

Death by Numbers: Why Evolving Standards Compel Extending *Roper*'s Categorical Ban Against Executing Juveniles from Eighteen to Twenty-One

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Nearly fifteen years ago, the Supreme Court held in Roper v. Simmons that the Eighth Amendment prohibits the execution of people who were under eighteen at the time of their offenses. The Court justified the line it drew based on legislative enactments, jury verdicts, and neuroscience. In the intervening years, however, much has changed in juvenile sentencing jurisprudence, the legal treatment of young people, and neuroscience. These changes beg the question: Why eighteen? Is the bright-line rule that the Court announced in Roper still constitutionally valid or do the changes since 2005 now point to a new cutoff at twenty-one?

To answer those questions, this Essay considers post-Roper developments in the relevant domains to make the case that the eighteen-year-old constitutional line should be extended to age twenty-one. It does so by applying the Supreme Court's evolving-standards-of-decency methodology. Specifically, this Essay examines all death sentences and executions imposed in the United States post-Roper and looks at the current state of neuroscientific research that the Court found compelling when it decided Roper.

Two predominant trends emerge. First, there is a national consensus against executing people under twenty-one. This consensus comports with what new developments in neuroscience have made clear: people under twenty-one have brains that look and behave like the brains of younger teenagers, not like adult brains. Second, young people of color are disproportionately sentenced to die—even more so than adult capital defendants. The role of race is amplified when the victim is white. These trends confirm that the logic that compelled the Court to ban executions of people under eighteen extends to people under twenty-one.

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Introduction

In April of 1997, eighteen-year-old Justin Chaz Fuller and three other people—twenty-five-year-old Elaine Hays, twenty-year-old Samhermundre Wideman, and nineteen-year-old Brent Chandler—broke into a college student’s apartment in Tyler, Texas, robbed him, and drove him in his car to a park where he was shot and killed.¹ Over the course of the next few days, someone brought a group of students from the local high school to see the victim’s body and, unsurprisingly, one of them immediately contacted law enforcement.² When the police arrested Justin a few days after the killing, he waived his *Miranda* rights and gave an uncounseled confession in which he admitted being present for the murder but denied being the triggerman.³ No forensic evidence indicated which of the four codefendants pulled the trigger.

Justin, who was black, went to trial first;⁴ he was convicted of murder and sentenced to death by a jury of twelve that included only one African-American.⁵ The trial judge refused to admit evidence that codefendant Samhermundre (who Justin maintained was the shooter) had a lengthy criminal record and told his girlfriend that “it felt good to shoot somebody.”⁶ The verdict sheet did not require the jury to determine whether Justin was the

1. David Carson, *Execution Report: Justin Fuller*, TEX. EXECUTION INFO. CTR. (Aug. 25, 2006), <http://www.txexecutions.org/reports/374-Justin-Fuller.htm> [<https://perma.cc/8WVJ-JYAL>]. At the time of the crime for which he was executed, Justin had no criminal record. *Fuller v. State*, No. AP-73106, 2000 WL 35432767, at *1 (Tex. Crim. App. Dec. 20, 2000). He was applying to college that spring. Brief for the Appellant at 32, *Fuller*, 2000 WL 35432767 (No. 73106), 1999 WL 33748921, at *32. Tyler is the seat of Smith County, Texas, a place with a history of executing young people. For example, one of the last juvenile offenders executed in the United States prior to *Roper* was Napoleon Beazley, whose story bears striking similarities to Justin Fuller’s. Napoleon was executed in 2005 for a murder he committed in Tyler, Texas, when he was seventeen. Napoleon and two older codefendants shot and killed a sixty-three-year-old man (the father of a federal judge) and stole his car. Like Justin, Napoleon was a promising student with no prior criminal record at the time of the murder. Like Justin, Napoleon was black. And like Justin, Napoleon’s victim was white. See Barry Pineo, *A Double Life*, AUSTIN CHRON. (July 15, 2005), <https://www.austinchronicle.com/arts/2005-07-15/279549/> [<https://perma.cc/U9BH-AFTC>].

2. Carson, *supra* note 1.

3. *Fuller v. Dretke*, 161 F. App’x 413, 415 (5th Cir. 2006); Brief for the Appellant, *supra* note 1, at *xxvii–iii.

4. Brief for the Appellant, *supra* note 1, at *xxviii. Brent Chandler took a plea for twenty-five years and testified against Justin; Samhermundre Wideman went to trial separately and received a life sentence; Elaine Hays also received a life sentence. See *Fuller*, 2000 WL 35432767, at *1 n.4 (noting that Fuller and Wideman were tried separately); *Texas Prison Inmates: Elaine Kay Hays*, TEX. TRIB., <https://www.texastribune.org/library/data/texas-prisons/inmates/elaine-kay-hays/> 1118180/ [<https://perma.cc/5SCV-Y9QB>] (current through Aug. 2019) (archiving Hays’s crime and life sentence); *Texas Prison Inmates: Samhermundre Raemune Wideman*, TEX. TRIB., <https://www.texastribune.org/library/data/texas-prisons/inmates/samhermundre-raemune-wideman/1198507/> [<https://perma.cc/M5BU-7P1Z>] (current through Aug. 2019) (archiving Wideman’s crime and life sentence); Michael Graczyk, *Killer in East Texas Slaying Headed to Death Chamber*, PLAINVIEW DAILY HERALD (Aug. 23, 2006), <https://www.myplainview.com/news/article/Killer-in-East-Texas-slaying-headed-to-death-8519166.php> [<https://perma.cc/K8NN-MDR7>]. Brent Chandler was released early and is not currently serving a prison sentence.

