S. Ct. at 1052 ("Indeed, Texas itself does not follow *Briseno* in contexts other than the death penalty.").

^{403.} *Briseno*, 135 S.W.3d at 7-8 (citing what is now titled the Persons with an Intellectual Disability Act, TEXAS HEALTH & SAFETY CODE ANN. § 591.003 (7)(a), (13) (West 2015)).

^{404.} For a discussion of such adaptive behavior scales, see *supra* Part VII.A.

^{405.} Briseno, 135 S.W.3d at 8.

of a personality disorder^{*406} There are numerous serious problems with these "evidentiary factors.^{*407}

One of the primary problems that the Supreme Court identified with the enterprise is that it was clearly designed to carve out a subset of individuals with intellectual disability to receive *Atkins* protection, leaving the remainder—who also met the clinical definition described in the Supreme Court's opinion⁴⁰⁸—outside the mandated Eighth Amendment protection.⁴⁰⁹ The Texas court attempted to justify its rationing enterprise by declaring that "[w]e, however, must define *that level and degree* of mental retardation at which *a consensus of Texas citizens* would agree that a person should be exempted from the death penalty."⁴¹⁰ The Supreme Court disagreed, stating: "Mild levels of

- Did those who knew the person best during the developmental stage—his family, friends, teachers, employers, authorities—think he was mentally retarded at that time, and, if so, act in accordance with that determination?
- Has the person formulated plans and carried them through or is his conduct impulsive?
- Does his conduct show leadership or does it show that he is led around by others?
- Is his conduct in response to external stimuli rational and appropriate, regardless of whether it is socially acceptable?
- Does he respond coherently, rationally, and on point to oral or written questions or do his responses wander from subject to subject?
- Can the person hide facts or lie effectively in his own or others' interests?
- Putting aside any heinousness or gruesomeness surrounding the capital offense, did the commission of that offense require forethought, planning, and complex execution of purpose?

Id. at 8-9.

407. The Briseno evidentiary factors have been severely criticized. See, e.g., Macvaugh & Cunningham, Forensic Practice, supra note 83, at 136 ("The seven criteria of the Briseno opinion operationalize an Atkins interpretation that only exempts a subcategory of persons with mental retardation from execution."); Caroline Everington, Challenges of Conveying Intellectual Disabilities to Judge and Jury, 23 WM. & MARY BILL OF RIGHTS J. 467, 481 (2014) ("Using these seven factors as part of a diagnosis has the potential (if strictly interpreted) to exclude anyone functioning in the mild ID range from the protection of Atkins."); Carol S. Steiker & Jordan M. Steiker, Atkins v. Virginia: Lessons from Substance and Procedure in the Constitutional Regulation of Capital Punishment, 57 DEPAUL L. REV. 721, 727-28 (2008); John H. Blume, Sheri Lynn Johnson & Christopher Seeds, Of Atkins and Men: Deviations from Clinical Definitions of Mental Retardation in Death Penalty Cases, 18 CORNELL J.L. & PUB. POLICY 689, 710-14 (2009); Peggy M. Tobolowsky, A Different Path Taken: Texas Capital Offenders' Post-Atkins Claims of Mental Retardation, 39 HASTINGS CONST. L.Q. 1, 149-66 (2011). The Supreme Court has taken note of the clinical criticism of Briseno. See Moore, 137 S. Ct. at 1052 n.10 ("Given the Briseno factors' flaws, it is unsurprising that scholars and experts have long criticized the factors.").

408. See Atkins v. Virginia, 536 U.S 304, 308 n.3 (2002) (setting forth the AAMR and DSM-IV-TR definitions of mental retardation).

409. *Moore*, 137 S. Ct. at 1051 ("By design and in operation, the *Briseno* factors creat[e] an unacceptable risk that persons with intellectual disability will be executed." (alteration in original) (internal quotation omitted)).

