

United States Court of Appeals  
For the Eighth Circuit

---

No. 20-1830

---

Alvin Bernal Jackson

*Plaintiff - Appellee*

v.

Dexter Payne, Director, Department of Correction

*Defendant - Appellant*

---

Appeal from United States District Court  
for the Eastern District of Arkansas - Pine Bluff

---

Submitted: May 12, 2021

Filed: August 13, 2021

---

Before SMITH, Chief Judge, SHEPHERD and GRASZ, Circuit Judges.

---

SHEPHERD, Circuit Judge.

Alvin Bernal Jackson is an Arkansas prisoner on death row. This is the fourth appeal regarding his petition for federal habeas relief on the basis that he is intellectually disabled and thus ineligible for the death penalty under the Eighth Amendment and Atkins v. Virginia, 536 U.S. 304 (2002). In a previous appeal, this Court reversed and remanded for further proceedings on Jackson's Atkins claim.

See Jackson v. Kelley, 898 F.3d 859 (8th Cir. 2018). On remand, the district court<sup>1</sup> found that Jackson met his burden of showing that he is intellectually disabled and accordingly vacated Jackson's death sentence. Dexter Payne, Director of the Arkansas Department of Correction, appeals. Having jurisdiction under 28 U.S.C. § 1291, we affirm.

## I.

In 1989, when he was 19 years old, Jackson killed Charles Colclasure and was later convicted of capital murder and sentenced to life in prison. In 1996, while in prison, Jackson killed a prison guard, Scott Grimes. Jackson was convicted of capital murder and sentenced to death. The Arkansas Supreme Court affirmed his conviction and sentence, see Jackson v. State, 954 S.W.2d 894 (Ark. 1997), and later denied his petition for state postconviction relief, see Jackson v. State, 105 S.W.3d 352 (Ark. 2003).

In 2003, Jackson filed a petition pursuant to 28 U.S.C. § 2254 in the federal district court, asking that the court find him intellectually disabled and thus ineligible for the death penalty under the Eighth Amendment and Atkins. The district court denied relief, and we reversed and remanded. See Jackson v. Norris, 256 F. App'x 12 (8th Cir. 2007) (per curiam) (Jackson I). On remand from Jackson I, the district court again denied Jackson relief without a hearing. Again, we reversed and remanded, finding that Jackson was entitled to an Atkins hearing. See Jackson v. Norris, 615 F.3d 959 (8th Cir. 2010) (Jackson II).

In 2011, the district court held an evidentiary hearing on Jackson's Atkins claim and heard from two experts: clinical psychologist Dr. James Money Penny, Jackson's expert; and clinical and forensic psychologist Dr. Gilbert S. Macvaugh,

---

<sup>1</sup>The Honorable Susan Webber Wright, United States District Judge for the Eastern District of Arkansas.

III, the State's<sup>2</sup> expert. The district court also heard testimony from Jackson. The district court heard testimony and reviewed records that Jackson, who grew up in Little Rock, exhibited serious behavioral problems early in his life and did not perform well in school. Jackson was administered multiple intelligence quotient (IQ) tests in childhood, resulting in observed scores of 72, 73, 74, and 81. During childhood, Jackson was diagnosed with anti-social personality disorder and ADHD, among other disorders. Throughout his schooling, Jackson exhibited violent and disruptive behavior, and he consistently tested below his age and grade level. At age eight, Jackson had to be removed from the classroom because he was considered too dangerous, and he was referred to the Elizabeth Mitchell Children's Center for evaluation. That institution found that Jackson was "unable to function physically or emotionally at the present time." At age 13, his academic skills were at the second and third grade level, and he was placed in a homeschooling program. In his early teens, Jackson was placed in various special education and day treatment programs, and he was terminated from one such program for "disruption." In tenth grade, Jackson dropped out of school due to failing grades.

Dr. Money Penny opined that Jackson met the criteria for intellectual disability. Dr. Macvaugh offered a clinical opinion that Jackson is not intellectually disabled. However, Dr. Macvaugh refused to offer a forensic opinion, within a reasonable degree of scientific certainty, as to whether Jackson is intellectually disabled. He wrote in his report that "some of the data suggest that [Jackson] may have mental retardation,<sup>3</sup> and some of the data suggest that he may not." He testified at the hearing that if Jackson "has mental retardation, it's not by much. If he doesn't have it, it's not by much." Dr. Macvaugh observed that there were incomplete details

---

<sup>2</sup>Because the Director has changed during this litigation, and following the district court's lead, we will refer to the Director as the State in this opinion.

<sup>3</sup>At the time of Jackson's Atkins hearing, "mental retardation," rather than "intellectual disability," was the accepted term. In subsequent quotations of cases that use the term "mental retardation," we have replaced the term with "intellectual disability." However, quotations of record evidence will retain the original language.

regarding Jackson's childhood IQ tests, but he opined that "when you have lots of scores that all fall in the same approximate area or range, then there is probably less error associated with each of those scores because we have evidence of consistency across multiple administrations."

In 2016, the district court found that Jackson had not met his burden of demonstrating that he is intellectually disabled. The district court applied the standard from the fifth edition of the American Psychiatric Association's (APA) Diagnostic and Statistical Manual of Mental Disorders (DSM-5),<sup>4</sup> a then-current and still current psychiatric manual setting forth the diagnostic criteria for intellectual disability. The three core elements are: (1) intellectual functioning deficits (indicated by an IQ score of 70 or below adjusted for the standard error of measurement [SEM], which is generally plus or minus five points); (2) adaptive deficits; and (3) the onset of these deficits during the developmental period. See DSM-5, supra note 4, at 33, 37. The district court credited Dr. Macvaugh's opinion and did not credit Dr. Money Penny's. The court found that Dr. Macvaugh "conducted a more comprehensive investigation and provided more reliable testimony," R. Doc. 113, at 43, whereas Dr. Money Penny did not adequately assess Jackson for malingering and relied on improper testing methods. The district court found that the scores from Jackson's two most recent IQ tests—one administered by Dr. Macvaugh, one administered by Dr. Money Penny—were unreliable because Jackson was malingering. The district court also referenced the IQ scores from Jackson's childhood but did not apply any standard error of measurement to those scores. The court found that Jackson's test scores did not preclude a finding of intellectual disability and proceeded to analyze Jackson's adaptive functioning. The district court found that Jackson had adaptive deficits but failed to demonstrate that those deficits were due to intellectual functioning deficits or another disorder. The court also focused heavily upon Jackson's supposed adaptive strengths and improvements in prison.