5. Brief for the Appellant, *supra* note 1, at 102–06.

6. *Dretke*, 161 F. App’x at 415–16, 422.

triggerman because, under Texas law, his participation in the robbery and kidnapping was sufficient for the jury to return a death sentence.⁷ After all of his appeals were rejected by the state and federal courts, Justin was executed by lethal injection in 2006. He was twenty-seven years old.

The year before Justin's execution, the Supreme Court of the United States created a categorical ban on the execution of people who were under the age of eighteen when they committed a capital offense.⁸ In announcing this categorical ban, the Court acknowledged that "[d]rawing the line at 18 years of age is subject, of course, to the objections always raised against categorical rules" and "[t]he qualities that distinguish juveniles from adults do not disappear when an individual turns 18."⁹ Nevertheless, in recognition that "a line must be drawn," the *Roper* Court embraced a bright-line cutoff at age eighteen.¹⁰ Justin fell on the wrong side of that line by a few months.

In the fourteen years since *Roper*, the scientific, legal, and societal understanding of youth's significance has fundamentally changed. Neuroscience has revealed a more nuanced view of the physiological markers of youth, how those markers affect behavior, and ways in which young people's brains continue developing into their mid-twenties. At the same time, society's understanding of what it means to be a young person has evolved, and capital-sentencing practices reflect that evolution by limiting the death penalty's use against youths under the age of twenty-one. These changes beg the question: Why eighteen? Are the underlying principles about youth that gave rise to *Roper*'s eighteen-year cutoff still socially and scientifically valid? Although some litigants have argued in favor of extending *Roper*'s categorical ban beyond the age of eighteen, there is a dearth of scholarly research addressing social and scientific changes since *Roper*.¹¹

This Essay seeks to answer these questions using the Supreme Court's evolving standards of Eighth Amendment methodology. Based on our analysis of post-*Roper* death sentences and executions, viewed against the new, more nuanced understanding of juvenile-brain development, we conclude a cutoff of eighteen years old is no longer supportable; instead, the

7. See Verdict Form, *Texas v. Fuller*, 1998 WL 35255778 (Tex. Dist. Ct. Mar. 4, 1998) (No. 241-80814-97) (indicating that a death sentence could be conferred given Justin's factual situation because the court allowed a verdict for capital murder).

8. *Roper v. Simmons*, 543 U.S. 551, 578 (2005).

9. *Id.* at 574.

10. The Court selected eighteen because, it explained, "[t]he age of 18 is the point where society draws the line for many purposes between childhood and adulthood," and because the then-available neuroscience indicated that the brains of eighteen-year-olds were underdeveloped relative to those of older people. *Id.* at 573–74.

11. For example, in 2017 a Kentucky trial court agreed that *Roper* should be extended to cover offenders under the age of twenty-one and barred the death penalty for a twenty-year-old individual charged with a capital crime. *Commonwealth v. Bredhold*, No. 14-CR-161, slip op. at 1 (Ky. Cir. Ct. Aug. 1, 2017). As of March 2020, the case is pending on interlocutory appeal at the Kentucky Supreme Court.

cutoff should be raised to twenty-one. In Part I, we review the Supreme Court's jurisprudence on evolving standards of decency and how its treatment of youth has changed since *Roper*. In Part II, we review the work of neuroscientists focused on brain development in young people and explore how novel technology since *Roper* has eroded the scientific basis for *Roper*'s eighteen-year cutoff.¹² We also describe ways in which society treats people under twenty-one like children, not adults. In Part III, we discuss our methodology and present our analysis of death sentencing and executions of youthful offenders since *Roper*, including a review of racial disparities revealed by that data. We conclude by discussing the implications of our data and analysis.

I. Juvenile Sentencing from *Roper* to *Montgomery*

A. *The Supreme Court's Jurisprudence on Evolving Standards of Decency*

In *Roper v. Simmons*, the Court held the execution of a juvenile offender—one under the age of eighteen at the time of the offense—violates the Eighth Amendment's prohibition on cruel and unusual punishment.¹³ The Eighth Amendment proscribes “all excessive punishments, as well as cruel and unusual punishments that may or may not be excessive.”¹⁴ This proscription “flows from the basic ‘precept of justice that punishment for [a] crime should be graduated and proportioned to [the] offense.’”¹⁵ Punishment is “cruel and unusual” if there is either a general societal consensus against its imposition or if its imposition affronts “the basic concept of human dignity at the core of the Amendment” because it is disproportionate to the offender's moral culpability.¹⁶ Each of these Eighth Amendment principles “must draw its meaning from the evolving standards of decency that mark the progress of a maturing society.”¹⁷

12. The authors of this Essay are not neuroscientists or neuropsychologists. The aim of Part II is to provide an overview of some legally relevant developments in the field of brain science since *Roper*, not to offer any novel interpretations of the relevant science.