410. Briseno, 135 S.W.3d at 6 (emphasis added). Without explaining why the scope of the

^{406.} Id. at 8. The factors that were invented by the Texas court are:

intellectual disability, although they may fall outside Texas citizens' consensus, nevertheless remain intellectual disabilities, and States may not execute anyone in the entire category of [intellectually disabled] offenders."411

Over and above the Texas court's apparent ambivalence about implementing the constitutional holding of *Atkins*, the purported remedy it ordered is based on blatant stereotypes about people with intellectual disability, and is contrary to the accepted definition and the understanding of clinicians about the nature of the disability. Its seven "evidentiary factors" appear to be drawn from a preconceived image of what people with mental retardation must be like.⁴¹² Some elements of those factors are at least tangentially related to characteristics seen in many—but not all—individuals with intellectual disabilities.⁴¹³ Others seem more clearly focused on mental illness than on intellectual disability.⁴¹⁴ One factor actually relies on the stereotypes about mental retardation that were held by others.⁴¹⁵ The final Briseno factor mandates inquiry into the facts of the crime with which the defendant has been charged, in the hope that they will reveal whether the individual has intellectual disability.⁴¹⁶

The most serious concern with the Briseno evidentiary factors is that they are at odds with the clinical literature concerning the diagnosis

Eighth Amendment's substantive provisions should vary from state to state, the court concludes that the best guidance for its state courts would be found in a literary description of a single fictional character with mental retardation: "Most Texas citizens might agree that Steinbeck's Lennie should, by virtue of his lack of reasoning ability and adaptive skills, be exempt." Briseno, 135 S.W.3d at 6 (citing JOHN STEINBECK, OF MICE AND MEN (1937)). Remarkably, the state court then went on to speculate about whether "[there is] a national or Texas consensus that all of those persons whom the mental health profession might diagnose as meeting the criteria for mental retardation are automatically less morally culpable than those who just barely miss meeting those criteria[.]" Id.

^{411.} Moore, 137 S. Ct. at 1051 (alteration in original) (internal quotations omitted).

^{412.} See Briseno, 135 S.W.3d at 8-9. This despite the fact that the court acknowledged elsewhere that, "[t]he term 'mental retardation' encompasses a large and diverse population suffering from some form of mental disability." Id. at 5.

^{413.} For example, impulsivity is often observed in individuals with intellectual disability. See Ellis & Luckasson, Defendants, supra note 10, at 429.

^{414.} For example, whether the defendant's conduct is "rational and appropriate," and whether he responds to questions "coherently [and] rationally." Briseno, 135 S.W.3d at 8.

^{415. &}quot;Did those who knew the person best during the developmental stage-his family, friends, teachers, employers, authorities-think he was mentally retarded at that time, and, if so, act in accordance with that determination?" Id. The answer to that question, of course, depends on what the image of a "person with mental retardation" meant to that individual. That family member's (or other person's) stereotype about mental retardation is then given great weight years or decades later in a capital case. See supra notes 390-98 and accompanying text.

^{416.} Briseno, 135 S.W.3d at 8-9. The Texas court's cautionary preface to this factor: "[p]utting aside any heinousness or gruesomeness surrounding the capital offense," id., seems particularly unlikely to be effective. For a discussion of the relevance of the facts of the crime, see supra Part VII.D.

of people with intellectual disability.⁴¹⁷ This approach rejects the understanding of deficits in adaptive behavior that is the product of decades of experience and scholarly study,⁴¹⁸ and replaces it with a stereotype of "mental retardation" grounded only in the judge's imagination and prejudices.⁴¹⁹ As a result, the *Briseno* court effectively subdivided the class of individuals with intellectual disability into two groups: (1) those who match the court's preconceived expectation of what people with intellectual disability must be like; and (2) those who satisfy the clinical definition but who do not conform to the court's stereotypes.⁴²⁰ Because the *Briseno* factors completely abandoned clinical science in favor of stereotypes, the Supreme Court unanimously found them to be incompatible with the Eighth Amendment.⁴²¹ The Supreme Court has made clear that the Eighth Amendment prohibits the

^{417.} AAIDD has been particularly insistent on the subject of reliance on stereotypes of people with mental retardation. *See* AAIDD, USER'S GUIDE 2012, *supra* note 65, at 26. Regardless of their origin, a number of incorrect stereotypes can interfere with justice. These incorrect stereotypes must be dispelled:

⁻ Persons with ID look and talk differently from persons from the general population

⁻ Persons with ID are completely incompetent and dangerous

⁻ Persons with ID cannot do complex tasks

⁻ Persons with ID cannot get driver's licenses, buy cars, or drive cars

⁻ Persons with ID do not (and cannot) support their families

⁻ Persons with ID cannot romantically love or be romantically loved

⁻ Persons with ID cannot acquire vocational and social skills necessary for independent living

⁻ Persons with ID are characterized only by limitations and do not have strengths that occur concomitantly with the limitations

These incorrect stereotypes are unsupported by both professionals in the field and published literature.