---

<sup>4</sup>American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders (5th ed. 2013).

Jackson again appealed, and we reversed and remanded in light of the United States Supreme Court's intervening decision in Moore v. Texas, 137 S. Ct. 1039 (2017) (Moore I). See Jackson v. Kelley, 898 F.3d 859 (8th Cir. 2018) (Jackson III). We ordered the district court on remand to

include in its reconsideration: the standard error of measurement as applied to Jackson's IQ tests administered during his youth; whether Jackson's adaptive functioning deficits are related to his subaverage intellectual functioning without requiring Jackson to demonstrate a specific link between the two; and whether Jackson's adaptive functioning deficits rather than his adaptive functioning strengths indicate that he is not intellectually disabled.

Id. at 869. We also explained that the district court should apply a SEM of plus or minus five points. Id. at 863-64.

On remand from Jackson III, the district court applied a SEM of plus or minus five points to Jackson's four childhood IQ test scores, resulting in three scores whose low end of the score range fell below 70. The district court assigned no weight to Dr. Macvaugh's opinion that, notwithstanding Jackson's IQ scores and ranges, Jackson's intellectual functioning fell within the low-to-mid borderline range of intelligence and thus was not subaverage. The district court also found that Jackson's adaptive functioning deficits are related to his subaverage intellectual functioning. The district court assigned no weight to Jackson's purported adaptive functioning strengths or his improvements in prison. The district court ultimately concluded that Jackson sufficiently demonstrated that he is intellectually disabled and accordingly granted his § 2254 petition and vacated his death sentence.

## II.

The State contends that the district court erred in concluding that Jackson had shown, by a preponderance of the evidence, that he is intellectually disabled and thus ineligible for the death penalty under Atkins. The State principally argues that

Jackson failed to prove, by a preponderance of the evidence, that he has intellectual functioning deficits or adaptive functioning deficits. “The legal standard applicable to an Atkins claim presents a pure question of law, which we review de novo. Whether an individual is [intellectually disabled] under the applicable legal standard, however, is a pure question of fact, which we review for clear error.” Id. at 863 (quoting Sasser v. Hobbs, 735 F.3d 833, 841-42 (8th Cir. 2013)). “We will overturn a finding of fact under clear error review if the finding is: (1) not supported by substantial evidence; (2) based upon an erroneous view of the law; or (3) such that ‘we are left with the definite and firm conviction that an error has been made.’” Phelps-Roper v. Ricketts, 867 F.3d 883, 890 (8th Cir. 2017) (citation omitted).

The Arkansas statute barring a death sentence for persons with an intellectual disability defines intellectual disability as follows:

- (A) Significantly below-average general intellectual functioning accompanied by a significant deficit or impairment in adaptive functioning manifest in the developmental period, but no later than age eighteen (18) years of age; and
- (B) A deficit in adaptive behavior.

Ark. Code Ann. § 5-4-618(a). “[T]he Arkansas Supreme Court has consistently construed [this statute] to be concurrent with the federal constitutional right established in Atkins.” Jackson III, 898 F.3d at 863 (alterations in original) (quoting Sasser, 735 F.3d at 842). Jackson bears the burden of proving his intellectual disability “by a preponderance of the evidence.” Ark. Code Ann. § 5-4-618(c). To satisfy his burden, he must show: (1) “Significantly [below-]average<sup>5</sup> general intellectual functioning”; (2) “[a] significant deficit or impairment in adaptive functioning”; (3) “[t]hat both of the above ‘manifest[ed] . . . no later than age

---

<sup>5</sup>A prior version of the statute used the word “subaverage.” In 2019, the statute was amended to replace “subaverage” with “below-average.” See 2019 Ark. Acts 1035.

eighteen””; and (4) “[a] deficit in adaptive behavior.” Sasser, 735 F.3d at 843 (fourth and fifth alterations in the original) (quoting Ark. Code Ann. § 5-4-618(a)).<sup>6</sup>

After the district court’s 2016 decision and while Jackson’s appeal in Jackson III was pending, the Supreme Court decided Moore I, in which it vacated the Texas Court of Criminal Appeals’ (CCA) decision that a habeas petitioner was not intellectually disabled under Atkins. See 137 S. Ct. 1039. The Supreme Court described the medical community’s “generally accepted, uncontroversial intellectual-disability diagnostic definition” as containing “three core elements”:

- (1) intellectual-functioning deficits (indicated by an IQ score “approximately two standard deviations below the mean”—*i.e.*, a score of roughly 70—adjusted for “the standard error of measurement”);
- (2) adaptive deficits (“the inability to learn basic skills and adjust behavior to changing circumstances”); and
- (3) the onset of these deficits while still a minor.

Id. at 1045 (citations omitted). Reaffirming its analysis in Hall v. Florida, 572 U.S. 701, 713, 724 (2014), the Moore I Court explained that “where an IQ score is close to, but above, 70, courts must account for the test’s ‘standard error of measurement.’” Id. at 1049. Because IQ tests are inherently imprecise, “an individual’s score is best understood as a range of scores on either side of the recorded score.” Id. (quoting Hall, 572 U.S. at 713). And when the low end of an individual’s IQ score range “falls at or below 70,” courts must “move on to consider [the petitioner’s] adaptive functioning.” Id.

