

Atkins v. Virginia: Implications and recommendations for forensic practice

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In 2002, the United States Supreme Court held in the landmark case of Atkins v. Virginia that the execution of individuals who have mental retardation is unconstitutional. Following the Atkins holding, courts in death penalty jurisdictions have relied heavily upon mental health professionals in making a determination of whether or not capital offenders have mental retardation. The determination of mental retardation in death penalty cases, however, presents complex challenges for both courts and mental health professionals. In addition, there is variability in how death penalty states define mental retardation and in the assessment methods used by mental health professionals to diagnose mental retardation in such cases. The purpose of this article is to (a) describe how statutes in death penalty jurisdictions have operationalized the various clinical definitions of mental retardation, (b) discuss issues confronting examiners in assessing and diagnosing mental retardation in Atkins cases, and (c) provide recommendations for forensic practice.

KEY WORDS: *Mental retardation, Atkins, death penalty, capital punishment, intelligence, adaptive functioning, malingering.*

In 2002, the United States Supreme Court held in *Atkins v. Virginia* that the execution of individuals who have mental retardation is unconstitutional because it violates the Eighth Amendment's prohibition against cruel and unusual punishments. Bonnie (2004) has observed that one of the "striking aspects" of the Court's decision in *Atkins* is that this prohibition is framed in the language of a clinical diagnosis. No other class of individuals is constitutionally exempt from the death penalty solely on the basis of a psychological diagnosis (DeMatteo, Marczyk, & Pich, 2007). Equally striking, the *Atkins* decision elevated *psychodiagnostic* assessment to an unprecedented position in criminal law. For the first time, a *score* on a psychological test(s) and an associated *diagnostic* finding became dispositive. Mental health professionals, by necessity, have become primary sources of information and expertise regarding these assessment and diagnostic determinations.

The scholarly literature has lagged in grappling with the complex issues surrounding professional practice in performing these assessments. Similarly, the fields of psychology and psychiatry are only just beginning to develop formal standards or guidelines for professional practice in *Atkins* cases. This is surprising, as there is no other type of psychodiagnostic evaluation in which the stakes are higher and the consequences of misdiagnosis are greater. The necessity of developing standards for evaluations in *Atkins* cases is also demonstrated by the limited specialized training of professionals undertaking these evaluations. As Olley (2006b) points out, few psychologists have extensive specialized training in the areas of forensic evaluation and mental retardation. In an unpublished survey by Macvaugh and Grisso (2006) of 20 forensic clinicians' practices in post-conviction *Atkins* cases, 40% reported formal training in mental retardation, and 45% reported at least some formal training in forensic evaluation. Only one of the forensic clinicians surveyed (5%) reported significant formal training and experience in both the fields of mental retardation and forensic

evaluation. This is particularly problematic in light of the observation of Keyes, Edwards, and Derning (1998): “Training in traditional mental health graduate programs includes little, if any, information about mental retardation” (p. 535).

Professional standards for *Atkins* evaluations would promote greater uniformity of these evaluations, a characteristic that is not currently present. Results of informal surveys of psychologists’ professional practices in *Atkins* cases suggest that there is much variability in the assessment methods used to assess and diagnose mental retardation (Everington & Olley, 2004; Macvaugh & Grisso, 2006). Further, the articulation of such standards would illuminate what is generally accepted in the field, one of the factors governing the admissibility of scientific evidence (*Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 1993).

In 2005, Division 33 of the American Psychological Association (Mental Retardation and Developmental Disabilities) formed an Ad Hoc Committee (Olley, Greenspan, & Switzky, 2006) to identify issues related to mental retardation and the death penalty and to clarify psychologists’ role in *Atkins* proceedings. In August of 2008, the Ad Hoc Committee held a meeting at the American Psychological Association’s annual convention in Boston, Massachusetts to address the issue of standards of practice in *Atkins* cases. At this meeting, a panel of experts in the fields of mental retardation, forensic psychology, law, psychometrics, and others, convened to begin working on determining areas of consensus in the field regarding the assessment of mental retardation in *Atkins* proceedings. The panel interpreted the results of several recent unpublished surveys regarding professional practice in *Atkins* cases and began developing position statements regarding best practice. The results of the surveys reviewed by the panel are expected to be published in the near future. The work of the Ad Hoc Committee and position statements regarding the issues described above also are pending.

This article seeks to inform the discussion on professional standards of practice for evaluations of mental retardation in capital cases by considering how this landmark decision has been variously operationalized by statutes across death penalty jurisdictions, the commonalities and differences in “clinical” definitions of mental retardation, and issues encountered by mental health professionals who conduct evaluations of mental retardation in capital cases. The associated “practice recommendations” are those of the authors alone.

Operationalizing *Atkins*

The *Atkins* Court made reference to definitions of mental retardation both by the American Association on Mental Retardation (AAMR, 1992) and the diagnostic criteria for mental retardation in the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR)* (American Psychiatric Association, 2000). These will be detailed subsequently. The Court, however, left to the individual states the task of how to define mental retardation, as well as the procedures for making these determinations. This lack of specificity would seem to be a prudent way of allowing for the inevitable evolution of the diagnostic criteria of mental retardation as this intellectual and behavioral deficiency is understood by the mental health professions, as well as providing individual states some discretion in selecting from the various professionally-accepted diagnostic criteria. An unsurprising expression of this ambiguity is the variability across death penalty jurisdictions regarding which definition of mental retardation is used (DeMatteo et al., 2007) and the procedures for assessments and determination of mental retardation in such cases (Duvall & Morris, 2006).

A wrinkle of some moment, however, is introduced by the rather cryptic language of the majority opinion:

In this case, for instance, the Commonwealth of Virginia disputes that Atkins suffers from mental retardation. Not all people who claim to be mentally retarded will be so impaired as to fall within the range of mentally retarded offenders about whom there is a national consensus. (*Atkins v. Virginia*, 2002, p. 317)

This language can be interpreted as standing for the proposition that some offenders will attempt to assert mental retardation who do not meet the nationally-accepted diagnostic criteria to be classified as “mentally retarded.” Alternatively, this language could reflect an expectation that not all persons with mental retardation will be “retarded enough” to qualify for an exemption from the death penalty. In this latter interpretation, the diagnosis of mental retardation is a necessary, but not sufficient condition. Instead of a national consensus regarding *diagnostic classification* (i.e., substantially a professional/clinical determination), this latter interpretation invokes a “*community values*” determination not unlike competency and sanity considerations. A “community values” approach to restricting death penalty exemption to a subcategory of capital offenders with mental retardation has been asserted by the Texas Criminal Court of Appeals in *Ex parte Briseno* (2004).

It is thus understandable that those in the mental health profession should define mental retardation broadly to provide an adequate safety net for those who are at the margin and might well become mentally-unimpaired citizens if given additional social services support. We, 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. Most Texas citizens might agree that Steinbeck’s Lennie [Footnote: See John Steinbeck, *Of Mice and Men* (1937)] should, by virtue of his lack of reasoning ability and adaptive skills, be exempt. But, does a consensus of Texas citizens agree that all persons who might legitimately qualify for assistance under the social services definition of mental retardation be exempt from an otherwise constitutional penalty? Put another way, is there 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? Is there, and should there be, a “mental retardation”

bright-line exemption from our state's maximum statutory punishment? As a court dealing with individual cases and litigants, we decline to answer that normative question without significantly greater assistance from the citizenry acting through its Legislature...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. (*Ex parte Briseno*, 2-11-04)

Two aspects of this Texas Court of Criminal Appeals decision are notable. First, a Texas consensus is substituted for a national consensus as specified by the *Atkins* Court. Second, the seven criteria specified by the Texas Court of Criminal Appeals to identify the subcategory of capital offenders with mental retardation who would be exempted from the death penalty reflect a level of impairment that is consistent with Moderate Mental Retardation (IQ = 40-55) or Severe Mental Retardation (IQ = 25-40), rather than the Mild Mental Retardation category (IQ = 55-70), which constitutes virtually all capital offenders who have mental retardation. The seven criteria of the *Briseno* opinion operationalize an *Atkins* interpretation that only exempts a subcategory of persons with mental retardation from execution. That said, the authors are unaware of a case—in Texas or elsewhere—where a capital defendant was identified as having mental retardation by clinical/professional standards, but then found not retarded enough to be exempted from the death penalty.

There are obviously grave problems with mental health professionals idiosyncratically parsing a subcategory of offenders who are sufficiently mentally retarded to meet a *community* consensus of death penalty ineligibility. Accordingly, it is our position that mental health professionals in *Atkins* proceedings are tasked with making what is essentially a *psychodiagnostic* assessment, in this case of mental retardation, albeit in a forensic context. This is in sharp contrast to the *psycholegal* assessments that are undertaken in evaluations of competency to stand trial and criminal responsibility.

Practice recommendation 1 Because restricting death penalty ineligibility to a subcategory of particularly impaired offenders with mental retardation has not yet been tested by the U.S. Supreme Court and because mental health professionals possess no special expertise in identifying community values, it is recommended that an *Atkins* assessment of a capital defendant specify the clinical/professional definition of mental retardation being employed and how the offender in question comports with that standard, in addition to illuminating more restricted jurisdictionally-specific criteria.