Id. at 26; *see also* Reschly, *Documenting Origins, supra* note 83, at 133 ("MMR [mild mental retardation] diagnoses require deep knowledge of the phenomenon of MMR and the capabilities of persons with MMR. For example, many persons with MMR attain basic literacy skills, typically reading at about the fourth grade level, with some reading as high as the sixth grade level. Most are capable of driving competently and many can pass the written driver's license examination. Many can secure employment and economic self-support, typically in low-level jobs that do not require complex reasoning and decision making.").

^{418.} See supra Part VII.A-B.

^{419.} See supra notes 366-83 and the accompanying text for a discussion of the common stereotypes about people with intellectual disability. And, of course, it ignores a central feature of intellectual disability: the fact that for almost all individuals, adaptive weaknesses co-exist with strengths. See supra Part VII.C.

^{420.} See Briseno, 135 S.W.3d at 7-8.

^{421.} Moore v. Texas, 137 S. Ct. 1039, 1053 (2017) ("By rejecting the habeas court's application of medical guidance and clinging to the standard it laid out in *Briseno*, including the wholly non-clinical *Briseno* factors, the CCA failed adequately to inform itself of the medical community's diagnostic framework." (internal quotation omitted)); *id.* at 1053 (Roberts, C.J., dissenting) ("I agree with the Court today that those factors are an unacceptable method of enforcing the guarantee of *Atkins*, and that the CCA therefore erred in using them to analyze adaptive deficits.").

execution of anyone who meets the clinical definition of intellectual disability, and that the states lack the authority to protect only a portion of that population.⁴²²

VIII. PROCESS OF JUDICIAL EVALUATION

Judges facing the task of evaluating a defendant's *Atkins* claim, whether at the trial level or in reviewing the work of a lower court, may encounter several more specific questions about the clinical evaluations of the defendant.

A. Qualifications of Evaluators

A key element to any accurate assessment of an individual's possible intellectual disability is, of course, the skill and qualifications of the evaluators whose work comes before the court. As a general matter, courts will want to place primary reliance on those experts who have the most relevant knowledge and training.⁴²³ While that is true for assessments in cases involving mental illness,⁴²⁴ it is particularly important in the evaluation of whether an individual has intellectual disability.⁴²⁵

^{422.} *Moore*, 137 S. Ct. at 1044, 1051; Hall v. Florida, 134 S. Ct. 1986, 1999 (2014) ("If the states were to have complete autonomy to define intellectual disability as they wished, the Court's decision in *Atkins* could become a nullity, and the Eighth Amendment's protection of human dignity would not become a reality.").

However, it would appear that states do have some opportunity to select the wording of the definition that, for example, is already employed elsewhere in state law, so long as it includes all individuals who meet the clinical definition. See *supra* notes 95-96 for a discussion of the definitions states used in their statutes. But if a state were to create a more restrictive definition than the clinically accepted standard, it would run the risk of "creating a clinical diagnosis and a forensic diagnosis of mental retardation." Tassé, *Adaptive Behavior and Diagnosis, supra* note 87, at 122.

^{423.} See FEDERAL RULE OF EVIDENCE 702 ("A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.").

^{424.} See, e.g., GARY B. MELTON ET AL., PSYCHOLOGICAL EVALUATIONS FOR THE COURTS: A HANDBOOK FOR MENTAL HEALTH PROFESSIONALS AND LAWYERS 580 (3d ed. 2007) ("The most fundamental reason for clarifying referral issues is to make sure that the clinician has the clinical and forensic skills necessary to undertake the referral."); JOHN PARRY & ERIC Y. DROGIN, CRIMINAL LAW HANDBOOK ON PSYCHIATRIC AND PSYCHOLOGICAL EVIDENCE AND TESTIMONY 26-34 (AM. BAR ASS'N 2000); ABA MENTAL HEALTH STANDARDS 1988, *supra* note 8, std. 7-1.1 (Roles of Mental Health and Mental Retardation Professionals in the Criminal Process); see also ABA MENTAL HEALTH STANDARDS 2016, *supra* note 8, std. 7-1.3.