The Moore I Court also provided guidance on how to properly analyze the adaptive deficits prong. The Court criticized the CCA for “overemphasiz[ing] [the petitioner’s] perceived adaptive strengths,” explaining that “the medical community

---

<sup>6</sup>The dissent refers to the presumption of constitutionality afforded to this statute. However, the constitutionality of Ark. Code. Ann. § 5-4-618(a) is not in question in this case.

focuses the adaptive-functioning inquiry on adaptive *deficits*.” Id. at 1050. The Court also criticized the CCA for “stress[ing] [the petitioner’s] improved behavior in prison,” explaining that clinicians “caution against reliance on adaptive strengths developed ‘in a controlled setting,’ as prison surely is.” Id. (citation omitted).<sup>7</sup> The Supreme Court also stated that the CCA “departed from clinical practice by requiring [the petitioner] to show that his adaptive deficits were not related to ‘a personality disorder,’” explaining that “many intellectually disabled people also have other mental or physical impairments” such as ADHD. Id. at 1051 (citation omitted). “The existence of a personality disorder or mental-health issue, in short, is ‘not evidence that a person does not also have intellectual disability.’” Id. (citation omitted). The Supreme Court vacated and remanded to the CCA for further proceedings. Id. at 1053. Moore I heavily informed our decision in Jackson III and our instructions to the district court on remand.

After our decision in Jackson III, the Supreme Court decided Moore II, Moore v. Texas, 139 S. Ct. 666 (2019) (per curiam). On remand from Moore I, the CCA once again determined that the petitioner had not demonstrated intellectual disability, this time focusing almost entirely on adaptive deficits. Id. at 670. The Supreme Court reversed, concluding that the CCA’s remand opinion suffered from the same analytical flaws as the prior opinion the Court vacated in Moore I. See id. at 672. Among other things, the Moore II Court criticized the CCA for “again rel[ying] less upon the [petitioner’s] adaptive *deficits* . . . than upon [his] apparent adaptive *strengths*” and for “rel[ying] heavily upon adaptive improvements made in prison.” Id. at 670-71. The Supreme Court also said the CCA erred in concluding that the petitioner failed to show that his adaptive deficits were related to intellectual functioning deficits, “rather than ‘emotional problems.’” Id. at 671 (citation omitted). The Court reiterated its discussion from Moore I that the CCA “‘departed from clinical practice’ when it required [the petitioner] to prove that his ‘problems

---

<sup>7</sup>The record indicates that Jackson was first imprisoned when he was 12 or 13 years old. Jackson has been incarcerated continuously since August 1989 when he was charged with the Colclasure murder; he was approximately 19 years old. Jackson is currently 51.



in kindergarten’ stemmed from his intellectual disability, rather than ‘emotional problems,’” and the medical community’s view that “a personality disorder or mental-health issue is ‘not evidence that a person does not also have intellectual disability.’” Id. (citation omitted). The CCA also erred in reaching its intellectual disability determination when it relied on evidence that the petitioner’s crime “required ‘a level of planning and forethought.’” Id. (citation omitted). The Supreme Court held that, “on the basis of the trial record, [the petitioner] has shown he is a person with intellectual disability.” Id. at 672. We view Moore II as reaffirming Moore I’s reasoning and guidance on how to properly evaluate intellectual disability claims under Atkins.

A.

“The first prong of Arkansas’s intellectual disability statute—‘significantly [below-]average general intellectual functioning,’ § 5-4-618(a)—matches the first clinical diagnostic criterion for intellectual disability—deficits in intellectual functioning.” Jackson III, 898 F.3d at 863 (citing DSM-5, supra note 4, at 33). Intellectual functioning “is typically measured with individually administered and psychometrically valid, comprehensive, culturally appropriate, psychometrically sound tests of intelligence.” DSM-5, supra note 4, at 37. “[A]n IQ between 70 and 75 or lower . . . is typically considered the cutoff IQ score for the intellectual function prong of the [intellectual disability] definition.” Atkins, 536 U.S. at 309 n.5. Recognizing the psychiatric and psychological communities’ consensus—adopted by the Supreme Court—that IQ tests are inherently imprecise, we have held that courts should consider “a margin of error of plus or minus five points on [IQ] tests because it is possible to diagnose intellectual disability ‘in individuals with IQs between 70 and 75 who exhibit significant deficits in adaptive behavior.’” Jackson III, 898 F.3d at 863-64 (quoting Sasser, 735 F.3d at 843). When the low end of an IQ score range “falls at or below 70,” courts must “move on to consider [the petitioner’s] adaptive functioning.” Moore I, 137 S. Ct. at 1049.

In 2016, the district court, crediting Dr. Macvaugh’s testimony, found that the scores from Jackson’s two most recent IQ tests—one administered by Dr. Macvaugh, one administered by Dr. Money Penny—were inaccurate because Jackson was malingering. In Jackson III, we explained that, notwithstanding the two recent test scores, the district court could still consider Jackson’s four childhood scores. See 898 F.3d at 864. We observed that “[t]he district court did not find that any of the IQ tests administered to Jackson before he was 18 were invalid.” Id.

In accordance with our instructions, the district court on remand applied a SEM of plus or minus five (+/-5) points to Jackson’s childhood IQ scores of 72, 73, 74, and 81. The lower end of the score range fell below 70 for three scores. Thus, because the lower end of Jackson’s IQ “score range falls at or below 70,” the district court “had to move on to consider [Jackson’s] adaptive functioning.” See Moore I, 137 S. Ct. at 1049.

The State argues that the district court clearly erred in determining that Jackson met his burden of showing intellectual functioning deficits. According to the State, the district court first erred in considering Jackson’s childhood IQ test scores, which the State contends are unreliable or invalid. But as we explained in Jackson III, the district court in 2016 “did not find that any of the IQ tests administered to Jackson before he was 18 were invalid.” See 898 F.3d at 864. The State did not request rehearing in this Court to challenge the validity or use of the childhood IQ scores, nor did it make any such arguments to the district court on remand. The State now points to the testimony of its expert, Dr. Macvaugh, in which he opined that the record was not “real specific” about which version of a test was given and that he was uncertain whether the tests were administered by a licensed psychologist trained to administer IQ tests. In context, however, it appears Dr. Macvaugh was opining that the absence of test details prevented him from assessing the “Flynn effect,” which the DSM-5 describes as “overly high scores due to out-of-date test norms.” DSM-5, supra note 4, at 37. And Dr. Macvaugh also testified: “[W]hen you have lots of scores that all fall in the same approximate area or range, then there is probably less error associated with each of those scores

because we have evidence of consistency across multiple administrations.” This testimony undermines the State’s contention that Dr. Macvaugh found Jackson’s childhood IQ tests to be invalid or unreliable. Thus, the district court did not clearly err in considering Jackson’s childhood IQ scores in accordance with this Court’s instructions.