13. 543 U.S. at 571–73. The *Roper* Court defined “juveniles” as offenders under the age of eighteen at the time of the offense. However, the Court adopted an eighteen-year bright line at least in part because the respondent, Christopher Simmons, advocated for such a cutoff based on the scientific and social information available in 2005, as well as the fact that Christopher Simmons was himself seventeen at the time of his offense. Brief for Respondent at 1, 28, *Roper*, 543 U.S. 551 (No. 03-633), 2004 WL 1947812, at *1, 28.

14. *Atkins v. Virginia*, 536 U.S. 304, 311 n.7 (2002).

15. *Kennedy v. Louisiana*, 554 U.S. 407, 419 (2008) (quoting *Weems v. United States*, 217 U.S. 349, 367 (1910)).

16. *Gregg v. Georgia*, 428 U.S. 153, 182 (1976) (opinion of Stewart, Powell, Stevens, JJ.).

17. *Trop v. Dulles*, 356 U.S. 86, 100–01 (1958) (plurality opinion).

“[T]he standard of extreme cruelty . . . itself remains the same, but its applicability must change as the basic mores of society change.”¹⁸ “[E]volving standards of decency,” in turn, are measured by reference to whether a “national consensus” supports a categorical prohibition on a given punishment.¹⁹ To ascertain whether or not such a consensus exists, the Court considers “objective indicia of society’s standards, as expressed in legislative enactments and state practice with respect to executions.”²⁰ Although legislative enactments constitute the “clearest and most reliable objective evidence of contemporary values,”²¹ “[a]ctual sentencing practices are [also] an important part of the Court’s inquiry into consensus.”²² Specifically, the Court has explained that “[i]t is not so much the number” of states that technically authorize a sentence that is significant, “but the consistency of the direction of change” relative to that sentence.²³

When the Court identifies a national consensus, it then exercises its independent judgment to decide whether there is reason to disagree with (or accept) the national consensus.²⁴ “The penological justifications for the sentencing practice are . . . relevant to [this] analysis” because although “[c]riminal punishment can have different goals, and choosing among them is within a legislature’s discretion[,] . . . [a] sentence lacking any legitimate penological justification is by its nature disproportionate to the offense.”²⁵ The Court has identified four valid penological justifications for punishment: retribution, deterrence, incapacitation, and rehabilitation.²⁶ In the capital context, however, only two of those justifications are relevant—“general deterrence and retribution.”²⁷ If a capital sentence does not serve those objectives with respect to a class of offenders, the sentence is categorically disproportionate. Additionally, when the Court evaluates the justifications for a capital sentence, it applies a special standard: “Because the death penalty is the most severe punishment, the Eighth Amendment applies to it

18. *Kennedy*, 554 U.S. at 419 (quoting *Furman v. Georgia*, 408 U.S. 238, 382 (1972) (Burger, C.J., dissenting)).

19. *Atkins*, 536 U.S. at 312–14.

20. *Roper*, 543 U.S. at 563; *see also* *Enmund v. Florida*, 458 U.S. 782, 788 (1982) (looking to “historical development of the punishment at issue, legislative judgments, international opinion, and the sentencing decisions juries have made”); *Coker v. Georgia*, 433 U.S. 584, 593–97 (1977) (plurality opinion) (considering the sentencing behavior of juries as well as legislative decision-making).

21. *Atkins*, 536 U.S. at 312 (quoting *Penry v. Lynaugh*, 492 U.S. 302, 331 (1989)).

22. *Graham v. Florida*, 560 U.S. 48, 62 (2010).

23. *Atkins*, 536 U.S. at 315.

24. *Id.* at 321; MARC J. TASSÉ & JOHN H. BLUME, *INTELLECTUAL DISABILITY AND THE DEATH PENALTY* 41 (2018).

25. *Graham*, 560 U.S. at 71 (citations omitted).

26. *Id.* (citing *Ewing v. California*, 538 U.S. 11, 25 (2003) (plurality opinion)).

27. *Gregg v. Georgia*, 428 U.S. 153, 233 (1976) (Marshall, J., dissenting). Incapacitation is equally well served by a sentence of life without the possibility of parole, and rehabilitation is not a possibility for a dead person.

with special force.”²⁸ Thus, a sentence of death violates the Eighth Amendment if the sentencer’s discretion is insufficiently channeled.²⁹ Over the last two decades, the Supreme Court has applied these principles to gradually restrict the classes of defendants who may be exposed to the possibility of capital punishment.³⁰

B. Evolving Standards of Decency and Juvenile Sentencing

In 2005, overruling its previous decisions upholding the practice,³¹ the *Roper* Court held that the execution of juvenile offenders violates the Eighth Amendment because the severity of the punishment is categorically disproportionate to the offender’s diminished personal responsibility for the crime.³² As it had done in prior evolving standards cases, the Court began by identifying a national consensus with reference to “objective indicia”: “the rejection of the juvenile death penalty in the majority of States; the infrequency of its use even where it remains on the books; and the consistency in the trend toward abolition of the practice.”³³

Following its settled methodology, the Court then set about determining whether the national consensus comported with its own judgment about the

28. *Roper v. Simmons*, 543 U.S. 551, 568 (2005).