^{425.} Richard J. Bonnie, *The American Psychiatric Association's Resource Document on Mental Retardation and Capital Sentencing: Implementing* Atkins v. Virginia, 32 J. AM. ACADEMY PSYCHIATRY & LAW 304, 307 (2004) ("The expert selected or appointed to conduct mental

On the issue of intelligence testing, it is important to recognize that the administration and evaluation of IQ testing is a particularly specialized and demanding skill.⁴²⁶ As AAIDD, the leading professional organization in the field of intellectual disabilities, has concluded:

retardation evaluations in capital cases should be a psychiatrist or psychologist who is qualified by training and experience to make a diagnosis of mental retardation. The testing of intellectual functioning and adaptive behavior should be carried out by clinicians who have the necessary skill and experience."). The most recent edition of the American Psychiatric Association's diagnostic manual states: "A comprehensive evaluation includes an assessment of intellectual capacity and adaptive functioning; identification of genetic and nongenetic etiologies; evaluation for associated medical conditions (e.g., cerebral palsy, seizure disorder); and evaluation for co-occurring mental, emotional, and behavioral disorders." APA, DSM-5, *supra* note 65, at 39; *see also* Olley, *Qualifications, supra* note 268, at 136 ("Experts in *Atkins* cases should be familiar with the prevalent definitions of mental retardation ..., the applicable ethical principles of their professions, position statements made by professional organizations, and recommendations made by recognized authorities in the field." (citations omitted)); ABA MENTAL HEALTH STANDARDS 1988, *supra* note 8, std. 7-3.11 (Expert witnesses: Qualifications for Testifying About A Person's Mental Condition.); ABA MENTAL HEALTH STANDARDS 2016, *supra* note 8, std. 7-3.10(c).

In addition to expertise concerning the definition and the clinical literature, courts should be mindful of the importance of an evaluator's actual experience with individuals who have intellectual disability. Olley, *Qualifications, supra* note 268, at 139 ("The expert in an *Atkins* proceeding must have experience with individuals with mild mental retardation, knowledge of the research on this population, and knowledge of the applicable laws and court procedures."); *id.* at 135 ("Neuropsychologists bring an understanding cognitive processes and the use of tests to assess various strengths and weaknesses. However, a background in neuropsychology does not assure expertise or experience with people with mental retardation"); MARC J. TASSÉ & JOHN H. BLUME, INTELLECTUAL DISABILITY AND THE DEATH PENALTY 144 (2018); Gilbert S Macvaugh III, Mark D. Cunningham, & Marc J. Tassé, *Professional Issues in Atkins Assessments, in* THE DEATH PENALTY AND INTELLECTUAL DISABILITY 325, 327-29 (Edward A. Polloway ed., 2015). *See generally*, Snell, *Characteristics, supra* note 77.

^{426.} See, e.g., ANASTASI & URBINA, PSYCHOLOGICAL TESTING, supra note 106, at 207 ("In common with most individual intelligence tests, the Stanford-Binet requires a highly trained examiner."); Bonnie & Gustafson, Implementing Atkins, supra note 127, at 827 ("Once a standardized measure generally accepted by the field has been selected, it must be administered in conformity with accepted professional practice."); Macvaugh & Cunningham, Forensic Practice, supra note 83, at 159 ("The best instrument in the wrong (poorly trained) hands is no better than a poorly designed instrument in the hands of the best professionals." (quoting MARY BEIRNE-SMITH, JAMES PATTON, & RICHARD ITTENBACH, MENTAL RETARDATION 133 (4th ed. 1994))).