The State also contends that the district court erred in applying a SEM of +/- 5 points to Jackson’s childhood IQ scores. The State’s position appears to be premised on the possibility that a lower SEM may apply to some or all of Jackson’s childhood IQ scores, which in turn may result in the lower end of the score range being above 70. We disagree. The DSM-5 states that the “margin for measurement error” for IQ tests is “generally” +/-5 points. The Supreme Court and this Court have also endorsed a five-point SEM. See Moore I, 137 S. Ct. at 1049; Hall, 572 U.S. at 722 (explaining that “an individual with an IQ test score ‘between 70 and 75 or lower’ may show intellectual disability by presenting additional evidence regarding difficulties in adaptive functioning” (quoting Atkins, 536 U.S. at 309)); Brumfield v. Cain, 576 U.S. 305, 315-16 (2015) (relying on Hall to find unreasonable a state court’s conclusion that a score of 75 precluded a finding of intellectual disability); Jackson III, 898 F.3d at 863-64. The DSM-5 does state that the margin of error is “generally” +/-5 points, and the Supreme Court has acknowledged that “[e]ach IQ test has a ‘standard error of measurement,’” Hall, 572 U.S. at 713 (citation omitted). But here the State does not explain what SEM(s) the district court should have applied to Jackson’s scores, arguing only that the district court erred in applying a SEM of +/-5 points. Because the State did not identify a different test-specific SEM, we cannot say the district court clearly erred in applying the “generally” applicable SEM of +/-5 points. Even if there were a lower SEM, the Flynn effect suggests that Jackson’s older scores may be artificially inflated. Thus, the Flynn effect may well “cancel out” the lower SEM such that the lower end of Jackson’s score range would remain at 70 or below. Thus, in this case, applying a +/-5 points SEM mitigates the “unacceptable risk that persons with intellectual disability will be executed.” See Hall, 572 U.S. at 704. Accordingly, the district

court did not clearly err in applying a +/-5 SEM to Jackson's childhood IQ test scores.

The balance of the State's argument is that the district court clearly erred in rejecting Dr. Macvaugh's conclusion that Jackson exhibits low-to-mid borderline intelligence, and that his opinion precludes a finding of intellectual-functioning deficits notwithstanding Jackson's IQ scores. But the Supreme Court is clear: When the lower end of a petitioner's IQ "score range falls at or below 70," the court "ha[s] to move on to consider [the petitioner's] adaptive functioning." Moore I, 137 S. Ct. at 1049. The Supreme Court has never held that, in determining whether a petitioner has intellectual functioning deficits, an expert opinion can outweigh an IQ score where the low end of the petitioner's IQ score range is at or below 70. In fact, Moore I appears to reject such a proposition.<sup>8</sup> Perhaps the Supreme Court's view diverges from the DSM-5, whose diagnostic criteria for intellectual functioning deficits call for confirmation "by both clinical assessment and individualized, standardized

---

<sup>8</sup>In Moore I, one of the petitioner's IQ scores was 74, resulting in a score range of 69 to 79 after applying a +/-5 point SEM. Moore I, 137 S. Ct. at 1049. Based on the observed score of 74, but not on the lower portion of the range, the CCA found that the petitioner's IQ score was above the range for intellectual disability. Id. at 1047. The CCA recognized that significantly subaverage intellectual functioning was "generally shown by an IQ of 70 or less." Ex Parte Moore, 470 S.W.3d 481, 513 (Tex. Crim. App. 2015), vacated and remanded by Moore I, 137 S. Ct. 1039 (2017). However, the CCA considered expert testimony that the petitioner's depression and "history of academic failure" might have hindered his test performance. Id. at 517-19. In light of these factors, the CCA rejected the possibility that the petitioner's actual IQ score was in the "lower portion of that 69 to 79 range," finding it had "no reason to doubt" that the observed score of 74 "represented [petitioner's] intellectual functioning as being above the intellectually disabled range." Id. at 519. The Supreme Court criticized the CCA's analysis as inconsistent with Hall because the CCA had disregarded the low end of the score range. Moore I, 137 S. Ct. at 1049. The Supreme Court instructed that "the presence of other sources of imprecision in administering the test to a particular individual cannot *narrow* the test-specific standard-error range." Id. (citation omitted). Because the lower end of petitioner's score range was at or below 70, the CCA was required to continue the inquiry and consider the petitioner's adaptive functioning. Id.

intelligence testing.” DSM-5, supra note 4, at 33. “However, the Supreme Court’s decision in Hall strongly suggests that the legal standard for intellectual disability in Atkins cases has become more protective than the clinical standard.” United States v. Wilson, 170 F. Supp. 3d 347, 391 (E.D.N.Y. 2016). Accordingly, we find that the district court did not clearly err in concluding that Jackson satisfied the intellectual functioning deficit prong.

## B.

“The second criterion for intellectual disability in both the DSM-[5] and the Arkansas [s]tatute is a deficit in adaptive functioning. There are three adaptive-skills domains—conceptual, social, and practical. The DSM-[5] states that deficits in only one of the three adaptive-skills domains is sufficient to show adaptive deficits.” Jackson III, 898 F.3d at 864 (citations omitted). The DSM-5 explains the three adaptive-skills domains as follows:

The *conceptual (academic) domain* involves competence in memory, language, reading, writing, math reasoning, acquisition of practical knowledge, problem solving, and judgment in novel situations, among others. The *social domain* involves awareness of others’ thoughts, feelings, and experiences; empathy; interpersonal communication skills; friendship abilities; and social judgment, among others. The *practical domain* involves learning and self-management across life settings, including personal care, job responsibilities, money management, recreation, self-management of behavior, and school and work task organization, among others.