Definitions of mental retardation Regardless of whether the Court envisioned a *diagnostic* or *diagnostic + community values* determination, the definition of mental retardation (operationalized in diagnostic criteria) holds a critical position. Mental retardation has been defined by several professional organizations in the field. The American Association on Intellectual and Developmental Disabilities (AAIDD) (formerly the AAMR) and the American Psychiatric Association (APA) have provided the two most widely accepted definitions. Ellis (2003) has observed that many state legislatures enacted statutes based on the definition provided by the American Association on Mental Deficiency (1983), the former name for the AAMR: “Mental retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period” (p. 11). Nine years later, the AAMR (1992) revised its definition, with an emphasis on refining the adaptive functioning component of the previous version:

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. (p. 1)

The AAMR (1992) definition was cited in *Atkins* and adopted by several state legislatures in the 1990s (Ellis, 2003).

However, it has been criticized for lacking theoretical grounding and empirical research support (Greenspan, 1997). In addition, Olley et al. (2006) have raised the question as to whether or not a consensus exists in the field regarding the meaning of the 10 domains of adaptive behavior when applied in a forensic context.

The American Psychiatric Association's current definition in the *DSM-IV-TR* (APA, 2000) contains language similar to the definition by the AAMR (1992) and was also one of the definitions cited by the Court in *Atkins*:

A. Significantly subaverage intellectual functioning: an IQ test of approximately 70 or below on an individually administered IQ test (for infants, a clinical judgment of significantly subaverage intellectual functioning). B. Concurrent deficits or impairments in adaptive functioning (i.e., the person's effectiveness in meeting the standards expected for his or her age by his or her cultural group) in at least two of the following areas: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety. C. The onset is before age 18 years. (p. 49)

Five days before the Court's decision in *Atkins*, the AAMR (2002) again revised its definition, primarily by modifying the description of adaptive functioning: "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" (p. 1).

The most recent AAMR (2002) definition also does not specify a particular IQ score in its description of significant limitations in intellectual functioning. Instead, this prong of the definition is operationalized as an IQ score of "approximately two standard deviations below the mean, considering the standard error of the measurement for specific assessment instruments used and the instruments' strengths and limitations" (p. 14). Similarly, the AAMR (2002) definition further defines significant limitations in adaptive

behavior as: “performance that is at least two standard deviations below the mean of either (a) one of the following three types of adaptive behavior: conceptual, social, or practical, or (b) an overall score on a standardized measure of conceptual, social, and practical skills” (p. 14).

In the authors’ experience, the issue of which definition should be used by experts in forming an opinion regarding mental retardation is routinely debated in *Atkins* proceedings. This also has been raised as a controversial issue in the professional literature (Olley et al., 2006). Ellis (2003), who argued *Atkins* before the United States Supreme Court, has suggested that the AAMR (2002) definition is the most appropriate, because it contains the three essential components of all definitions cited in the *Atkins* decision. The current AAMR definition also has been described as being more consistent with contemporary thinking and research related to the assessment of adaptive behavior (Everington & Olley, 2008). Because of its tripartite model of conceptualizing adaptive behavior (i.e., conceptual, social, and practical), the 2002 AAMR definition better addresses the issue of impaired social intelligence, which has been described as a key characteristic of those with mental retardation (Greenspan, Switzky, & Granfield, 1996), and particularly those who become involved in the criminal justice system (Greenspan, Loughlin, & Black, 2001). However, Olley et al. (2006) have questioned whether a new definition, at least in terms of measuring deficits in adaptive behavior, is needed for the purpose of forensic cases.

Definitions of
mental
retardation in
death penalty
statutes

A recent review by DeMatteo et al. (2007) of state legislation defining mental retardation reflects a general acceptance of professional/clinical definitions of mental retardation, though endorsing different definitions or only a portion of the diagnostic criteria. More specifically, four death penalty states (i.e., Delaware, Idaho, North Carolina, and Oklahoma) use the *DSM-IV-TR* definition. Six death penalty states (i.e., Connecticut, Florida, Oregon, Texas, Virginia, and

Washington) have adopted either the 1992 or the 2002 AAMR definition. Only one state, Maryland, has adopted the definition provided by the American Psychological Association, which consists of significant limitations in general intellectual functioning, significant concurrent limitations in adaptive functioning, and onset prior to age 22 (Jacobson & Mulick, 1996). The remaining states that currently permit the death penalty have statutes that define mental retardation in ways that diverge somewhat from the *DSM-IV-TR*, AAMR, and American Psychological Association definitions (DeMatteo et al., 2007).

The differences between definitions across statutes exist primarily in terms of whether or not all three prongs of the definition are required (i.e., significantly subaverage intellectual functioning, limitations in adaptive functioning, and age of onset) and whether any or all of the three prongs are specifically operationalized in the definition (e.g., IQ score of 70 or below, deficits in two out of ten areas of adaptive behavior). Eight states' statutes (Alabama, Colorado, Georgia, Nevada, New Hampshire, New Jersey, Ohio, and South Carolina) use the three prongs common to widely accepted definitions in the field, but do not operationalize any of these three criteria by identifying a specific IQ score, the required number of adaptive deficits, or a particular age of onset (DeMatteo et al., 2007). Twelve states (i.e., Arizona, California, Indiana, Kentucky, Louisiana, Missouri, Mississippi, Pennsylvania, South Dakota, Tennessee, Utah, and Wyoming) that currently permit the use of the death penalty have statutes containing all three prongs common to most definitions; but these statutes operationalize only one or two of the three clinical criteria common to all definitions (DeMatteo et al., 2007). Four states (i.e., Arkansas, Illinois, Nebraska, and New Mexico) allow IQ scores that are below a specified cutoff to constitute presumptive evidence of mental retardation, regardless of whether an individual has demonstrated deficits in adaptive functioning and onset during the developmental period (DeMatteo et al., 2007).

This appears to focus the determination on the more “objective” data provided by intelligence testing, even if broadening the classification of eligible offenders.

Many states with statutory definitions of mental retardation have not revised their statutes post-*Atkins*. As of September of 2008, 12 death penalty states have yet to develop statutes for determining mental retardation in *Atkins* cases. These include: Alabama, Mississippi, Montana, New Hampshire, New Jersey, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Texas, and Wyoming (DPIC, 2008). Although most of these states have statutes that define mental retardation (DeMatteo et al., 2007), it is unclear how these statutes apply in *Atkins* proceedings. Some death penalty states, such as Mississippi and Texas, which do not yet have statutes to define mental retardation specifically for the purpose of *Atkins* proceedings, have adopted the *Atkins* decision in case law (i.e., *Chase v. State*, 2004; *Ex parte Briseno*, 2004). In the face of definitional differences between individual states, it is likely that the *Atkins* decision is applied inconsistently across death penalty jurisdictions. As DeMatteo et al. (2007) have observed:

Given the differing definitions of mental retardation among the states . . . an offender diagnosed as mentally retarded in one state may not qualify for that diagnosis in a neighboring state due to definitional differences. As such, after *Atkins*, where a capital crime is committed has a large effect on whether an offender can be sentenced to death. (p. 791)

Beyond these types of definitional issues, the *Atkins* Court also did not specify how, when, or by whom the issue of mental retardation is to be decided in capital cases. In most states, the judge makes the determination of mental retardation in *Atkins* cases (Ellis, 2003). But, procedures vary across jurisdictions with regard to when the issue must be raised, who has the burden of persuasion, and the burden of proof that is required (DPIC, 2008). Such procedural differences increase the likelihood that the *Atkins* decision will be applied inconsistently across death penalty states

(DeMatteo et al., 2007; Duvall & Morris, 2006; Orpen, 2003).

Diagnosis
and
misdiagnosis
of mental
retardation in
Atkins cases

Because the population of individuals with mental retardation consists mostly (i.e., approximately 85%) of those who function in the mild range of impairment (APA, 2000), and because their impairments are often not immediately observable, accurate diagnosis for this subpopulation can be particularly difficult (Everington & Olley, 2008). This issue is of no less concern among capital offenders who have mental retardation, as virtually all are within the mild category of mental retardation.