A particular concern arises when an older or uncommon test is found in the defendant's records. *See supra* note 176. Courts should be alert to this potential problem, and make sure that experts interpreting scores from an older or less widely-used instrument are qualified to do so. *See* AMERICAN EDUCATIONAL RESEARCH ASSOCIATION, AMERICAN PSYCHOLOGICAL ASSOCIATION & NATIONAL COUNCIL ON MEASUREMENT IN EDUCATION, STANDARDS FOR EDUCATIONAL AND PSYCHOLOGICAL TESTING std. 10.15 at 167 (2d ed. 2014) ("The interpretation of test or test battery results for diagnostic purposes should be based on . . . an understanding of the normative, empirical and theoretical foundations, as well as the limits of, such tests and data."); *id.* comment to std. 10.15 at 167 ("The interpretation of findings . . . requires appropriate education about, supervised experience with, and knowledge of procedural, theoretical, and empirical limitations of the tests and the evaluation procedure.").

The assessment of intellectual functioning is a task that requires specialized professional training. Assessment data should be reported by an examiner(s) experienced with people who have mental retardation and qualified in terms of professional and state regulations as well as meeting a publisher's guidelines for conducting a thorough, valid psychological evaluation of the individual's intelligence functioning. In some instances, this may require an interdisciplinary

The American Psychological Association's standards regarding psychological testing and assessment also emphasize the evaluator's qualifications: "Those who use psychological tests should confine their testing and related assessment activities to their areas of competence, as demonstrated through education, training, experience, and appropriate credentials."⁴²⁸

Similarly, the administration of adaptive behavior instruments must be performed by professionals with expertise in their use.⁴²⁹ Evaluators and expert witnesses who do not meet these standards are appropriately viewed with some skepticism.⁴³⁰

430. That is not to deny that there may be some evidentiary value, in very limited circumstances, in evaluations that do not meet this standard. For example, an IQ test that had been

evaluation.427

^{427.} AAMR 2002, *supra* note 95, at 51; *see also* AAIDD 2010, *supra* note 65, at 40-41. Seemingly small errors in implementing the test's conditions and protocols can produce scores that inaccurately reflect the subject's actual level of intelligence. *See* ANASTASI & URBINA, PSYCHOLOGICAL TESTING, *supra* note 106, at 207 ("Special training and experience are needed for administration, scoring, and interpretation of results. Considerable familiarity and practice with the scale are demanded for a smooth performance. Hesitation and fumbling may be ruinous to rapport, especially with a young test taker. Minor, inadvertent alterations in wording may alter the difficulty of items.") (discussing the Stanford-Binet instrument); AIKEN, ASSESSMENT OF INTELLECTUAL FUNCTIONING, *supra* note 106, at 91 ("[T]]he directions for each test should be followed closely and read rather than recited from memory.") (discussing the Stanford-Binet).

^{428.} AMERICAN EDUCATIONAL RESEARCH ASSOCIATION, AMERICAN PSYCHOLOGICAL ASSOCIATION & NATIONAL COUNCIL ON MEASUREMENT IN EDUCATION, STANDARDS FOR EDUCATIONAL AND PSYCHOLOGICAL TESTING, std. 10.1 at 164 (2d ed., 2014). The Commentary to this Standard explains that:

Responsible use and interpretation of test scores require appropriate levels of experience, sound professional judgment, and understanding of the empirical and theoretical foundations of tests. For many assessments, competency also requires sufficient familiarity with the population of which the test taker is a member to facilitate test selection, test administration, and test score interpretation.

Id. comment at 164; *see also* Paul Andrews, *Psychological Testing*, *in* 4 WILEY ENCYCLOPEDIA OF FORENSIC SCIENCE 2173, 2174-75 (Allan Jamieson & Andre Moenssens eds. 2009) (discussing qualifications of psychologists to administer cognitive testing).

^{429.} NATIONAL RESEARCH COUNCIL, MENTAL RETARDATION: DETERMINING ELIGIBILITY FOR SOCIAL SECURITY BENEFITS 155 (Daniel J. Reschly et al. eds., 2002) ("In order for the assessment to be clinically and scientifically meaningful, it is important that the assessor be sufficiently trained in using and interpreting appropriate instruments. A high level of training is necessary in order to capture and distinguish the level, quality, and pattern of adaptive behavior displayed by a given subject, as viewed by the eyes of the respondent (parent, teacher, or caregiver).").