DSM-5, supra note 4, at 37. The DSM-5 further states:

Adaptive functioning is assessed using both clinical evaluation and individualized, culturally appropriate, psychometrically sound measures. Standardized measures are used with knowledgeable informants (e.g., parent or other family member; teacher; counselor; care provider) and the individual to the extent possible. Additional sources of information include educational, developmental, medical,

and mental health evaluations. . . . Adaptive functioning may be difficult to assess in a controlled setting (e.g., prisons, detention centers); if possible, corroborative information reflecting functioning outside those settings should be obtained.

Id. at 37-38. The DSM-5’s diagnostic criteria do not require a direct relationship between adaptive deficits and subaverage intellectual functioning, but the explanatory text states that “[t]o meet diagnostic criteria for intellectual disability, the deficits in adaptive functioning must be *directly related* to the intellectual impairments described in [prong one].” DSM-5, supra note 4, at 38 (emphasis added). However, following Moore I, we explained that “Jackson is not required to demonstrate a specific connection between subaverage intellectual functioning and adaptive behavior deficits. Rather, he must show only that deficits related to intellectual functioning exist.” Jackson III, 898 F.3d at 869. And “Jackson is not required to exclude [other] disorders as causes of his adaptive behavior deficits.” Id.

Although the district court in 2016 did not find that Jackson’s IQ scores demonstrated subaverage intellectual functioning, it nonetheless proceeded to consider evidence of Jackson’s adaptive functioning. The district court in 2016 found that Jackson exhibited adaptive functioning deficits, specifically intellectual deficits (part of the “conceptual” domain). The district court’s finding appeared to be based on Dr. Macvaugh’s opinion that Jackson had “adaptive deficits in a number of areas, including functional academic skills.” See R. Doc. 113, at 40. But the district court also found that Jackson had not demonstrated that his adaptive deficits were “directly related” to intellectual functioning deficits as opposed to his anti-social personality disorder, ADHD, or other disorders. This finding was consistent with Dr. Macvaugh’s opinion that he could not determine whether Jackson’s adaptive deficits were due to intellectual functioning deficits or other disorders. Dr. Macvaugh stressed his belief that determining the etiology of an individual’s adaptive deficits is important for an intellectual disability diagnosis, while acknowledging that other clinicians believe “if the deficits are present, that’s all that matters.”

On remand from Jackson III, the district court explained that no parent or caretaker was available to provide retrospective information about Jackson's adaptive functioning in the community. The court also discussed Dr. Macvaugh's opinion that traditional standardized tests for assessing adaptive functioning were not appropriate in Jackson's case because "such tests assess adaptive functioning in the open community and were not developed for use with incarcerated populations." R. Doc. 130, at 29. The district court then expanded its earlier adaptive deficits finding and concluded that "[e]ducational and related mental health records from Jackson's childhood document that he had deficits in *each domain* of adaptive functioning." R. Doc. 130, at 40 (emphasis added). The district court explained:

Relevant to the conceptual domain, Jackson lacked basic functional academic skills, and he appeared to suffer from a language or communication disorder. Jackson also had severe behavior problems, indicating deficits in the social domain, and his academic record demonstrated that he had difficulty with self-management and staying on task, indicating possible deficits in the practical domain.

R. Doc. 130, at 40. The district court also found that "Jackson's documented deficits in the conceptual, social, and practical domains in childhood, regardless of etiology, were at least related to his deficits in intellectual functioning." R. Doc. 130, at 41-42. The court explained that while Dr. Macvaugh found Jackson's other disorders to be "a roadblock to assessing Jackson's adaptive functioning, Moore I clearly requires a different approach." R. Doc. 130, at 41. The State does not challenge the "relatedness" finding.

Substantial evidence in the record supports the district court's conclusion that Jackson sufficiently demonstrated adaptive functioning deficits. Dr. Macvaugh testified that there was "no question" Jackson suffered from adaptive deficits as a

child.<sup>9</sup> Jackson's educational records reveal that he was sent home from elementary school at age seven because he was "unable to function in a normal classroom setting." At age eight, Jackson once again had to be removed from the classroom because he was considered too dangerous: In a letter to Jackson's mother, Jackson's elementary school principal wrote that it would be "necessary to keep [Jackson] out of school until something is worked out about his further education." The principal continued:

It is almost impossible to get him into or keep him in a classroom. He wanders over the building upsetting furniture, yelling into other classrooms, and hitting or kicking anyone who is within reach. Yesterday he kicked a supervising aide bruising her leg. Today he has choked two children and kicked or hit at a number of others.

Jackson was referred to the Elizabeth Mitchell Children's Center for evaluation. That institution found that Jackson was "unable to function physically or emotionally at the present time." Additionally, Dr. Bill Johnson, a clinical psychologist who evaluated Jackson at the Elizabeth Mitchell Children's Center, wrote in a 1977 psychological report that Jackson had "severe behavior problems at both home and school, . . . he is aggressive toward other children, won't do his work, and generally is disruptive in the classroom." In his early teens, Jackson was placed in various special education and day treatment programs, and he was expelled from one such program for "disruption." These records are substantial evidence supporting the district court's conclusion that Jackson had adaptive deficits in the social and practical domains.

---

<sup>9</sup>We note that the district court claimed to give "no weight" to Dr. Macvaugh's opinion regarding Jackson's intellectual functioning. But that does not mean the district court gave no weight to Dr. Macvaugh's opinion regarding Jackson's *adaptive deficits*, or that we are prohibited from considering his report in determining whether the record contains substantial evidence in support of the district court's conclusion that Jackson had significant adaptive deficits. The district court previously credited Dr. Macvaugh's opinion, and it reiterated in the decision below that it had done so.