Some commentators (Baroff, 1991; Keyes et al., 1998) have suggested that misdiagnosis may, in part, be due to a lack of understanding of the definition of mental retardation and failure to properly assess each diagnostic criterion. Misdiagnosis also may stem from inaccurate and stereotyped notions regarding the characteristics of those with mental retardation (Everington & Olley, 2008; Keyes et al., 1998; Olvera, Dever, & Earnest, 2000). For example, those with mild mental retardation who become involved in the criminal justice system typically do not exhibit stereotypical physical or behavioral characteristics commonly associated with severe mental retardation. As a result, they are often misperceived as having a “normal” appearance (Keyes et al., 1998). Basing a diagnostic finding on first impression is additionally problematic, as persons with mental retardation often attempt to compensate for their limitations through behaviors that mask their disability (Keyes et al., 1998). Though there are variations in the course and behavioral expression of mild mental retardation, a particularly cogent description of mild mental retardation was provided the Editorial Board of the APA Division 33 in the *Manual of Diagnosis and Professional Practice in Mental Retardation* (1996):

People classified with mild MR evidence small delays in the preschool years but often are not identified until after school entry, when assessment is undertaken following academic failure or emergence of behavior problems. Modest expressive language delays are evident during early primary school years, with the use of 2- to 3-word sentences common. During the later primary school years, these children develop considerable expressive speaking skills, engage with peers in spontaneous interactive play, and can be guided into play with larger groups. During middle school, they develop complex sentence structure, and their speech is clearly intelligible. The ability to use simple number concepts is also present, but practical understanding of the use of money may be limited. By adolescence, normal language fluency may be evident. Reading and number skills will range from 1st to 6th-grade level, and social interests, community activities, and self-direction will be typical of peers, albeit as affected by pragmatic academic skill attainments. Baroff (1986) ascribed a mental age range of 8 to 11 years to adults in this group. 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. Consequently, their involvement in adult services and participation in therapeutic activities following completion of education preparation is relatively uncommon, is often time-limited or periodic, and may be associated with issues of adjustment or disability conditions not closely related to MR. (pp. 17-18)

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Regardless of the definition (e.g., *DSM-IV-TR*, AAMR) used to diagnose mental retardation in death penalty cases, evaluators should address all three of the clinical components of the widely accepted definitions in the field (Everington & Olley, 2008). In addition, because of the high stakes nature of these cases, it is essential that forensic assessment methods are consistent with standards of professional practice and psychological testing (Ellis, 2003; Ellis & Luckasson, 1985; Olvera et al., 2000; see also American Psychological Association, 2002; Committee on Ethical Guidelines for Forensic Psychologists, 1991).

Despite the minor differences between the various clinical definitions of mental retardation, all have three common components: (1) significant deficits in intellectual

functioning; (2) related or concurrent deficits in adaptive functioning; and (3) onset during the developmental period. In the following sections, we discuss the assessment of these three prongs, with additional emphasis on the topic of assessment of malingered mental retardation and other controversial issues related to the evaluation of mental retardation in death penalty cases.

Assessment of intellectual functioning

According to the current and most widely accepted definitions of mental retardation, intellectual functioning must be assessed using standardized, individually administered measures of intelligence (AAMR, 2002; APA, 2000). In addition, only global measures of intelligence are acceptable for making a diagnosis of mental retardation (AAMR, 1992; Sattler, 2002).

Instruments for measuring intelligence

There are three intelligence tests that are generally accepted measures of mental retardation for adults (Everington & Olley, 2008). The most current editions of these instruments include the *Wechsler Adult Intelligence Scale—Fourth Edition (WAIS-IV)* (Wechsler, 2008); the *Stanford-Binet Intelligence Scale—Fifth Edition (SB-5)* (Roid, 2003); and the *Kaufman Adolescent and Adult Intelligence Test (KAAIT)* (Kaufman & Kaufman, 1993). The *WAIS-III* (and now *WAIS-IV*) and the *SB-5* are considered by many practitioners as the “gold standard” in assessments of mental retardation in death penalty cases (Macvaugh & Grisso, 2006). Studies have shown that historically, the Wechsler scales have been the most emphasized in graduate level psychological assessment courses (Oakland & Zimmerman, 1986) and also have tended to be the most frequently used by clinical psychologists in practice (Kaufman, 1990).

The *WAIS-IV* contains ten Core Subtests and five Supplemental Subtests, producing scores on four scales: verbal comprehension,

perceptual reasoning, working memory, and processing speed. These replace the verbal and performance (non-verbal) scales that had characterized earlier editions of the *WAIS*. The *WAIS-IV* yields a General Ability Index and Full Scale IQ score. IQ scores on the *WAIS-IV* have a mean of 100 and a standard deviation of 15. Therefore, an overall IQ score of 70 on the *WAIS-IV* is two standard deviations below the mean and represents the bottom 2.2% of the standardization sample.

Not uncommonly, mental health professionals will encounter group-administered intelligence test scores in the records of capital offenders. For example the *Revised Beta Examination* (Kellogg & Morton, 1978) has been widely used as a screening test for inmates who are entering into correctional facilities (Baroff, 1991; 2003). The *Revised Beta Examination* is a nonverbal, group administered, intelligence test that was originally developed during World War I for assessments of draftees who were unable to read English. It should not be given the same weight as the Wechsler or Stanford Binet scales and should not be used to diagnose mental retardation (Baroff, 1991; Everington & Olley, 2008). Because independent effort cannot be assured, mental health professionals are also cautioned about relying on scores from group-administered tests, particularly when administered in a correctional setting, to rule out mental retardation.

In addition, scores from short forms and/or abbreviated tests of intelligence such as the *Wechsler Abbreviated Scale of Intelligence (WASI)* (Wechsler, 1999), *Slosson Intelligence Test—Revised* (Slosson, 1991), and the *Kaufman Brief Intelligence Test (K-BIT)* (Kaufman & Kauman, 1990) also are occasionally encountered in the records of capital defendants or utilized in *Atkins* evaluations (Everington & Olley, 2008). These, however, should be considered supplemental and should not be given the same weight as the more comprehensive, global measures of intelligence (e.g., *WAIS-IV*, *SB-5*), which are required for diagnosing mental retardation (Keyes et al., 1998).

<i>Practice recommendation</i> 3	In evaluating the intellectual prong in <i>Atkins</i> evaluations, mental health professionals should place primary reliance on scores from global, individually administered, comprehensive, multisubtest, standardized measures of intelligence.
Factors affecting interpretation of intelligence test scores	Even when global, individually administered, standardized tests of intelligence are used in accordance with standards of professional practice, there are a number of factors that affect the interpretation of IQ scores, all of which can greatly impact the diagnosis of mental retardation in <i>Atkins</i> cases. These include: (a) standard error of measurement, (b) practice effects, (c) the Flynn Effect, (d) active symptoms of mental illness, (e) cultural and linguistic factors, and (f) verbal and performance IQ score discrepancies. In addition to discussing factors that affect IQ score interpretation, we will further consider the related issues of the examiner's clinical judgment and the imprecision of IQ scores.
Standard error of measurement	A fundamental assumption in the field of psychological assessment is that all tests have error. Error invariably exists in intelligence testing because of factors related to test construction. Test error is defined in psychometric terms as the standard error of measurement (SEM), which provides an estimate of the amount of error in a person's observed test score. The SEM is simply another way of expressing the reliability of a test; as the reliability of the instrument increases, the SEM decreases, which gives the examiner more confidence in the accuracy of an observed score. The SEM is calculated based on the reliability coefficient and standard deviation of the instrument. The SEM varies across instruments, age ranges, and even between individual IQ scores due to the statistical concept of regression to mean (Kaufman & Lichtenberger, 1999). The key point here is that that a particular obtained IQ score should be interpreted as existing within the range of error for the test instrument (e.g., "confidence interval"), as an obtained score is only an estimate of a person's "true" IQ score. For example, if a 32 year-old male capital murder defendant obtained a Full Scale

IQ score of 72 on the *WAIS-III*, because of the SEM (at a “.95% confidence interval”), there is a 95% chance that this his “true” Full Scale IQ score would likely fall somewhere between 67 and 76 (because the 95% confidence interval is $72 \pm \text{the SEM of } 2.32 \times 1.96 = 4.5$). Because of the measurement error associated with all intelligence test scores, it is possible to diagnose mental retardation based on an IQ score of 75 or below, as long as there is evidence of related deficits in adaptive behavior (AAMR, 1992; APA, 2000).

Error in intellectual assessment is not solely a function of psychometric statistics. Other sources of error or assessment imprecision may involve the examinee, the examiner, and/or the testing situation on the particular day in which the test is administered. Such factors include the mental and physical health, mood, effort, and motivation of the examinee during testing; subtle examiner mistakes in administration and scoring; and other events that occur unexpectedly in the testing environment that create a less than optimal testing situation (e.g., poor lighting, noise distractions in the testing room).

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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. Efforts should be made to minimize other sources of error by strict adherence to test instructions and rechecking scoring. When additional error is introduced, such as through sub-optimum testing conditions or examiner mistakes in test administration or scoring, these should be candidly and proactively acknowledged.

**Practice
effects**

Gain scores, also called “practice effects,” can be caused by repeated administrations of the same intelligence test in a short period of time. This may be problematic in *Atkins* cases should multiple experts administer the same intelligence test to offenders within a relatively brief timeframe. 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 (Kaufman & Lichtenberger, 1999).

Estimates of practice effects based on test—retest administrations over an interval of several weeks or months amounted to approximately two to three points for Verbal IQ, nine to ten points for Performance IQ, and six to seven points for Full Scale IQ (Kaufman, 1990; 1994); although this tends to vary by age (Kaufman & Lichtenberger, 1999). As noted in the *WAIS-III and WMS-III Technical Manual* (The Psychological Corporation, 1997), in one study involving 394 subjects in the standardization sample of the *WAIS-III* who were tested and retested at a mean interval of 34.6 days, mean test scores were two to three points higher on Verbal IQ scores, three to eight points higher on Performance IQ scores, and two to three points higher on Full Scale IQ scores; this was attributable “mainly to practice” (p. 57). 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.

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Avoid 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.

Flynn effect

The Flynn Effect is a well-established finding that IQ scores are inflating (becoming increasing overestimates) by approximately .31 points per year from the date of test standardization to the date of test administration (AAMR, 2005; Flynn, 1984a, 1984b, 1987, 1998, 2000, 2006; Kanaya, Scullin, & Ceci, 2003). Thus, an individual’s IQ score becomes artificially increased as a function of when the

intelligence test was administered relative to the date in which it was standardized. The Flynn Effect is more pronounced for performance (i.e., nonverbal or fluid) intelligence.