B. Clinical Judgment

In addition to explaining the technical details of evaluating a defendant who may have intellectual disability, clinical experts must also be given latitude to exercise and explain the role of their professional judgment⁴³¹ in reaching their conclusions.⁴³² An expert's credentials are necessary to a reliable assessment, but may not, by themselves, be sufficient.⁴³³ Courts must also be certain that the clinician is basing his or her conclusion on an empirical and fully documented assessment.⁴³⁴ That evaluative process must include consideration of a

432. See ROBERT L. SCHALOCK & RUTH LUCKASSON, CLINICAL JUDGMENT 6 (1st ed. 2005) ("Clinical judgment should not be thought of as a justification for abbreviated evaluations, a vehicle for stereotypes or prejudices, a substitute for insufficiently explored questions, an excuse for incomplete or missing data, or a way to solve political problems."); CLINICAL JUDGMENT 2014, *supra* note 253, at 15; Tassé, *Adaptive Behavior and Diagnosis, supra* note 87, at 121 ("Hence, clinical judgment should not be used as a shield when one draws conclusions that are not supported by the assessment results, observations, and/or case records."); Macvaugh & Cunningham, *Forensic Practice, supra* note 83, at 155 (["C]linical judgments... should be based on a solid foundation of scientific knowledge and not the 'gut instinct' or 'seat-of-the-pants' impression of the examiner."); Everington & Olley, *Defining and Diagnosing, supra* note 15, at 7 ("Statements such as 'the bright look in his eye told me he was not retarded,' cannot be accepted as psychological evidence in a mental retardation hearing.").

433. Olley, *Qualifications*, *supra* note 268, at 139 ("[T]he diagnosis of mild mental retardation is complex and requires more than the rigid application of test scores.").

434. This excludes, of course, impressionistic and unscientific "observations":

Alternatively, an examiner might simply conclude that the defendant 'does not seem mentally retarded,' independent of IQ score, effort testing, and structured adaptive behavior assessment. Such idiosyncratic methods and intuitive observations have no normative comparisons, have not been scientifically tested, have no known reliability or

administered during a defendant's childhood which indicated that he had intellectual disability may be useful to the courts in confirming that the definition's requirement of manifestation during the developmental period (age of onset) is satisfied. For a discussion of the similar issue of "short form" IO tests, see *supra* Part VI.B.

^{431.} Keith F. Widaman, Concepts of Measurement, in THE DEATH PENALTY AND INTELLECTUAL DISABILITY 55, 59 (Edward A. Polloway ed., 2015) ("[T]he need for clinical judgment to combine all information to arrive at important diagnostic decisions is always a component of this assessment task."); CLINICAL JUDGMENT 2014, supra note 253, at 7 ("The purpose of clinical judgment is to enhance the quality, validity, and precision of the clinician's decision or recommendation in situations related to diagnosis, classification, and planning supports."); see also AMERICAN EDUCATIONAL RESEARCH ASSOCIATION, AMERICAN PSYCHOLOGICAL ASSOCIATION & NATIONAL COUNCIL ON MEASUREMENT IN EDUCATION, STANDARDS FOR EDUCATIONAL AND PSYCHOLOGICAL TESTING, std. 10.1 comment at 164 (2d ed., 2014) ("Test score interpretation requires professionally responsible judgment that is exercised within the boundaries of knowledge and skill afforded by the professional's education, training, and supervised experience, as well as the context in which the assessment is being performed."); APA, DSM-5, supra note 65, at 37 ("Clinical training and judgment are required to interpret test results and assess intellectual performance."); Ruth Luckasson & Robert L. Schalock, Standards to Guide the Use of Clinical Judgment in the Field of Intellectual Disability, 53 INTELLECTUAL & DEVELOPMENTAL DISABILITIES 240, 247 (2015) ("The clinical judgment standards ... provide the basis for valid and precise decisions and recommendations").

variety of sources of information that shed light on whether the individual has intellectual disability.⁴³⁵ Expert witnesses, whether for the prosecution or the defense,⁴³⁶ must be held to a high standard of professionalism and thoroughness in the performance of their evaluations and preparation of their reports for the courts.⁴³⁷

C. Codes and Standards of Ethics

Mental disability professionals are governed and guided by standards established by their own professions, and adherence to these standards should be reflected in the reports they prepare and the testimony they offer. Psychologists, psychiatrists, and other clinicians operate within codes of professional responsibility and ethical guidelines, and these codes and standards are fully consistent with their task in *Atkins* cases of assisting the courts honestly.