Other records provide substantial evidence to support the district court’s conclusion that Jackson had adaptive deficits in the conceptual (academic) domain. For example, Dr. Johnson’s report also noted that Jackson had “extremely limited vocabulary and language usage was poor with his speech being slurred and almost incomprehensible at times.” A 1982 evaluation—when Jackson was 11 years old—put Jackson’s mental age at seven years eight months. When Jackson was 13 years old and in seventh grade, achievement testing put his academic skills at the second- to third-grade level, and he was placed in a homeschooling program. Cf. Moore II, 139 S. Ct. at 670-71 (criticizing CCA for failing to discuss evidence that by sixth grade the petitioner struggled to read at a second-grade level). According to Metropolitan Achievement Tests administered while Jackson was in ninth grade, Jackson’s math computation grade equivalent was 4.1; his total math grade equivalent was 3.6; his science grade level equivalent was 3.6; and his total reading grade equivalent was 2.8. Jackson dropped out of school in tenth grade after receiving all failing grades. Further, a 1990 report from neurologist Dr. Lee Archer states that Jackson’s school records “indicate[] test scores that raise the question of borderline mental retardation, and [Jackson] was classified in the mental retardation category during part of his schooling.” Dr. Macvaugh found that “[Jackson’s] school records and related mental health records during his childhood years clearly illustrate that he demonstrated significant difficulty succeeding academically.”

The State argues that the district court clearly erred in determining Jackson met his burden of proof because no “standardized measures” or “knowledgeable informants” could be used, as recommended by the DSM-5, to evaluate Jackson’s adaptive functioning in the open community because he has been imprisoned for nearly all his adult life. The State contends that it was error for the district court to rely solely on documentary evidence from Jackson’s childhood, which the DSM-5 classifies as “[a]dditional . . . information” to consider. DSM-5, supra note 4, at 37. We disagree. The DSM-5 anticipates that standardized testing for adaptive functioning is not always an available option: “When standardized testing is difficult or impossible, because of a variety of factors . . . , the individual may be diagnosed with unspecific intellectual disability.” Id. at 37-38. Here, standardized testing was

not possible because no parent or caretaker was available and because Jackson was incarcerated and had been for nearly all his adult life. Dr. Macvaugh explained that none of the instruments used to measure adaptive functioning in the open community was developed for use with incarcerated individuals. He also explained that “the retrospective use of these instruments to measure adaptive behavior prior to age 18 for those who have been incarcerated for an extended period of time remains [a] topic of controversy in the field.” Thus, because Jackson has been incarcerated for nearly all his adult life, “any retrospective assessment of his adaptive deficits prior to age 18 is likely to be of questionable validity and plagued by measurement error.” And given that nearly all of Jackson’s time in the open community was during his childhood, it was not clearly erroneous for the district court to rely on the childhood records.

The State also contends that the district court clearly erred by placing no weight on Jackson’s purported adaptive strengths, including his conduct in prison. But we expressly directed the district court to consider “whether Jackson’s adaptive functioning deficits *rather than his adaptive functioning strengths* indicate that he is not intellectually disabled.” Jackson III, 898 F.3d at 869 (emphasis added). Our instruction was informed by Moore I, which stressed that the psychiatric literature “focuses . . . on” adaptive deficits, not strengths. See 137 S. Ct. at 1050 (citing several psychiatric texts, including DSM-5). Indeed, the DSM-5 is silent about whether adaptive strengths should be considered at all when diagnosing a person with intellectual disability. The Arkansas statute defining intellectual disabilities similarly says nothing about adaptive strengths, requiring only a showing of a “significant deficit or impairment in adaptive functioning.” Ark. Code Ann. § 5-4-618; accord Sasser, 735 F.3d at 845 (“Consistent with nationally accepted clinical definitions of [intellectual disability], the Arkansas standard does not ask whether an individual has adaptive strengths to offset the individual’s adaptive limitations.”). This view was reinforced in Moore II, where the Supreme Court criticized the lower appellate court for “again rel[ying] less upon the [petitioner’s] adaptive *deficits* . . . than upon [his] apparent adaptive *strengths*.” See 139 S. Ct. at 670. Although the Supreme Court has not expressly forbidden any consideration of

adaptive strengths, it has twice said that the focus is on adaptive deficits. The Supreme Court’s decisions—consistent with the psychiatric literature—suggest that adaptive strengths play little (if any) role in the adaptive functioning analysis. In the absence of new guidance from the Supreme Court or the medical community regarding the appropriate role of adaptive strengths evidence, we cannot say that the district court’s conclusion that Jackson sufficiently demonstrated adaptive functioning deficits was clearly erroneous.<sup>10</sup>

---

<sup>10</sup>Another panel of this Court recently held that, notwithstanding Moore I, a district court did not clearly err in considering evidence of an Atkins petitioner’s adaptive strengths in assessing the petitioner’s overall adaptive functioning. See Sasser v. Payne, 999 F.3d 609, 619-20 (8th Cir. 2021). However, even assuming adaptive strengths could be relevant, the district court here did not clearly err in assigning them no weight. The State points out that Jackson had some menial labor jobs growing up, which, according to the State, indicates that Jackson has adaptive strengths in the practical domain. But Dr. Macvaugh testified that “[n]othing that [Jackson] has done before the first capital murder charge would necessarily be inconsistent by way of work history with someone with an intellectual disability.” Indeed, the medical community estimates that “between nine and forty percent of persons with intellectual disability have some form of paid employment.” Brief for APA et al. as Amici Curiae 8, Moore v. Texas, 139 S. Ct. 666 (2019) (No. 15-797). The State additionally notes that when Little Rock police questioned Jackson regarding the Colclasure murder, Jackson expressed concern that the police planned to question his girlfriend and stated, “I just don’t want her having nothing to do with that.” According to the State, Jackson displayed concern and empathy that is “inconsistent with someone who has significant deficits in the social domain.” Appellant Br. 56. But the evidence of Jackson’s empathy for his girlfriend stood in contrast to evidence of his recurring violent outbursts towards other children and teachers. And the fact that some evidence supports the State’s position does not render the district court’s contrary conclusion clearly erroneous. See Anderson v. City of Bessemer City, 470 U.S. 564, 574 (1985) (explaining that when there are “two permissible views of the evidence, the factfinder’s choice between them cannot be clearly erroneous”). We find that the district court did not clearly err in declining to conclude that the State’s proffered evidence outweighed or undermined the documented evidence of Jackson’s adaptive deficits.