29. *Zant v. Stephens*, 462 U.S. 862, 883, 907 (1983) (Marshall, J., dissenting).

30. For example, in *Coker v. Georgia*, the Court held that the death penalty is categorically “an excessive penalty for the rapist who, as such, does not take human life” and is therefore less culpable than a murderer. 433 U.S. 584, 598 (1977). Likewise, in *Enmund v. Florida*, the Court held that the death penalty is a categorically disproportionate punishment for individuals convicted of murder who did not directly participate in a killing because of their diminished culpability relative to that of the direct participants. 458 U.S. 782, 798 (1982). *But see* *Tison v. Arizona*, 481 U.S. 137, 158 (1987) (finding that the death penalty may be imposed for felony murder when the defendant’s participation is major and the mental state is one of reckless indifference to the value of human life). More recently, the Court held in *Atkins v. Virginia* that a sentence of death is a categorically disproportionate punishment for offenders with intellectual disability because of their diminished culpability. 536 U.S. 304, 318, 320 (2002). In *Atkins*, the Court identified specific deficiencies shared by people with intellectual disability that reduce their culpability as a class, regardless of their crimes: “they have diminished capacities to understand and process information, to communicate, to abstract from mistakes and learn from experience, to engage in logical reasoning, to control impulses, and to understand the reactions of others”; “they often act on impulse rather than pursuant to a premeditated plan”; and “in group settings they are followers rather than leaders.” *Id.* at 318.

31. *See* *Stanford v. Kentucky*, 492 U.S. 361, 370–73 (1989) (concluding the Eighth and Fourteenth Amendments did not proscribe the execution of offenders over fifteen but under eighteen because twenty-two of thirty-seven death-penalty states permitted that penalty for sixteen-year-old offenders, and twenty-five permitted it for seventeen-year-olds, thereby indicating there was no national consensus); *Thompson v. Oklahoma*, 487 U.S. 815, 826–30, 838 (1988) (plurality opinion) (finding that national standards of decency did not permit the execution of any offender under age sixteen at the time of the crime).

32. *Roper*, 543 U.S. at 570–71.

33. *Id.* at 567. At the time that *Roper* was decided, eighteen states had expressly banned the execution of offenders under eighteen, and twelve states had abolished the death penalty entirely. *Id.* at 564. The Court counted those states as a group and concluded that “30 States prohibit the juvenile death penalty.” *Id.*

proportionality of the death penalty for juveniles. It began by describing class-wide traits shared by people under the age of eighteen that diminish their culpability, regardless of the nature of their offense: (1) they have a “lack of maturity and an underdeveloped sense of responsibility” that “often result[s] in impetuous and ill-considered actions and decisions”; (2) they are “more vulnerable or susceptible to negative influences and outside pressures, including peer pressure”; and (3) their characters are “not as well formed” and their personalities are “more transitory, less fixed” than those of adults.³⁴ These traits of the young, the Court explained, “render suspect any conclusion that a juvenile falls among the worst offenders,” and once their diminished culpability is recognized, “it is evident that the penological justifications for the death penalty apply to them with lesser force than to adults.”³⁵ As for the first penological objective of the death penalty, retribution, “the case for [it] is not as strong with a minor as with an adult” because “[r]etribution is not proportional if the law’s most severe penalty is imposed on one whose culpability or blameworthiness is diminished, to a substantial degree, by reason of youth and immaturity.”³⁶ And as for deterrence, “it is unclear whether the death penalty has a significant or even measurable deterrent effect on juveniles” because “[t]he likelihood that the teenage offender has made the kind of cost-benefit analysis that attaches any weight to the possibility of execution is so remote as to be virtually nonexistent.”³⁷

After *Roper*, the Court applied the “children are constitutionally different from adults” rationale to noncapital sentencing. First, in *Graham v. Florida*,³⁸ the Court barred sentences of life without parole for nonhomicide offenders who were under eighteen at the time of their crimes.³⁹ Two years later, the Court held in *Miller v. Alabama*⁴⁰ that the Eighth Amendment prohibits the mandatory imposition of life without the possibility of parole for juvenile offenders.⁴¹ Finally, in 2016, the Court held that *Miller* was a substantive rule of criminal procedure and that it therefore was entitled to retroactive application to cases that were final on direct review at the time *Miller* was decided.⁴²

As it did in *Roper*, the Court in *Graham* and *Miller* found national consensus against the punishments based on objective measures. The Court’s focus, however, shifted from “widespread legislative authorization”

34. *Id.* at 569–70.

35. *Id.* at 570–71.

36. *Id.* at 571.

37. *Id.* at 571–72 (quoting *Thompson v. Oklahoma*, 487 U.S. 815, 837 (1988) (plurality opinion)).

38. 560 U.S. 48 (2010).

39. *Id.* at 71–72.

40. 567 U.S. 460 (2012).

41. *Id.* at 480.