Those professionals confront different ethical issues, of course, when they have been retained in a criminal case by the prosecution or by defense counsel, as contrasted to that same professional's duties when diagnosing an individual in a treatment or educational setting. The relevant codes and standards have addressed the particular issues involved in forensic practice.

For example, the American Psychology-Law Society (a division of the American Psychological Association)⁴³⁸ provides in its *Specialty*

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validity, and reflect unsystematic and potentially confirmatory sampling bias. Whatever their anecdotal appeal, such methods lack scientific rigor and are not appropriate expressions of clinical judgment.

Macvaugh & Cunningham, Forensic Practice, supra note 83, at 155; see also AAIDD, USER'S GUIDE 2012, supra note 65, at 21 ("[A]lthough socio-cultural factors are important to be considered by the clinician, at no time do socio-cultural factors justify modifications to scores obtained by the individual on a standardized assessment instrument that assesses intellectual functioning."); Robert M. Sanger, *IQ Intelligence Tests, "Ethnic Adjustments" and* Atkins, 65 AM. U. L. REV. 87, 123 (2015) ("An extensive review of the literature did not locate any peer reviewed scientific studies that support the scientific use of ethnic adjustments for forensic purposes and, therefore, none that support such adjustments in *Atkins* cases in particular.").

^{435.} CLINICAL JUDGMENT 2014, *supra* note 253, at 27 ("A thorough history is essential for a valid and precise diagnosis of ID. Such a history should include three components: social, medical, and educational.").

^{436.} See McWilliams v. Dunn, 137 S. Ct. 1790, 1793 (2017) ("[W]hen certain threshold criteria are met, the State must provide an indigent defendant with access to a mental health expert who is sufficiently available to the defense and independent from the prosecution to effectively 'assist in evaluation, preparation, and presentation of the defense."" (quoting Ake v. Oklahoma, 470 U.S. 68, 83 (1985))).

^{437.} See AAIDD, USER'S GUIDE 2012, *supra* note 65, at 21 ("Be sensitive to language differences and culturally based behaviors and beliefs... Do not, however, allow cultural or linguistic diversity to over-shadow or minimize the disability.").

^{438.} The group is designated as Division 41 of the American Psychological Association. *See Join Us*, AMERICAN PSYCHOLOGICAL-LAW SOCIETY: APA DIV. 41, http://ap-

Guidelines for Forensic Psychology that the role of forensic examiners is "to assist the trier of fact to understand evidence or determine a fact in issue, and [to] provide information that is most relevant to the psycholegal issue."⁴³⁹ In performing this function for the courts, psychologists are admonished to "ensure that the products of their services, as well as their own public statements and professional reports and testimony, are communicated in ways that promote understanding and avoid deception."⁴⁴⁰ Meeting this responsibility requires of the clinician both integrity and candor.⁴⁴¹

Psychiatrists are governed by similar ethical rules when they work in forensic settings. The Ethics Guidelines of the American Academy of Psychiatry and the Law counsel caution that the adversarial nature of the legal process cannot be permitted to distort the witness's obligation to provide the court with accurate assessments and professional opinions.⁴⁴²

All of these professional and ethical standards reflect a common principle: assuring that the evaluator gives the court the most accurate and complete information available and the benefit of that professional's best clinical judgment.⁴⁴³ This is, of course, the same perspective shared

ls.wildapricot.org/page-1680571 (last visited Aug. 23, 2018). The group that specializes in issues involving intellectual disability is Division 33. *See President's Welcome*, AMERICAN PSYCHOLOGICAL ASSOCIATION: APA DIV. 33: IDD/ASD, http://www.division33.org/presidents-welcome (last visited Aug. 23, 2018).