The State’s remaining examples of Jackson’s purported adaptive strengths relate to Jackson’s prison behavior. The State focuses primarily on Jackson’s pro se

The State also suggests that the district court erred because Jackson failed to demonstrate by a preponderance of the evidence that that he was intellectually disabled “at the time of committing capital murder,” Ark. Code Ann. § 5-4-618(b)—i.e., when he murdered Scott Grimes. But Atkins held that it violates the Eighth Amendment to execute a person who *is* intellectually disabled. See Atkins, 536 U.S. at 321. Again, we have explained that the Arkansas statute is “concurrent with the federal constitutional right established in Atkins,” Sasser, 735 F.3d at 842-43, and that the Arkansas statute and Atkins together “preclud[e] the execution of an individual who can prove [intellectual disability] *either* (a) at the time of committing the crime *or* (b) at the presumptive time of execution,” id. at 846 (“Arkansas may not execute an individual who sufficiently proves he met all four prongs of the Arkansas [intellectual disability] standard at *either* relevant time, even if the individual lacks proof he satisfied the standard at *both* relevant times.” (citing Miller

---

filings and other prison writings, contending that such evidence shows Jackson has adaptive strengths in the conceptual domain and thereby undermines Jackson’s claim of adaptive functioning deficits. But as the Supreme Court observed, clinicians “caution against reliance on adaptive strengths developed ‘in a controlled setting,’ as prison surely is.” Moore I, 137 S. Ct. at 1050 (citation omitted). Dr. Macvaugh similarly opined that “what [Jackson] does in prison is not a valid index of his adaptive functioning that’s necessary for a diagnosis of [intellectual disability]. That has to be based on his functioning in the community.” Regarding pro se filings in particular, the Supreme Court has stated that such evidence is “relevant” but “lacks convincing strength without a determination about whether [the petitioner] wrote the papers on his own.” Moore II, 139 S. Ct. at 671. Here, the district court made no such determination. And we note Jackson’s testimony that every pro se filing, library request, grievance, and commissary request was drafted by fellow inmates, and he merely copied the documents. Dr. Macvaugh corroborated the common phenomenon of prisoners copying pleadings and also echoed the Supreme Court’s caution against reliance on writing skills developed in prison. And Dr. Macvaugh also opined that recordings of Jackson’s prison phone calls illustrate that Jackson “clearly has genuine intellectual limitations.” Thus, Dr. Macvaugh’s testimony effectively discounted the relevance of Moore’s so-called adaptive strengths that Moore I and Moore II say not to focus on anyway. The district court did not clearly err in declining to credit adaptive strengths allegedly exhibited by Jackson in prison over documented adaptive deficits he exhibited in the open community.

v. State, 362 S.W.3d 264, 276 (Ark. 2010))). We have referred to Sasser's "presumptive time of execution" language as dicta when we rejected a habeas petitioner's argument that his Atkins claim was not ripe until his execution was scheduled. See Davis v. Kelley, 854 F.3d 967, 972-73 (8th Cir. 2017) (per curiam). Whatever else is meant by the phrase "the presumptive time of execution," from context it is plainly a placeholder for "at the relevant time under the federal standard."

The State does not present its "timing" argument as a standalone argument but instead folds it into the arguments regarding adaptive deficits. The State also does not provide much explanation about how the district court allegedly erred, only generally arguing that the evidence was insufficient because Jackson's proffered evidence was from childhood and not around the time of the crime. Appellant Br. 38. But the district court found that Jackson sufficiently proved that he *is* intellectually disabled and entitled to relief under Atkins. The State points to no case holding that Jackson needed to prove something more with respect to the timing of his status as intellectually disabled in order to be entitled to Atkins relief. In fact, Moore I and Moore II—which the district court summarized and discussed at length—undermine the State's argument. The Moore petitioner committed capital murder at age 20. Moore I, 137 S. Ct. at 1044. When the petitioner was approximately 59 years old, the Supreme Court held that, "on the basis of the trial court record, [the petitioner] has shown he is a person with intellectual disability" and thus ineligible for the death penalty. Moore II, 139 S. Ct. at 672. The IQ score that the Supreme Court relied upon was from a test the petitioner took at age 30, Moore I, 137 S. Ct. at 1049; Ex Parte Moore, 470 S.W.3d at 514, and the adaptive deficits evidence was from the petitioner's childhood, Moore II, 139 S. Ct. at 670-71. Moreover, the DSM-5 explains that "[a]fter early childhood, the disorder is generally lifelong." DSM-5, supra note 4, at 39. It is the State's burden on appeal to show that the district court's conclusion was clearly erroneous, and the State has failed to do so here.

In light of Supreme Court precedent, prevailing medical standards, and the record, we find that the district court did not clearly err in concluding that Jackson met his burden of demonstrating that he has significant adaptive functioning deficits.

C.

The third criterion in § 5-4-618(a) and the DSM-5 is that both intellectual functioning deficits and adaptive functioning deficits manifested no later than age 18. The parties agree, and the district court found, that the third criterion was satisfied. The record contains substantial evidence—particularly Jackson’s childhood IQ scores, childhood records, and the expert testimony—supporting this conclusion. Thus, the district court did not clearly err in determining that the requisite deficits manifested before age 18.

D.

The fourth and final criterion in § 5-4-618(a) is a deficit in adaptive behaviors. We explained in Jackson III, and the parties agree, that “[t]he fourth prong largely duplicates the second prong, but places no age requirement on the evidence used to establish limitations in adaptive behavior.’ Accordingly, the same evidence used to prove the second prong is used to prove the fourth prong.” 898 F.3d at 867 (citation omitted). Thus, our analysis under prong two also applies to prong four. As explained above, the district court did not clearly err in determining that Jackson has adaptive deficits.

E.

We find that the district court did not clearly err in concluding that Jackson met his burden of demonstrating that he is intellectually disabled and thus ineligible for the death penalty. In our view, Dr. Macvaugh’s refusal to offer a forensic opinion that Jackson is *not* intellectually disabled, coupled with his admission that “some of the data” suggest that Jackson may be intellectually disabled, supports and certainly

does not contradict the district court’s conclusion. The State has not persuaded us that the district court’s conclusion lacked substantial evidence, was based on an erroneous view of the law (particularly given the Supreme Court’s recent decisions in Moore I and Moore II), or otherwise leaves us with “the definite and firm conviction that an error has been made.” See Phelps-Roper, 867 F.3d at 890 (citation omitted).