Although the Flynn Effect is a well-established statistical phenomenon of intelligence tests and has gained general acceptance in the scientific community (Neisser, 1998), the practice of adjusting individual IQ scores downward in capital cases to correct for the Flynn Effect is an issue of some debate in the post-*Atkins* era. Lack of widespread adoption of Flynn Effect score corrections in *Atkins* evaluations may be a function of limited familiarity of examiners with this concept. Instruction regarding the modification of individual IQ scores to account for the Flynn Effect has not traditionally been a component of psychology graduate school training in intelligence testing. Not surprisingly, then, correcting IQ scores for the Flynn Effect in clinical practice has also lagged behind the scientific acceptance of this statistical phenomenon.

The implications of the Flynn Effect are not limited to *Atkins* evaluations or even the forensic arena. In a large-scale study designed to explore the impact of the Flynn Effect and its impact on special education placement recommendations, Kanaya et al. (2003) reviewed archived special education records for 8,944 school-age children from nine sites around the United States who had been tested and retested for special education programs and had IQ scores that fell in the borderline and the mild range of mental retardation. By comparing students' Full Scale IQ scores on the older *Wechsler Intelligence Scale for Children—Revised (WISC-R; Wechsler, 1974)* to their scores on the newer *Wechsler Intelligence Scale for Children—Third Edition (WISC-III; Wechsler, 1991)*, Kanaya et al. (2003) found that students in both groups lost an average of 5.6 points when retested with the newer version of the test. Stated differently, these students' scores on the outdated *WISC-R* were on average 5.6

points higher compared to their scores when tested on the renormed *WISC-III*, and these students also were more likely to be classified as mentally retarded compared to their peers who were retested on the same test (Kanaya et al., 2003).

Flynn (2006, 2007) and Greenspan (2006, 2007), as well as Schalock et al. (2007), have advocated that it is appropriate to adjust individual test scores to account for the Flynn Effect in *Atkins* cases (see also Kanaya et al., 2003). Specifically, Flynn (2006, 2007) proposed that individual IQ scores should be lowered 0.3 points per year, in order to cover the period of time between the year in which the test was normed and the year in which a person was administered the test. Flynn (2006, 2007) further proposed that an additional 2.34 points should be deducted from IQ scores obtained on the *WAIS-III* because of a sampling error in its standardization. In an attempt to correct the “tree stump” phenomenon, whereby a subject was able to obtain an IQ score in the 40s without giving a single correct answer, The Psychological Corporation, the publisher of the *WAIS-III*, apparently did too good of a job in stratifying for low ability, in that the sample contained too many low scoring subjects, which produced norms that overstated IQ by 2.34 points (Greenspan, 2007). According to Flynn (2007), for example, an IQ score of 81 on the *WAIS-III* obtained in 2007 should be reduced 3.6 points to account for 12 years of obsolescence, and then further reduced by 2.34 points to account for the sampling error unique to the *WAIS-III*, yielding a total IQ score reduction of 5.94 points. Using Flynn’s (2006, 2007) proposed score reductions, an IQ score of 81 (after subtracting approximately six points), therefore, becomes a corrected IQ score of 75, which is the upper limit for mild mental retardation when considering the SEM. However, this recommendation is not without disagreement (see Moore, 2006). Further, the publisher of the Wechsler tests does not endorse the recommendation to modify *WAIS-III* scores to correct for the Flynn Effect (Weiss, 2007).

Although the practice of adjusting individual IQ scores in capital cases to account for the Flynn Effect has been argued in a number of *Atkins* cases at both the trial and appellate court levels, the courts' willingness to accept the Flynn Effect has varied. For example, in the California case of *People v. Vidal* (2007), the trial court accepted the Flynn Effect and noted that it must be considered in the determination of the defendant's IQ. Some courts have ruled that the Flynn Effect should be considered on a case-by-case basis (e.g., *Walker v. True*, 2005), whereas others have explicitly rejected the Flynn Effect. In *Ledford v. Head* (2008), for example, the Federal Court for the Northern District of Georgia noted, "The Court is not impressed by the evidence concerning the Flynn effect...The Court is hesitant to apply a theory that is used solely for the purpose of lowering IQ scores in a death penalty context" (p. 7). (Note, however, the discussion of Kanaya et al. (2003) regarding applications to special education and mental retardation classifications of children.) To date, no state statute addresses the Flynn Effect (Duvall & Morris, 2006).

*Practice
recommendation*
6

Though recognizing that there is debate among forensic practitioners regarding this issue, as well as inconsistent court rulings, we believe that the Flynn Effect has gained sufficient scientific acceptance that this factor should be described in *Atkins* assessments and that Flynn-corrected IQ scores (including the 2.34 adjustment of WAIS-III Full Scale IQ score) 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.

**Mental
illness and
IQ scores**

Mental illness and mental retardation are sometimes confused by both mental health professionals and courts. Mental retardation is a developmental disability, not a mental illness. Mental illness and mental retardation are distinctly unique and have different causes, courses, treatments and outcomes (Keyes et al., 1998). Further, mental retardation and mental illness are

not mutually exclusive conditions. A substantial minority of individuals who have mental retardation also suffer from mental illness (Ellis & Luckasson, 1985). Menolascino (1985) estimated that approximately 30% of persons with mental retardation also have mental illness. Therefore, with some regularity, clinicians involved in *Atkins* cases will encounter an evaluatee who has a comorbid psychotic-spectrum disorder, mood or anxiety disorder, or other psychiatric disorder. Such conditions may or may not significantly interfere with an examinee's performance on intelligence testing. It is not so much whether a particular evaluatee has a major mental illness. The issue is whether or not the person has active symptoms that would affect test performance. Symptoms of sufficient severity to significantly compromise performance on intellectual testing are typically apparent from a clinical interview.

*Practice
recommendation*
7

In the face of active and significant symptoms of psychological disorder, we recommend that the evaluation be postponed until the evaluatee 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 active symptoms of mental 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.

Cultural and
language
factors

Cultural and language factors also can play a role in a forensic evaluation of mental retardation, particularly in terms of the assessment of intelligence. This has significant implications for death penalty states with high concentrations of Spanish-speaking individuals in their criminal justice systems (see Ardila, 2000). More problematic, of course, are cases where the defendant is less than fully fluent in either English or Spanish, or less frequently where the defendant is only fluent in some other language.

The current standard for an individually administered Spanish-language intelligence test is the Spanish *WAIS-III* (TEA, 1999), standardized on an age-stratified (16-94 years of age) sample of 1,369 Spanish-speaking participants (for a discussion of the factor structure, see Garcia, Ruiz, & Abad, 2003). An earlier Spanish version of the Wechsler scales (*Escala de Inteligencia Wechsler Para Adultos [EIWA]*) is unsatisfactory for intellectual assessment of Hispanic Americans (Garcia et al., 2003). The *EIWA* was normed on a rural population in Puerto Rico in 1965. This sample was overrepresented with persons having less education and lower status employment than is representative of the U.S. population (Lopez & Romero, 1988). Though ostensibly derived from the *WAIS*, the *EIWA* contains more items that differ from the *WAIS* than are identical (Lopez & Romero, 1988). The conversion of raw scores to scaled scores results in substantially higher scale scores on the *EIWA*. As a result of these factors, the *EIWA* overestimates *WAIS* Full Scale IQs by more than a standard deviation (Frumkin, 2003; Melendez, 1994).

*Practice
recommendation*
8

Examiners should be aware of the cultural factors that may affect the validity of the assessment instruments and methodology. Instruments based on the most relevant norms should be utilized. It is never appropriate to simply translate test queries from English to another language and adopt the English-language norms. Non-English-speaking defendants, as well as those lacking adequate English fluency, should be assessed by a bilingual examiner who has fluency in the language of the defendant.

Verbal and
performance
IQ score
disparities

It is not uncommon in both clinical and forensic settings for individuals to show significant differences between their verbal and performance abilities as measured by their Verbal and Performance IQ scores. In clinical practice, this difference in ability has implications for both diagnostic assessment and treatment planning, particularly in terms of the diagnosis of learning disorders, attention disorders, and others. In cases in which individuals demonstrate significant or “abnormal”

differences between their Verbal and Performance IQ scores (e.g., 20 points or more), the overall Full Scale IQ score derived by combining the two domains becomes much less meaningful as an estimate of overall intellectual functioning (APA, 2000; Kaufman & Lichtenberger, 1999).

Some mental health experts in *Atkins* cases have argued that when there is a substantial disparity between verbal and performance IQ scores, only the lower score should be used to determine intellectual deficits for purposes diagnosing mental retardation. For example, in the California Supreme Court case of *People v. Vidal* (2007), defense experts argued that Vidal's Full Scale IQ scores that were in the low average to average range were misleading because of verbal – performance IQ score differences, which ranged between 26 and 65 points across previous test administrations. Because Vidal's verbal IQ scores were significantly lower than his performance IQ scores across test administrations, both defense experts argued that this was a better index of his overall intellectual functioning. The trial court agreed and found Vidal to be mentally retarded. The People petitioned the Court of Appeal, which vacated the trial court's ruling, citing that general intellectual functioning is to be determined by the Full Scale IQ score. Vidal appealed to the California Supreme Court, which reversed the lower appellate court's ruling and remanded the case for further proceedings. In its reasoning, the California Supreme Court appeared to state that a particular IQ score alone, as a matter of law, is not dispositive on the issue of mental retardation.