^{439.} Am. Psychological Ass'n, *Specialty Guidelines for Forensic Psychology*, 68 AM. PSYCHOLOGIST 7, 15 (2013) (Guideline 10.01). The American Psychological Association has also adopted general ethical principles for all psychologists. Am. Psychological Ass'n, *Ethical Principles of Psychologists and Code of Conduct*, 57 AM. PSYCHOLOGIST 1060 (2002).

^{440.} Id. at 16 (Guideline 11.01); id. ("Forensic practitioners do not, by either commission or omission, participate in misrepresentation of their evidence, nor do they participate in partisan attempts to avoid, deny, or subvert the presentation of evidence contrary to their own position or opinion.").

^{441.} *Id.* at 8-9 (Guideline 1.02); *id.* at 9 ("When conducting forensic examinations, forensic practitioners strive to be unbiased and impartial, and avoid partisan presentation of unrepresentative, incomplete, or inaccurate evidence that might mislead finders of fact.").

^{442.} AM. ACADEMY PSYCHIATRY & THE LAW, ETHICS GUIDELINES FOR THE PRACTICE OF FORENSIC PSYCHIATRY (2005) (Guideline IV Commentary), *reprinted in* PHILIP J. CANDILIS ET AL., FORENSIC ETHICS AND THE EXPERT WITNESS 185, 187-88 (Andrew Szanton ed., 2007) ("Being retained by one side in a civil or criminal matter exposes psychiatrists to the potential for unintended bias and the danger of distortion of their opinion. It is the responsibility of psychiatrists to minimize such hazards by acting in an honest manner and striving to reach an objective opinion."); *see also* Robert Weinstock et al., *Ethical Guidelines, in* PRINCIPLES AND PRACTICE OF FORENSIC PSYCHIATRY 56 (Richard Rosner ed., 2d ed. 2003); Am. Academy of Psychiatry & the Law, *AAPL Practice Guideline for the Forensic Assessment*, 43 J. AM. ACADEMY PSYCHIATRY & LAW S3, S36, 38 (2015 Supp.) (Guideline 10.3 Assessments of Persons with Intellectual Disability, and Guideline 10.6.3 Evaluator Bias).

^{443.} See, e.g., SHANE S. BUSH ET AL., ETHICAL PRACTICE IN FORENSIC PSYCHOLOGY: A SYSTEMATIC MODEL FOR DECISION MAKING 11 (2006) ("To achieve this goal, the psychologist assumes the role of seeker of truth and judicial educator.").

by the legal profession and by courts.⁴⁴⁴ In *Atkins* cases, courts need to be mindful of these professional principles, and careful in determining whether they are, in fact, being met by the professionals who appear before them.⁴⁴⁵

IX. CONCLUSION

Adjudicating cases under *Atkins* presents challenges for courts, but the challenges are certainly not insurmountable. There is a remarkable degree of consensus and clarity on almost all diagnostic issues among clinicians and scholars who study intellectual disability, and that consensus is reflected in the abundant scientific literature. As a result, courts (as well as counsel and expert witnesses) have access to clear clinical guidance in addressing the issues posed by these cases.

^{444.} See, e.g., ABA MENTAL HEALTH STANDARDS 1988, supra note 8, std. 7-1.1(b) ("In offering expert opinions and testimony concerning present scientific or clinical knowledge and in evaluating and offering expert opinions and testimony on the mental condition of criminal defendants, the mental health or mental retardation professional, no matter by whom retained, should function objectively within the professional's area of expertise. . . In evaluating the mental condition of a defendant or witness, the professional has an obligation to make a thorough assessment based on sound evaluative methods and to reach an objective opinion on each specific matter referred for evaluation."). The Commentary to this Standard notes that "[t]he counterpart to an attorney's responsibility to respect an evaluator's professional independence is, of course, the evaluator's obligation to perform objectively and to understand the need for objectivity." *Id.* commentary (Professionals as Evaluators); *see also* ABA MENTAL HEALTH STANDARDS 2016, *supra* note 8, std. 7-1.3(b).

^{445.} Olley, *Death Penalty and Courts, supra* note 160, at 231 ("Whether the expert is hired by the prosecution or the defense, it is his or her ethical responsibility to present information objectively. Thus, it is essential that one knows and relies upon the established research on ID." (citation omitted)).