### III.

Discerning no clear error, we affirm the district court’s judgment.

GRASZ, Circuit Judge, dissenting.

Many things about this twenty-five-year-old case are tragic. And this latest appeal involves difficult legal questions with uncertain answers. Still, I believe that certain aspects of the court’s holding tend to advance an incremental de-constitutionalization of capital punishment. I do not see those aspects of the opinion as consistent with precedent or with our limited judicial role, and so, I respectfully dissent.

First, while we must respect the factual findings of the district court, a finding of fact resulting from an erroneous view of the law constitutes clear error. *See Howard v. United States*, 964 F.3d 712, 716 (8th Cir. 2020). The district court’s disregard of all evidence of Jackson’s adaptive strengths, all evidence of his functioning while in prison, and Dr. Macvaugh’s clinical assessment of Jackson’s intellectual functioning is not dictated by Supreme Court precedent. And it is inconsistent in important ways with our own recent precedent. *See Sasser v. Payne*, 999 F.3d 609, 619–20 (8th Cir. 2021).

The district court, in my view, ascribed an overly broad meaning to *Moore v. Texas*, 137 S. Ct. 1039 (2017) (*Moore I*), and applied this errant view to ignore evidence of Jackson’s adaptive functioning. While the Supreme Court has warned

courts not to rely too heavily on adaptive strengths developed in prison, *id.* at 1050, that does not mean such evidence must be completely ignored in the overall assessment. *Sasser*, 999 F.3d at 620 (“The district court . . . properly considered all available evidence of Sasser’s adaptive functioning in order to make the necessary findings of fact in each relevant domain.”). This misapplication of *Moore I* is especially problematic when, as here, evidence outside the prison context is extremely limited or unavailable. Jackson has been incarcerated almost all of his adult life. When discussing this issue in *Moore I*, the Supreme Court cited the DSM-V, which notes: “[I]f possible, corroborative information reflecting functioning outside those [prison] settings should be obtained.” 137 S. Ct. at 1050 (emphasis added) (quoting DSM-5, at 38). A fair reading of *Moore I*, then, cautions against over-relying on information reflecting functioning while inside a prison setting. It does not say such information cannot be considered within the overall framework set forth by the Supreme Court.

Second, Jackson failed, in my view, to meet his burden of proof to show that he is intellectually disabled. The district court’s order contains broad hints that it thought so too. Under controlling precedent, Jackson had “[t]o prove that he was intellectually disabled . . . by a preponderance of the evidence[.]” *Sasser*, 999 F.3d at 616. However, Jackson provided little reliable evidence as to either intellectual functioning or adaptive functioning. His one and only medical expert was found not credible by the district court. This lack of reliable evidence was not the fault of the State. Nor is it the result of an unfair burden on Jackson. As the court notes, “[t]he district court found that the scores from Jackson’s two most recent IQ tests—one administered by Dr. Macvaugh, one administered by Dr. Money Penny—were *unreliable because Jackson was malingering.*” *Ante*, at 4 (emphasis added). And the evidence from tests administered during Jackson’s childhood was also unreliable. For one thing, as the district court noted, “The unique SEMs associated with the tests administered to Jackson are unknown.” R. Doc. 130, at 39. More importantly, though, the childhood tests resulted in highly discrepant scores such that they were “probably not a very reliable measure of his overall intellectual functioning,” according to the only credible medical expert, Dr. Macvaugh. R. Doc.



130, at 25. The district court found that “Dr. Macvaugh’s observation is consistent with the DSM-5, which states that ‘highly discrepant individual test score[s] may make an overall IQ score invalid.’” R. Doc. 130, at 25 (quoting DSM-5, at 37). Dr. Macvaugh was not alone in this assessment. The doctor who administered the test to Jackson at age seven “noted that the 30-point divergence between Jackson’s verbal and performance scores indicated that the reported 73-point, full-scale score was not reliable.” R. Doc. 130, at 24.

Despite the inconclusive intellectual functioning evidence, the district court was correct in proceeding to the adaptive functioning analysis. *See Hall v. Florida*, 572 U.S. 701, 714 (2014). But, at best, the record shows that Jackson presented inconclusive evidence as to adaptive functioning as well. The State’s medical expert, who was found credible, said the record contained too few data to arrive at a valid opinion on Jackson’s adaptive functioning at age eighteen. This inconclusive evidence of adaptive functioning means that Jackson failed to carry his burden of proof as to intellectual disability.

In the face of this evidence—or lack thereof—the district court, acting under what it seemed to view as compulsion arising from a previous order of this court, shifted the burden to the State. Specifically, the district court stated, “Jackson’s record of adaptive deficits . . . provide no indication that he is *not* intellectually disabled.” R. Doc. 130, at 43–44. But it was not the State’s burden to prove that Jackson was not intellectually disabled. This *sub silentio* burden shifting contradicts settled law, and it has serious consequences.

Arkansas law has placed the burden of proof squarely on the party claiming exemption from capital punishment. Ark. Code Ann. § 5-4-618(c). It is not our role to re-write Arkansas law or to infer and apply overriding standards that the Supreme Court has not articulated. *Cf. Rodriguez de Quijas v. Shearson/Am. Express, Inc.*, 490 U.S. 477, 484 (1989) (“[T]he Court of Appeals should follow the case which directly controls, leaving to [the Supreme Court] the prerogative of overruling its own decisions.”). Under our precedent, the Arkansas statute carries a presumption

of constitutionality. *Fitz v. Dolyak*, 712 F.2d 330, 333 (8th Cir. 1983). And Jackson did not try to rebut that presumption. While it may be true that careful application of legal safeguards takes on heightened importance in capital cases because “death is different,” *Woodson v. North Carolina*, 428 U.S. 280, 322 (1976) (Rehnquist, C.J., dissenting), creating unwritten exceptions to the law, even in capital cases, erodes public trust in the legal system.

For the foregoing reasons, I respectfully dissent.

---