*Practice
recommendation*
9

Although significant differences between verbal and performance IQ scores can impact the validity of the Full Scale IQ score on previous editions of the Wechsler intelligence tests (e.g., *WAIS-III*, *WAIS-R*), this is of less concern for the current version of this instrument (*WAIS-IV*), which does not rely upon verbal and performance IQ scores to determine the Full Scale IQ. Nevertheless, examiners in *Atkins* cases will inevitably be faced with the task of also

having to interpret the results of a defendant's previous IQ scores obtained on former versions of the Wechsler scales. In such instances, we recommend that when significant differences exist between verbal and performance IQ scores, this should be reported, as well as the limitations of relying upon the Full Scale IQ score as an index of overall intellectual ability.

Clinical
judgment

The interpretation of IQ scores depends in part upon the examiner's clinical judgment (Sattler, 1992; Kaufman, 1990, 1994; Anastasi & Urbina, 1997). Clinical judgment is similarly relevant for assessments of mental retardation (Schalock & Luckasson, 2005). Such clinical judgments, however, 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, 2008; Schalock & Luckasson, 2005). Such misuse of "clinical judgment" includes assertions that the observed IQ score on formal testing substantially underestimates the "actual IQ" solely because of a defendant's vocabulary usage or social recognition during an interview, particularly in the absence of other convergent data suggestive of a higher level of intellectual functioning. 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 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.

By contrast, more appropriate exercise of clinical judgment occurs in interpreting the relationship between current and previous IQ scores for the purpose of an *Atkins* proceeding. For example, it is not uncommon to find differences in an individual's prior IQ scores, particularly when these have

been obtained over a period of decades. Such differences may occur on multiple administrations of the same test, on different editions of the same test, and on different tests (Baroff, 2003). Forensic experts in *Atkins* cases are thus often faced with reconciling discrepant scores. There are a number of factors that may account for variability in observed IQ scores. For example, past examiners may have had variable levels of qualifications and experience, potentially impacting on the test administration. In the authors' experience, scoring errors on IQ tests are common, even among experienced examiners. Alternatively, prior scores may be derived from the use of different types of instruments with less than comparable reliability and validity coefficients. Prior scores obtained based on test administrations that occurred across a wide range of settings (e.g., psychoeducational assessments in the school setting, clinical assessments in inpatient and outpatient psychiatric treatment settings) for different referral reasons may also have resulted in inconsistent scores. This is particularly relevant if the evaluatee has been previously tested in medico-legal contexts (e.g., disability evaluations, prison intake assessments, pre-trial forensic evaluations) in which suboptimal effort may have affected the validity of prior scores. Although intelligence is often described by psychologists as a stable characteristic, forensic clinicians should be prepared to explain to courts that IQ scores can vary over time and across different conditions, so a certain amount of variability in IQ scores is not uncommon (Everington & Olley, 2008).

*Practice
recommendation
10*

Review the raw test data from prior intellectual assessments and closely inspect the scoring procedures used. Consider the psychometric properties of previously employed instruments, as well as the context of that testing. Incorporate applicable hypotheses for score discrepancies in reports and testimony that detail IQ scores from previous and current assessments. Mental health experts should apply their specialized knowledge of psychometrics and factors influencing assessment findings to their evaluations in *Atkins*

proceedings. 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.

Imprecision of IQ scores

As noted above, significantly subaverage intellectual functioning is numerically specified in *DSM-IV-TR* (APA, 2000) and in several state statutes that define mental retardation as an IQ score of approximately 70 or below. Accordingly, an IQ score of approximately 70 or below may be a necessary requirement for a finding of mental retardation in some states. As a result, legal professionals in *Atkins* proceedings occasionally place significant weight on a particular IQ score (e.g., 71 or 72) that is above the standard cutoff for mental retardation. Whatever the public policy necessity of a bright-line boundary, a rigid IQ cutoff score to distinguish between those who do and do not have mental retardation is quite arbitrary (see Mossman, 2003). There is no actual behavioral/functional difference between an individual who has an IQ score of 69 and one with an IQ of 71, especially when test error is taken into consideration. Baroff (2003) has offered a useful analogy to illustrate the artificiality of an IQ score of 70 by comparing the distribution of IQ scores to the color spectrum. The difference between an IQ score of 69 and 71, for example, is similar to the difference between the colors of yellow and orange, which is apparent only at extreme ends.

This psychometric imprecision underscores the importance of considering IQ scores within the context of other evidence of adaptive functioning. As Everington & Olley (2008) point out, when individuals score two standard deviations below the mean on an intelligence test, it is unusual for them to have no deficits in adaptive skills, since the two constructs overlap and are highly correlated (Simeonsson & Short, 1996).

Practice recommendation 11 Forensic clinicians should avoid rigid IQ score cut offs and make clear to the courts in their written opinions and testimony in *Atkins* cases the functional imprecision of IQ scores, e.g., an IQ score of 70 represents an arbitrary boundary between the diagnoses of mild mental retardation and borderline intelligence.

Assessment of adaptive functioning

The adaptive behavior prong of a diagnosis of mental retardation specifies that intellectual deficits should be accompanied by real world, disabling effects on an individual's functioning (Ellis, 2003). Because the IQ scores of defendants who are potentially *Atkins*-eligible may straddle (considering SEM) the mild mental retardation and borderline classifications, assessment of adaptive behavior can be particularly important to the diagnostic differential (see Olley, 2006b). This creates its own challenges, however, as adaptive behavior deficits have been described as the most problematic part of the definition of mental retardation (Everington & Olley, 2008) and may also be the least understood (Everington & Keyes, 1999). For example, some legal and mental health professionals may tend to view adaptive behavior only in terms of practical daily living skills, such as toileting, eating, dressing, driving, eating and meal preparation, money management, and maintaining household activities. In the authors' experience, these types of behaviors, when present in a capital murder defendant, are routinely cited by legal and mental health professionals as evidence that is contraindicative of mental retardation. For persons who function in the mild range of mental retardation, however, adaptive deficits are more likely to exist in the areas of social and conceptual skills than in daily living skills (Everington & Olley, 2008). Social skills include responsibility, rule following, obedience, interpersonal interactions, and gullibility. Conceptual skills include reading and writing, money concepts, and receptive and expressive language skills.

Instruments
for measuring
adaptive
functioning

Several standardized instruments have been developed to assess adaptive behavior. Current versions of these include the *Vineland Adaptive Behavior Scales II (VABS II)* (Sparrow, Balla, & Cicchetti, 2005), *Adaptive Behavior Assessment System—2nd Edition (ABAS-II)* (Harrison & Oakland, 2003), and the *Scales of Independent Behavior—Revised (SIB-R)* (Bruininks, Woodcock, Weatherman, & Hill, 1996). Each of these instruments has been normed on the general population, as well those with intellectual disabilities. Although these instruments are commonly used in the field, they have been criticized for, among other things, how they may be used in practice. This is usually less a criticism of the scales themselves and more a criticism of inappropriate applications and assessment technique. As Beirne-Smith, Patton, and Ittenback (1994) suggest, “The best instrument in the wrong (poorly trained) hands is no better than a poorly designed instrument in the hands of the best professionals” (p. 133). That said, adaptive behavior instruments have been criticized for inadequately assessing the constructs of gullibility and naiveté, which have been described in the literature as common characteristics of individuals with mental retardation (Greenspan, 1999; Greenspan & Switzky, 2003).

Some examiners report that they occasionally use the *Street Survival Skills Questionnaire (SSSQ)* (Lindhoker & McCarron, 1983) in death penalty cases to assess defendants’ adaptive functioning (Macvaugh & Grisso, 2006). The *SSSQ*, however, has been criticized as an inappropriate measure of adaptive deficits because it is a test of knowledge, rather than performance, and it emphasizes practical skills and not conceptual or social skills (Everington & Olley, 2008).

Measuring adaptive skills can also be difficult in jurisdictions that require examiners to determine if significant deficits exist in a particular domain of adaptive functioning (e.g., employment) according to the 1992 AAMR and *DSM-IV-TR* definitions of mental retardation. Because cut scores on standardized adaptive behavior instruments may not be

applicable to certain domains of behavior required by these definitions, and because it is often difficult to determine what constitutes a “significant impairment,” there is considerable room for subjectivity and measurement error. Olley (2007) has suggested that focusing on whether or not the evaluatee requires assistance in order to function adequately is a useful heuristic to follow.

*Practice
recommendation
12*

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. We concur with the criticisms of the *SSSQ* and advise against employment of this instrument in *Atkins* assessments.

Retrospective
assessments
of adaptive
behavior

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. Concerns exist regarding the validity of retrospective assessments of adaptive behavior (Brodsky & Galloway, 2003).

In response to this problem of retrospective assessment, some authors (Weiss, Haskins, & Hauser, 2004) have called for the development of a “penologically normed” instrument to assess adaptive functioning for incarcerated populations. To date, there is no such instrument available. Even if there were

such an instrument, an assessment of a particular inmate's adaptive behavior while in a highly-structured 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. It is the discrepancy in adaptive capability as compared to persons in the open community that demonstrates the functional expression of intellectual deficiency. Comparisons become near meaningless when the adaptive demands are profoundly minimized by institutionalization and where the institution itself functions to provide pervasive "assistance."