42. *Montgomery v. Louisiana*, 136 S. Ct. 718, 732 (2016).

to the infrequency with which states carried out the punishments at issue.⁴³ For example, in *Graham*, the Court's analysis depended on the fact that only 123 individuals were serving life-without-parole sentences for nonhomicide offenses they committed when they were under the age of eighteen.⁴⁴ The Court contextualized those numbers by comparing them to the much larger category of teenaged offenders who were arrested for nonhomicide crimes that might have exposed them to life without parole.⁴⁵ The Court concluded that, given the small number of juvenile nonhomicide offenders serving life without parole, "[t]he sentencing practice now under consideration is exceedingly rare. And 'it is fair to say that a national consensus has developed against it.'"⁴⁶

Similarly, in *Miller*, the practice at issue—sentencing juvenile homicide offenders to mandatory life without parole—was not only authorized but required in twenty-nine states.⁴⁷ The Court found a national consensus against the practice, despite the penalty's widespread availability, and reasoned the states that authorized the sentences did so by route of "inadvertent legislative outcomes."⁴⁸

43. See *Miller*, 567 U.S. at 482–83 (rejecting the argument that the number of states with mandatory life-without-parole sentences should prevent holding such statutes unconstitutional); *Graham*, 560 U.S. at 62–63 (stating that "an examination of actual sentencing practices in jurisdictions where the sentence in question is permitted by statute discloses a consensus against its use"); Robert J. Smith et al., *The Way the Court Gauges Consensus (and How to Do It Better)*, 35 CARDOZO L. REV. 2397, 2451 (2014) (suggesting that because forty-three states have not sentenced anyone to death or else not executed anyone since 2004, "Americans have repudiated capital punishment"). In *Graham*, the Court began its analysis by noting that six jurisdictions at that time barred life sentences for people under eighteen and seven jurisdictions permitted life-without-parole sentences for people under eighteen, but only for homicide crimes. *Graham*, 560 U.S. at 62. The Court rejected the State's argument—that because only thirteen states explicitly banned the sentencing practice at issue, there was no national consensus—as "incomplete and unavailing" because "[a]ctual sentencing practices are an important part" of the inquiry. *Id.* Similarly, the *Miller* Court rejected the States' argument that because a majority of jurisdictions statutorily authorized life-without-parole sentences for juveniles, there could be no consensus against it. *Miller*, 567 U.S. at 482–83. In *Miller*, the Court concluded that "the States' argument on this score [was] weaker than the one we rejected in *Graham*" because the outcome was not based solely on consensus, but instead "flow[ed] straightforwardly from our precedents: specifically, the principle of *Roper*, *Graham*, and our individualized sentencing cases that youth matters for purposes of meting out the law's most serious punishments." *Id.*

44. *Graham*, 560 U.S. at 63–64.

45. *Id.* at 65–66.

46. *Id.* at 67 (quoting *Atkins v. Virginia*, 536 U.S. 304, 316 (2002)).

47. The legislative enactments providing for mandatory juvenile life without parole that were at issue in *Miller* were poor indicators "that many States actually 'intended to subject such offenders' to those sentences" because the mandatory nature of the sentencing schemes precluded juries and judges from providing evidence of actual sentencing practices. *Miller*, 567 U.S. at 485–87 (quoting *Graham*, 560 U.S. at 67).

48. *Id.* at 486–87 (recognizing that "most States do not have separate penalty provisions" for juvenile homicide offenders charged as adults and, as a result "[o]f the 29 jurisdictions mandating life without parole for children, more than half do so by virtue of generally applicable penalty provisions, imposing the sentence without regard to age").

The Court in *Roper*, *Graham*, *Miller*, and *Montgomery* also cited developments in neuroscience and social science that confirmed a common-sense observation: young people's brains are different from adults' brains in ways that make young people less morally responsible for their actions.⁴⁹ Given juveniles' diminished moral culpability, the punishments at issue lacked "any legitimate penological justification."⁵⁰ The rationale that underpins the Court's judgment in all of these cases is that youth is uniquely mitigating: "[J]ust as the chronological age of a minor is itself a relevant mitigating factor of great weight, so must the background and mental and emotional development of a youthful defendant be duly considered' in assessing his culpability."⁵¹ Moreover, in reaching the conclusion that adolescents under eighteen may not be executed, the *Roper* Court acknowledged that "[t]he qualities that distinguish juveniles from adults do not disappear when an individual turns 18."⁵² To the contrary, the Court concluded that "a line must be drawn," and based on the scientific and social information that was available in 2005 when the Court was considering *Roper*, it settled on eighteen as an appropriate place to draw the line.⁵³

It is true, as the *Roper* Court acknowledged, that any bright-line rule is susceptible to criticism;⁵⁴ however, it is also true that when the Court has drawn bright lines that are later shown to lack social and scientific support, it has redrawn them. In *Roper*, the Court revisited its prior decisions because the scientific and societal bases upon which they were based could no longer support an age cutoff of sixteen.⁵⁵

49. See, e.g., *id.* at 471 ("Our decisions [in *Roper* and *Graham*] rested not only on common sense—on what 'any parent knows'—but on science and social science as well.").

50. *Graham*, 560 U.S. at 71.

51. *Miller*, 567 U.S. at 476 (alteration in original) (quoting *Eddings v. Oklahoma*, 455 U.S. 104, 116 (1982)).

52. *Roper v. Simmons*, 543 U.S. 551, 574 (2005).

53. See *id.* (drawing the line at eighteen because eighteen is the age "where society draws the line for many purposes between childhood and adulthood").

54. *Id.* The Court noted that "[t]he qualities that distinguish juveniles from adults do not disappear when an individual turns 18," but "some under 18 have already attained a level of maturity some adults will never reach." *Id.* Some of the criticisms against a bright-line rule based on age are laid out in Justice O'Connor's dissent in *Roper*: a bright-line rule "is premised on differences in the aggregate between juveniles and adults, which frequently do not hold true when comparing individuals"; "[c]hronological age is not an unfailing measure of psychological development, and common experience suggests that many 17-year-olds are more mature than the average young 'adult'; and "the class of offenders exempted from capital punishment [under *Roper*] is too broad and too diverse to warrant a categorical prohibition," which makes the rule "indefensibly arbitrary" by "protect[ing] a number of offenders who are mature enough to deserve the death penalty and may well leave vulnerable many who are not." *Id.* at 601–02 (O'Connor, J., dissenting).

55. See *id.* at 574 (majority opinion) ("The logic of *Thompson* extends to those who are under 18.").

II. Social and Scientific Changes Since *Roper*

A. Novel Research in Neuroscience and Brain Development

In the years since *Roper*, developments in neuroscience have made clear that the line the Court chose in *Roper*—eighteen years—is too low.⁵⁶ Developments in neuroscience confirm that impulsivity, a tendency to engage in high-risk behavior, a strong susceptibility to peer pressure, and a high degree of personality plasticity characterize people under eighteen just as they characterized the juveniles described in *Miller*, *Graham*, and *Roper*.⁵⁷ These traits are the product of asynchronous neurological developments that are common to juveniles and people between eighteen and twenty-one: although the brain's reward centers are fully developed and primed for impulsive action,⁵⁸ the regions of the brain that regulate higher reasoning and

56. See Elizabeth C. Victor & Ahmad R. Hariri, *A Neuroscience Perspective on Sexual Risk Behavior in Adolescence and Emerging Adulthood*, 28 DEV. & PSYCHOPATHOLOGY 471, 472 (2016) (“In the last decade, remarkable research has been conducted in the field of developmental neuroscience to provide a richer understanding of brain function and development during adolescence and emerging adulthood.”). Emerging adulthood is loosely defined as the period from late adolescence to the mid- or late-twenties. E.g., Aude Henin & Noah Berman, *The Promise and Peril of Emerging Adulthood: Introduction to the Special Issue*, 23 COGNITIVE & BEHAV. PRAC. 263, 263 (2016); see also LAURENCE STEINBERG, ADOLESCENCE 3–4 (11th ed. 2017) (defining adolescence as beginning with puberty and ending when individuals make the transition into adult roles, roughly from ages ten until the early twenties).

Some of the many novel developments in neuroscience in the past decade include: (1) functional magnetic resonance imaging (fMRI) studies have become ubiquitous in the field of neuroscience, and the tools used in conducting fMRI research have become significantly more sophisticated, see Kerri Smith, *fMRI 2.0: Functional Magnetic Resonance Imaging Is Growing from Showy Adolescence into a Workhorse of Brain Imaging*, 484 NATURE 24, 25 (2012) (observing that “fMRI has been applied to almost every aspect of brain science” and that “[i]n 2010, neuroscientists used fMRI in more than 1,500 published articles”); (2) diffusion tensor imaging (DTI), a form of MRI, has obtained more widespread clinical use and now allows neuroscientists to study white matter integrity in real time with a heightened degree of sensitivity, thereby giving scientists and clinicians access to more detailed information about how the brain develops, see Megan K. Horton et al., *Neuroimaging Is a Novel Tool to Understand the Impact of Environmental Chemicals on Neurodevelopment*, 26 CURRENT OPINIONS PEDIATRICS 230, 231–32 (2014) (describing DTI and other “[r]ecent advances in neuroimaging techniques” that have “opened unprecedented access to study the developing human brain”); and (3) tools, such as resting-state functional connectivity magnetic resonance imaging (RS-fcMRI), that allow neuroscientists to identify specific regions of the brain that control brain development, see Benjamin J. Shannon et al., *Premotor Functional Connectivity Predicts Impulsivity in Juvenile Offenders*, 108 PROC. NAT’L ACAD. SCI. U.S. 11241, 11241 (2011) (describing RS-fcMRI studies as “rapidly emerging as a major theme of human imaging research” and applying that tool to study how young people’s brains develop).

57. Compare Henin & Berman, *supra* note 56, at 264–65 (describing emerging adulthood as a developmental stage defined by high-risk behavior, vulnerability to peer pressure, impulsivity, deficits in self-regulation, and ongoing neurological growth), with *Miller v. Alabama*, 567 U.S. 460, 477 (2012) (describing the “hallmark features” of adolescence including “immaturity, impetuosity, and failure to appreciate risks and consequences”).