*Practice
recommendation
13*

When undertaking a retrospective assessment of adaptive behavior that may have been exhibited in the community years ago, evaluators are frequently forced to rely upon a combination of imperfect information (e.g., records, anecdotal recollections of third parties) and clinical judgment (Everington & Olley, 2008; Macvaugh & Grisso, 2006). 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.

**Clinical
interview**

Several factors may complicate interviews of capital defendants regarding adaptive functioning. 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 (Finlay & Lyons, 2002) and present with a "cloak of competence" in attempt to hide their disability in order to appear normal (Edgerton, 1967; 1993). During the clinical interview, therefore, forensic examiners should be careful not to use leading questions (Everington & Olley, 2008).

Olley et al. (2006) have cogently outlined a number of controversial issues related to the assessment of adaptive

behavior in *Atkins* cases that have relevance for the clinical interviews of these defendants. Among these include questions regarding how adaptive behavior should be conceptualized (i.e., actual or typical functioning versus potential). According to Everington & Olley (2008), there is consensus in the field that assessment of adaptive behavior should measure a person's typical or actual *performance* (Boan & Harrison, 1997), as opposed to *knowledge* of a skill or estimated potential (Schalock, 1999). Such performance is difficult if not impossible to assess in an institutional interview. Additionally, information obtained based on the defendant's self-report may be suspect (see Olley, 2006a), as some defendants with mental retardation claim greater capabilities than they actually demonstrate. For example, they are routinely unclear about their school history and often claim to have achieved more education than is actually the case (Keyes et al., 1998).

*Practice
recommendation*
14

Because persons of deficient intellectual ability tend to think in concrete and literal terms, interviews with a capital murder defendant suspected to have mental retardation should be conducted with clear and simple words using open-ended questions (Keyes et al., 1998). Avoid queries that only require assent. Further, forensic examiners should not place heavy reliance on what an *evaluee appears* to know about various seemingly complicated topics, as this may not be a reliable index of his or her actual performance. Similarly, examiners are cautioned about taking the defendant's self-descriptions at face value.

Review of
records

Information obtained from an *evaluee's* records often provides one of the most valuable sources of data in an *Atkins* evaluation. Records regarding a defendant's family history, medical history, school history, employment history, social history, military history, psychiatric history, substance use history, criminal history, and previous incarcerations can be quite illuminating regarding historical adaptive functioning in the community in a range of contexts.

School records in particular (i.e., psychoeducational reports and individualized education plans, triennial re-evaluations, transcripts of grades, retentions, promotions, teacher comments, and attendance) are especially valuable (see Keyes et al. 1998). It is in the school records that one is most likely to find evidence of mental retardation, since academic achievement is usually adversely affected by mental retardation (Baroff, 2003). It is often useful to request the assistance of a school official from the local school system who can help to interpret the meaning of school records (Olley, 2007), particularly when they appear inconsistent or contradictory.

The absence of a diagnosis of mental retardation in a defendant's school records does not demonstrate that mental retardation was not present (see Everington & Olley, 2008). Political forces in some jurisdictions have historically influenced, if not controlled, whether a particular student was labeled as mentally retarded in the schools. This variously occurred out of concerns about overrepresentation of minorities (Scullin, 2006), or because of reluctance on the part of some school professionals, particularly in the early 1960s and 1970s in southern states, to identify mental retardation because of racial tensions (Keyes et al., 1998). Similar care must also be taken in interpreting grades reports for children who were in special classes or subject to social promotion.

Correspondence or other materials purportedly written by the defendant may be among the records provided for review. Obviously, writings that clearly demonstrate advanced conceptual capabilities would be inconsistent with mental deficiency. However, the 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.

*Practice
recommendation
15*

Seek and thoroughly analyze a wide range of records. In cases where it is suspected that the records may not be a candid reflection of the defendant's performance in a school or employment context, school personnel, employers, and other third parties should be interviewed. Caution is suggested in interpreting documents purported to have been written by the defendant, with careful exploration of how these materials were created and integration with other evidence of the defendant's literacy and conceptual capability.

**Third party
interviews**

Interviews of family members, former teachers, employers, neighbors, and others who may be familiar with the evaluatee usually provide rich data involving practical examples of the evaluatee's functioning across multiple settings. In retrospective assessments of adaptive behavior, these interviews may be the primary source of adaptive behavior information. Though interviewing anyone who can contribute knowledge about the person being evaluated is a useful enterprise, this methodology is not without cautions. Information obtained from interviews or affidavits of family members and other third parties may or may not be biased. This is a "Catch-22" situation: the third parties who have the closest observation of adaptive behavior are also likely to be individuals who are invested in outcome of the *Atkins* determination. However, this is a bidirectional problem. Corrections officers or other prison officials, for example, are sometimes able to provide collateral data in *Atkins* cases, but they too may have biases in how they describe an inmate's functioning. Additionally, there are limitations to correctional

observations, as neither adaptation to an institutional setting nor comparative perspectives on such adaptation is demonstrative of adaptation in the open community.

*Practice
recommendation*
16

Family members and other third parties should be interviewed individually and outside the presence of other family members or collateral sources. Seek corroboration of adaptive strengths and weaknesses by systematically inquiring about different arenas of functioning, but without leading questions. Seek explanations and descriptions rather than simple assent. The potential for bias should be bi-directionally considered.

Implications
of the instant
offense and
“criminal
adaptive
behavior”

The concept of “criminal adaptive behavior” based on the capital offense and prior criminal conduct is not within any of the clinical constructs of adaptive functioning, but has been advanced by prosecutors (see Hon, 2003) and some experts in *Atkins* determinations. The results of one survey (Macvaugh & Grisso, 2006) suggest that some evaluators consider the circumstances surrounding the index offense to be valuable data in assessing adaptive functioning with death row inmates in post-conviction cases. This notion is also embedded in the Texas *Briseno* criteria. Mr. William Lee Hon, Chief Felony Prosecutor in the District Attorney’s office in Polk County, Texas, described utilizing this perspective in the prosecution of Johnny Paul Penry:

Even in the case of Penry, who had numerous questionable IQ scores below 70, the facts of his crimes spoke volumes about his ability to plan, premeditate, cover up—in other words, think on his feet. In many instances the facts of the crime will be the best evidence of a defendant’s level of adaptive functioning. (p. 21)

This emphasis on criminal adaptive behavior is contrasted with Penry’s history, described in testimony during his 2002 capital resentencing trial. This history included having been diagnosed as mentally retarded by 27 mental health professionals (1965-1989), including in the Texas prison system until his case was returned by the U.S. Supreme Court

(Penry v. Lynaugh, 1989). Further, 24 family members, neighbors, acquaintances, teachers, and paraprofessionals had regarded him as mentally retarded. Additionally, as a child he had been placed in the Mexia State School for the Mentally Retarded and had exhibited extensive lifelong deficits in adaptive behavior in numerous *DSM-IV-TR* arenas.

“Criminal adaptive behavior” has conceivable relevance in highly sophisticated criminal schemes, such as securities fraud, which would be potential death-penalty cases if a murder was committed. In these instances, however, the defendant’s functional capability would be evident in his security transactions apart from the capital offense as well as in many other arenas of life. The more typical context of capital murder involving burglary, robbery, rape, etc., as well as the offense aftermath, involve a degree of forethought, planning, and execution that could be carried out by an individual with the mental capabilities of an 8 to 11 year old—the gross comparative mental abilities of persons who are mildly mentally retarded. The offense and offense-aftermath conduct of Johnny Paul Penry is not an exception to this observation. Not uncommonly in the capital offenses we have reviewed, there were multiple and sequential steps involved in the commission of offense or the attempt to avoid apprehension. These, however, rarely involve a level of complexity that exceeds the capabilities of late childhood and preadolescence.

Equally important, “criminal adaptive behavior” is not a concept that has passed peer-review or been accepted by the professional psychiatric and psychological community. It is not a concept that has been found useful as part of a diagnostic scheme for this disorder. For these reasons, the AAMR User’s Guide advises against this kind of methodology: “Do not use past criminal behavior or verbal behavior to infer level of adaptive behavior or about having MR/ID” (AAMR, 2002). Similarly, Olley et al. (2006) questioned whether or not it is valid to base conclusions

regarding adaptive behavior upon details regarding the capital murder index offense. Olley (2006) also has cautioned against this practice, citing isolated examples of behavior as unreliable measures of typical adaptive functioning.

A relevant question, particularly in light of our assertion that these evaluations are best conceptualized as psychodiagnostic assessments in a forensic context, is whether an isolated behavioral sequence of behavior would generate a similar degree of scrutiny in a mental retardation evaluation performed *outside* of a criminal context. Factors that would be of limited interest or relevance to a non-criminal psychodiagnostic assessment of mental retardation are arguably simply that: of limited relevance.

In a troubling variation on an offense-emphasized adaptive behavior assessment, the authors have encountered cases where there has been an assertion that the evaluation of mental retardation is dependent on the defendant responding to questions regarding the capital offense. For example, an examiner may assert that it is necessary to query the defendant regarding the time period of the capital offense in order to ascertain whether the defendant is able to sequence verbal reports of events in a logical manner or, alternatively, has the ability to formulate a plan.