58. The limbic system, which is responsible for emotion processing, social information processing, and reward appraisal, matures around the time of puberty. E.g., STEINBERG, *supra* note 56, at 55–58; Daniel Romer et al., *Beyond Stereotypes of Adolescent Risk Taking: Placing the*

emotional control remain immature.⁵⁹ Put another way, the brains of people under twenty-one, unlike adults' brains but like teenagers' brains, are capable of triggering adult emotions but are not capable of managing or processing those emotions.

During the late teens and early twenties, a young person's brain is undergoing rapid changes in the areas of the brain most closely connected to impulsivity and decision-making.⁶⁰ Specifically, recent neuroimaging studies show that the volume of white matter in the brain is relatively stable until around age twenty-one, when it begins to increase dramatically.⁶¹ That is important because white matter fibers transmit information between neurons, allowing different regions of the brain to communicate with each other.⁶² This means that the brains of people under twenty-one are poorly

Adolescent Brain in Developmental Context, 27 DEVELOPMENTAL COGNITIVE NEUROSCIENCE 19, 19–21 (2017). Changes in the limbic system during adolescence are associated with adolescents becoming more emotional, more sensitive to stress, more sensitive to rewards, and more likely to engage in sensation-seeking. STEINBERG, *supra* note 56, at 55–57.

59. The prefrontal cortex allows people to engage in sophisticated thinking like planning and weighing risks and rewards. Laurence Steinberg, *Adolescent Development and Juvenile Justice*, 5 ANN. REV. CLINICAL PSYCHOL. 459, 466 (2009). This region of the brain is last to mature and is not fully developed until the mid-twenties. STEINBERG, *supra* note 56, at 60; B.J. Casey et al., *The Adolescent Brain*, 28 DEVELOPMENTAL REV. 62, 66 (2008); Jay N. Giedd, *Structural Magnetic Resonance Imaging of the Adolescent Brain*, 1021 ANNALS N.Y. ACAD. SCI. 77, 83 (2004); Laurence Steinberg, *A Social Neuroscience Perspective on Adolescent Risk-Taking*, 28 DEVELOPMENTAL REV. 78, 94–95 (2008).

60. See Lars T. Westlye et al., *Life-Span Changes of the Human Brain White Matter: Diffusion Tensor Imaging (DTI) and Volumetry*, 20 CEREBRAL CORTEX 2055, 2062 (2010) (describing lifetime neurological development). The specific changes involve the development of “association cortices and the frontolimbic systems involved in executive, attention, reward, and social processes.” Bradley Taber-Thomas & Koraly Perez-Edgar, *Emerging Adult Brain Development*, in THE OXFORD HANDBOOK OF EMERGING ADULTHOOD 126, 126–27 (Jeffrey Jensen Arnett ed., 2016). And those developments are “primarily expressed in axonal myelination and gray matter pruning, with a reduction in the cortical thickness and a simultaneous increase in white matter volume.” Martina Knežević & Ksenija Marinković, *Neurodynamic Correlates of Response Inhibition from Emerging to Mid Adulthood*, 43 COGNITIVE DEV. 106, 107 (2017). These changes have practical effects that are borne out by laboratory studies. For example, fMRI studies of adults' brains show that when adults engage in response-inhibition trials—common laboratory tests designed to evaluate impulsivity—a handful of brain regions are activated. Adam R. Aron, *From Reactive to Proactive and Selective Control: Developing a Richer Model for Stopping Inappropriate Responses*, 69 BIOLOGICAL PSYCHIATRY e55, e60–63 (2011). When those same tests are given to young people in their late teens and early twenties, however, the same brain regions are not activated in the same way. Knežević & Marinković, *supra*, at 111–14. Rather, young adults in their late teens and early twenties—unlike their older adult counterparts—perform worse on laboratory impulsivity tests. *Id.* at 109–10, 114–15.

61. Westlye et al., *supra* note 60, at 2062.

62. See Susumu Mori et al., 1 MRI ATLAS OF HUMAN WHITE MATTER (2005) (presenting an atlas of the human brain based on T 1-weighted imaging and diffusion tensor imaging); Quan Wen & Dmitri B. Chklovskii, *Segregation of the Brain into Gray and White Matter: A Design Minimizing Conduction Delays*, 1 PLOS COMPUTATIONAL BIOLOGY 617, 617 (2005) (discussing the role of white matter in information transmission).

integrated.⁶³ Additionally, increased white matter volume in the frontolimbic system—a part of the brain that is not fully developed until after age twenty-one—enables individuals to modulate anxiety, deal with fear, and become socially adept.⁶⁴ Because of these developmental deficits, people under twenty-one have difficulty generating appropriate responses to fear, envisioning the future, and understanding consequences.⁶⁵

The brains of people under twenty-one, like those of people under eighteen, also remain immature in three areas that support self-control and emotional regulation: the amygdala, the prefrontal cortex, and the ventral striatum.⁶⁶ For example, new neuroimaging studies reveal that the prefrontal cortex—an area of the brain associated with reasoning and higher function—remains developmentally immature and underregulated until the mid-twenties, while the brain’s dopamine-producing reward centers are relatively overexpressed, making young adults “more vulnerable to impulsivity,” less capable of emotional reasoning, and more likely to make “errors in self-regulation.”⁶⁷ Similarly, fMRI studies indicate that the brains of people in their late teens and early twenties lack the structural development that is necessary for higher-level reasoning and emotional regulation.⁶⁸