Two factors would seem relevant in scrutinizing such rationales, particularly in light of balancing the information gained against the extraordinary penetration of Fifth Amendment rights that such offense-specific queries represent. First, the ability to logically sequence memories or to formulate plans is well within the capability of a mildly mentally retarded person. Even if the quality of such sequencing is relevant to the evaluation, a demonstration of the ability to logically sequence memories of a past event could be obtained by inquiry regarding *any* memorable past event and is not dependent on detailing the time period of the capital offense. Similarly, the capacity to plan can also be

assessed from a broad spectrum of non-criminal behaviors. Assessment of an examinee's adaptive functioning, whether or not a criminal defendant, is most reliably based on that person's day-to-day behavior pattern in a variety of contexts. A capital defendant has a lifetime of behavior available to be queried and sampled by an examiner, without reliance on the immediate pre- and post-capital offense conduct.

Second, information regarding adaptive function is most reliably obtained through the descriptions of third parties who have had the opportunity to closely observe the examinee in the community. The individual under evaluation is not the most reliable source of information regarding his own adaptive functioning. Additionally, appraisal of the adaptive quality of behavior is most reliably based on comparison of described behavior with that of a normative group (e.g., standardized adaptive behavior rating scales). There is no corresponding standardization group with which to compare any self-reported offense-related behavior descriptions obtained by an *Atkins* examiner.

Another issue which is sometimes raised in *Atkins* proceedings is whether or not criminal behavior can be caused by mental retardation. Baroff (1991) has argued against this:

A psychiatrist who testified for the defense argued that the defendant did meet the criterion for mental retardation because his criminal behavior was prima facie evidence of adaptive impairment. At first this seems reasonable, but one can then ask if the criminal behavior is caused or attributable to his intellectual impairment. It would not appear to be, for few people with comparable intellectual functioning exhibit this behavior. Criminal behavior is not caused by retardation, although individuals with retardation seem more vulnerable . . . 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). (p. 347)

*Practice
recommendation
17*

Evaluators are discouraged from utilizing criminal behavior to ascertain the presence or absence of deficits in adaptive functioning. Evaluators are also discouraged from relying exclusively on data obtained regarding a defendant's behavior within the context of the alleged capital offense, which could result in grave ethical and practice implications. Forensic examiners are cautioned against allowing their *Atkins* access to the defendant to serve as a pretext for a custodial interrogation for purposes of trial.

Are adaptive
deficits due
to intellectual
deficits?

A frequently debated issue related to the assessment of adaptive functioning in *Atkins* cases pertains to whether or not observed deficits in adaptive behavior are directly attributable to significantly subaverage intellectual functioning. None of the definitions of mental retardation explicitly addresses whether or not there is a direct causal relationship between these two prongs of the definition, as these definitions use terms such as "associated," "concurrent," or "related" when describing the relationship between intellectual and adaptive impairments. It is not uncommon, particularly in those jurisdictions that have adopted either the former AAMR (1992) or the *DSM-IV-TR* (APA, 2000) definitions, for experts to disagree about the cause of apparent deficits in certain domains of adaptive behavior (e.g., work, functional academics, etc.).

Baroff (1991) described this issue as "one of the ambiguities" of the 1983 AAMR definition of mental retardation (Grossman, 1983). Unfortunately, this ambiguity continues to exist in current definitions of mental retardation. Although pre-*Atkins*, Baroff (1991) further observed that, at the time, available definitions of mental retardation did

not address the seemingly crucial question of whether adaptive behavior impairments are directly attributable to intellectual functioning . . . or are merely associated with it . . . We are left to choose, and, for me, unless the behavior appears to be a direct reflection of intellectual impairment, to use it as a basis for a diagnosis of mental retardation seems illogical. (p. 348)

Based on the current definitions of mental retardation, the ambiguity regarding the cause of adaptive behavior deficits continues to present a problem in the post-*Atkins* era. Some commentators have argued that the cause of adaptive impairments is irrelevant. For example, Olley (2007) has asserted:

Many arguments in court appear to be based on the assumption that diagnostic categories are explanatory concepts or causal factors. The discussion is sometimes framed as, “Was the observed adaptive behavior deficit caused by mental retardation or by something else?” The reply is that mental retardation is not a cause at all, but a result. Mental retardation is a label given to a constellation of observed behaviors. It doesn’t cause anything, but any one of several hundreds of known factors (genetic, environmental, infection, trauma, etc.) can cause the condition that we call mental retardation. Although the cause of mental retardation is often not known, it is clear that mental retardation is a term for the result; it is not a cause. To reason otherwise would be to argue that mental retardation causes mental retardation. (pp. 3-4)

Although the reasoning proposed by Olley (2006b) has merit, to say that that adaptive impairments do not have to be due to intellectual impairments is problematic. In our view, the task of determining the cause(s) of what may be an adaptive deficit is different than attempting to determine the cause of mental retardation. Some behaviors or patterns of behavior could be related to intellectual difficulties, personality traits, both, or a combination of those and other factors. For example, a person might drop out of school after repeated failure to succeed no matter how hard he tried. Or a person might drop out of school to pursue a criminal lifestyle. Both could be true for the same person.

*Practice
recommendation*
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Recognizing that deficits in adaptive functioning may arise from multiple sources, forensic clinicians in *Atkins* cases should neither assume that adaptive deficits are invariably related to intellectual impairment nor exclude intellectual impairment as an etiological factor in the presence of other contributing factors. We recommend that forensic clinicians consider and be prepared to explain the role of any intellectual impairment in the observed deficiency in adaptive

functioning. Review of the trajectory of adaptive deficits over time may inform this differential.

Age of onset

The third component of all definitions of mental retardation requires that the disability occurs during the developmental period (AAMR, 1992, 2002; APA, 2000). Many states have defined this as prior to age 18; although, some states have extended the age to 22 (Bonnie & Gustafson, 2007; DeMatteo et al., 2007; Ellis, 2003). The key point is that when a severe intellectual disability occurs during an individual's development, the entire developmental process is negatively affected (Keyes et al., 1998). School records in particular provide an invaluable source of information in determining whether or not there was evidence of mental retardation during the developmental period (Baroff, 2003).

Because the onset of mental retardation occurs during the developmental period, this prong of the definition prevents diagnostic confusion with other disorders that occur later in life, such as traumatic brain injury and/or dementia as a result of chronic substance use. In cases in which an individual sustains brain damage later in adulthood, the proper diagnosis would be Dementia due to Head Trauma, not mental retardation (Keyes et al., 1998); although, this would not be the case when brain damage occurs prior to age 18. Additionally, the age of onset criterion provides important historical information that is helpful to determine whether or not a capital defendant is attempting to malingering mental retardation (Bonnie & Gustafson, 2007; Ellis, 2003).

Assessment of suboptimum effort and malingered mental retardation

In his dissenting opinion in *Atkins*, Justice Scalia expressed concern about the possibility that individuals can "readily"

feign mental retardation. Though the frequency and ease with which mental retardation can be successfully feigned by capital offenders are likely less than feared by Justice Scalia, the potential for suboptimum effort warrants the scrutiny of mental health experts and the court in any determination of *Atkins* eligibility. 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. In considering the range and motivation of *Atkins* evaluatees, it may be helpful to conceptualize six categories, each with its own set of implications: (1) nonretarded, nonmalingerers who give good effort on testing, (2) retarded, nonmalingerers who give good effort, (3) nonretarded, nonmalingerers who give suboptimum effort, (4) retarded, nonmalingerers who give suboptimum effort, (5) nonretarded malingerers who feign memory and other intellectual deficits; and (6) retarded malingerers who feign memory and/or exaggerate other intellectual deficits. However, identifying which category a particular defendant should be assigned, and the associated implications, is challenging in these cases. 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.

Application
of cognitive
effort
instruments
to mental
retardation
assessments

The assessment of effort in *Atkins* assessments is complicated by the absence of a standardized measure that has been designed and validated specifically for the purpose of assessing suboptimum effort among persons with mental retardation and assessing malingered mental retardation among persons of higher intellectual ability. Although several instruments exist that are designed to assess malingering of memory and cognitive deficits, these instruments lack sufficient normative data for persons with mental retardation in their standardization samples. Therefore, it is unclear as to

whether or not persons with mental retardation may score in such a manner on these instruments (because of mental retardation) that they appear to be malingering when they are not, thereby creating the risk of false positives.

There have been relatively few studies to date that have investigated the validity of cognitive malingering measures for those with mental retardation, and these have produced mixed results. For example, Goldberg and Miller (1986) administered the *Rey-15 Item Memory Test* (Rey, 1964) to individuals with severe psychiatric disorders and those with mental retardation and found that 38% of those with mental retardation failed the *Rey-15 Item Memory Test*. Schretlen and Arkowitz (1990) used a combination of measures, including validity scales of the *MMPI-2*, two scores on the *Bender Gestalt* (Bender, 1938), and an experimental measure to identify individuals feigning insanity or mental retardation and found that the combination of measures accurately identified most of the individuals who feigned mental retardation. Their combined measure, however, has not been subsequently subjected to crossvalidation. Hayes, Hale, and Gouvier (1997) administered three measures of malingering, including the *Rey 15 Item Memory Test*, the *M-Test* (Beaber, Marston, Michelli, & Mills, 1985), and the *Dot Counting Test* to 37 individuals in a maximum-security forensic hospital who had been diagnosed with mental retardation and found that this battery of tests failed to identify malingering in those with mental retardation.

In a study with a nonforensic sample of individuals with IQ scores that ranged between 50 and 78, Hurley and Deal (2006) administered four measures of malingering, which included one that assesses feigned psychiatric disorders, the *Structured Interview of Reported Symptoms (SIRS)* (Rogers, Bagby, & Dickens, 1992), and three measures of malingered memory: the *Test of Memory Malingering (TOMM)* (Tombaugh, 1996), the *Rey 15-Item Memory Test*, and the *Rey Dot Counting Test (RDCT)* (Boone, Lu, & Herzberg, 2002).

The researchers found that three of the four measures were ineffective for a population of those who have mental retardation but recommended that the *RDCT* undergo further evaluation as a screening measure. However, Simon (2007) reported that with a sample of 21 adjudicated forensic inpatients with comorbid Axis I disorders and mental retardation, the *TOMM* was useful in assessing malingering with individuals who have mental retardation.

Finally, in a study by Graue et al. (2007), the investigators administered the *WAIS-III*, the *Miller Forensic Assessment of Symptoms Test (M-FAST)* (Miller, 2001), the *Structured Inventory of Malingered Symptomatology (SIMS)* (Widows & Smith, 2005), the short-form *Digit Memory Test (DMT)* (Guilmette, Hart, Guiliano, & Leininger, 1994; Hiscock & Hiscock, 1989), the *TOMM*, the *Letter Memory Test (LMT)* (Inman, Vickery, Berry, Lamb, Edwards, & Smith, 1998), and malingering indicators of the *WAIS-III* (the Mittenberg Discriminant Function) (Mittenberg, Theroux, Anuila-Puentas, Bianchini, Greve, & Rayls, 2001) to an outpatient sample of persons with mild mental retardation ($n = 26$), community volunteers who were instructed to mangle ($n = 25$), and community volunteers who were instructed to perform honestly on the tests ($n = 10$). Graue et al. (2007) found that the Full Scale IQs for the community volunteers who were instructed to mangle were not significantly different than the IQ scores for the mildly mentally retarded group, which suggests that the malingerers were able to suppress their IQ scores to a level that was comparable to those subjects who had a diagnosis of mental retardation. The authors also found that the *M-FAST*, *SIMS*, and the *WAIS-III* malingering indicators were unable to adequately distinguish the mentally retarded and community volunteer malingering groups. On the other hand, the results of all three of the cognitive malingering measures (e.g., *DMT*, *TOMM*, *LMT*) were more encouraging, as each significantly discriminated the malingering group from both the mentally retarded group and the honest responding group. Nevertheless, 69% of the mentally retarded

group performed below the recommended cutoffs on at least one of the measures of malingering (Graue et al., 2007).

Other approaches to effort assessment

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. A variation on this inference involves administering the *WAIS-III* or *WAIS-IV*, as well as an *SB-5* in the course of the *Atkins* assessment. In this sequential testing, substantial data are obtained regarding intellectual ability, and the defendant who is making a suboptimum effort has a complex task to achieve an equivalent performance on each.

Feigning of adaptive deficits

There is a particular dearth of research regarding the exaggeration of adaptive behavior deficits by collateral sources. We could identify only a single study investigating the susceptibility of measures of adaptive behavior to malingered responding. Doane and Salekin (in press) investigated whether or not collateral informants could feign adaptive deficits on two different measures of adaptive functioning within the context of a death penalty case. The researchers demonstrated that biased information obtained on standardized measures of adaptive functioning may undermine the validity of assessments in *Atkins* cases. Specifically, the results indicated that two, well recognized measures of adaptive behavior, the *ABAS-II* and the *SIB-R*, were susceptible to feigning by collateral informants. Although the *ABAS-II* was more vulnerable to exaggeration of deficits compared to the *SIB-R*, the researchers concluded

that collateral informants are able to successfully simulate impairments in adaptive functioning commensurate with persons who have mental retardation.

*Practice
recommendation
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Examiners in *Atkins* cases should always consider the possibility of suboptimum effort in intellectual testing and falsification of third party data. Analyzing the consistency of test results over time, as well as the consistency of testing with records and third party descriptions, can provide critically important perspectives regarding this issue. Utilization of instruments designed to assess effort or malingering in cognitive assessments is complicated by uncertainty regarding score interpretation. When errors on forced choice instruments such as the *TOMM* approach or exceed chance, greater confidence in assertions of suboptimum effort and/or malingering of cognitive deficits occurs. Examiners may wish to consider utilizing two individually-administered, comprehensive measures of intelligence as a mechanism to assess effort. Third parties should be interviewed independently and in detail regarding adaptive behavior, whether to complete a standardized adaptive behavior scale or to obtain anecdotal history.

Utility of the
MMPI-2 in
mental
retardation
assessments

Recurrently, the authors have encountered proposals that the *Minnesota Multiphasic Personality Inventory-2 (MMPI-2)* (Hathaway & McKinley, 1989) should be administered as part of an *Atkins* assessment (see *Foster v. State*, 2003). The accompanying rationale has variously involved utilizing this instrument to assess malingering, to assess psychological disorders that would interfere with test performance, and/or to assess forms of psychopathology that could be alternatives to mental retardation in accounting for deficits in adaptive functioning. Though the *MMPI-2* is highly respected and has many applications, there are a number of factors that make it inappropriate in an assessment of mental retardation.

First, as with any standardized psychological instrument, interpretation of the *MMPI-2* is based on a given individual's

scale scores relative to the standardization sample. Inspection of the descriptive characteristics of the *MMPI-2* standardization sample points to a near certainty that it included no individuals with mental retardation. In point of fact, 95% of the standardization sample had graduated from high school, and approximately half had graduated from college or completed postgraduate studies. Further, both the complexity of item content (e.g., insightful self-reflection, use of double negatives) and the required eighth grade reading level of the scale (Butcher, Dalstrom, Graham, Tellegen, & Kaemmer, 1989) make it inappropriate for use with a population of those who have mental retardation. Of course, administering an oral version of the test does not cure this problem, as vocabulary and conceptual understanding may still be deficient—particularly in an individual of borderline (or below) intellectual functioning (see Keyes et al., 1998; Keyes, 2004).

There is also the potential that persons with mental retardation may respond to the *MMPI-2* items in an idiosyncratic manner that is distinct from the response style of cognitively intact individuals. The interpretation of the associated test scales generated by a person with mental retardation would be speculative in the absence of comparative standardization data. Further, the assessment of psychological symptoms that might interfere with cognitive performance does not require administration of the *MMPI-2*. Rather, these data are available from observations of test performance, careful clinical interview, and inquiry of third parties who routinely interact with the person in question.

*Practice
recommendation
20*

The *MMPI-2* is not an appropriate instrument for any purpose in the assessment of persons who may be suspected to have mental retardation. If compelled by the court to administer the *MMPI-2*, the invalidity of the scores on this instrument in this context should be described, as well as the ethical implications related to the misuse of psychological tests.

Concluding thoughts regarding task conceptualization and ethical considerations

As was articulated early in this article, it is our position that an *Atkins* evaluation of mental retardation in a capital case represents what is fundamentally a psychodiagnostic assessment, albeit in a forensic context. That perspective points to the adoption of conceptualizations and definitions of mental retardation, as well as assessment procedures and sources of information, that would be considered “best practice” in making such determinations in a *noncriminal* context. Such best practices are, of course, informed by accurate perspectives regarding the presentation and adaptive capabilities of those who have mild mental retardation in the community. The noncriminal and the *Atkins* assessment may only vary in the more careful scrutiny for suboptimum effort in the capital defendant or bias in third party reporting of adaptive deficits, and in the incorporation of jurisdictionally-specific criteria. Even these considerations, however, require attention to the appropriateness of a given instrument or inquiry to the task and to intellectually deficient persons.

Further, though some courts may restrict *Atkins* exclusions to a subcategory of mentally retarded offenders based on the court’s view of a community consensus, it is our position that mental health professionals have no special expertise or reliable insight regarding such a consensus. That does not preclude our serving an important role in *describing* the contours of cognitive capability and functional behavior of a capital offender. It does preclude supplanting a *psychological* diagnosis with an idiosyncratic and arguably *politicized* diagnosis.

The 20 recommendations for practice proposed in this paper reflect an operationalization of this emphasis on a psychodiagnostic assessment amidst the complexities of an *Atkins* context. These recommendations for practice assume requisite competence and professionalism as prescribed by

the Ethical Principles of Psychologists and Code of Conduct (APA, 2002) and the Specialty Guidelines for Forensic Psychologists (Committee on Ethical Guidelines for Forensic Psychologists, 1991). It is our hope that the recommendations and associated discussion articulated herein will inform professional practice in *Atkins* assessments and potentially elevate the quality of these evaluations. We also desire to assist legal professionals and courts in becoming more discerning consumers of the findings of these evaluations. Finally, we seek to inform the discussion of standards for these assessments by professional organizations, including Division 33 of the American Psychological Association.

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