The differing timetables of brain development—increased reward-seeking, “which occurs early and is relatively abrupt,” and “the increase in self-regulatory competence, which occurs gradually and is not complete until the mid-20s”—make the period from the late teens to the early twenties “a

63. Taber-Thomas & Perez-Edgar, *supra* note 60, at 9. In one study designed to test the real-world impacts of an underdeveloped frontolimbic system, researchers asked teenagers, emerging adults (defined in the study as people ages eighteen to twenty-one), and young adults in their mid-twenties to exercise impulse control under emotionally neutral and emotionally arousing conditions. Alexandra O. Cohen et al., *When Is an Adolescent an Adult? Assessing Cognitive Control in Emotional and Nonemotional Contexts*, 27 *PSYCHOL. SCI.* 549 (2016). Although emerging adults performed similarly to young adults in response to emotionally neutral cues, that pattern flipped in response to threatening cues: emerging adults performed like teenagers and their brain activity looked like that of teenagers, not adults. *Id.* at 556–57.

64. See Joanna Jacobus et al., *White Matter Integrity, Substance Use, and Risk Taking in Adolescence*, 27 *PSYCHOL. ADDICTION BEHAV.* 431, 431–32 (2013) (noting that a neuroimaging study showed marked white matter development during late adolescence, an age range during which adolescents show “gradual improvements in executive functioning”).

65. Taber-Thomas & Perez-Edgar, *supra* note 60, at 9.

66. B.J. Casey, *Beyond Simple Models of Self-Control to Circuit-Based Accounts of Adolescent Behavior*, 66 *ANN. REV. PSYCHOL.* 295, 300–01 (2015).

67. Henin & Berman, *supra* note 56, at 264–65; see also Casey et al., *supra* note 59, at 62–63 (describing increased adolescent sensation-seeking behavior); Elizabeth Cauffman, TEDx Address: Arrested Development: Adolescent Development and Juvenile Justice (July 18, 2016), <https://www.youtube.com/watch?v=wUa0blqZ0XU> [<https://perma.cc/LC2A-GNBW>] (explaining the cognitive bases underlying why young people are driven to take risks without considering the consequences).

68. Nitin Gogtay et al., *Dynamic Mapping of Human Cortical Development During Childhood Through Early Adulthood*, 101 *PROC. NAT’L ACAD. SCI.* 8174, 8175–76 (2004) (stating that the loss of cortical gray matter in the prefrontal cortex and temporal lobe do not peak until the end of adolescence).

time of heightened vulnerability to risky and reckless behavior.”⁶⁹ The heightened propensity for recklessness is borne out in an increased risk of negative outcomes for individuals under twenty-one. For example, the peak risk years for young men both committing and being a victim of homicide are nineteen and twenty,⁷⁰ and people in their late teens and early twenties have higher rates of alcohol and illicit drug use, unplanned pregnancy, and sexually transmitted infections than any other age group.⁷¹

Researchers have proposed that this spike in risky behavior is a product of two defining, class-wide characteristics of people under twenty-one. On the one hand, their brains are physiologically like those of younger children, unable to fully regulate emotion or evaluate risk. On the other hand, they are experiencing rapid changes in social control, with the end of high school and the beginning of college or employment.⁷² These neuropsychological and social developments are accompanied by meaningful personality changes. Specifically, recent studies show that people in their late teens and early twenties have a “sensitivity to environmental factors in terms of the stability of personality features during this phase” and a unique plasticity of character that fades as they reach their mid-twenties.⁷³ These factors also mean that people in their late teens and early twenties are uniquely susceptible to peer pressure.⁷⁴

In short, people under twenty-one display the same traits that the Court identified in *Atkins*, *Roper*, and *Miller* as diminishing blameworthiness and undermining the case for retributive punishment: compared to adults, young people under twenty-one, like juveniles and people with intellectual disability, have diminished capacities “to abstract from mistakes and learn from experience, to engage in logical reasoning, to control impulses, and to

69. Steinberg, *supra* note 59, at 83; *see also* Renate L.E.P. Reniers et al., *Is It All in the Reward? Peers Influence Risk-Taking Behaviour in Young Adulthood*, 108 BRIT. J. PSYCHOL. 276, 277 (2017) (“[Although] [i]t is often overlooked . . . adolescents and young adults have been shown to be equally susceptible to taking risks . . .”).

70. Rolf Loeber & David P. Farrington, *Young Male Homicide Offenders and Victims: Current Knowledge, Beliefs, and Key Questions*, in *YOUNG HOMICIDE OFFENDERS AND VICTIMS* 1, 4 (Rolf Loeber & David P. Farrington eds., 2011).

71. Henin & Berman, *supra* note 56, at 264.

72. *See* STEINBERG, *supra* note 56, at 70 (discussing the increase in individual responsibility triggered by the change in social control that occurs during late adolescence); Taber-Thomas & Perez-Edgar, *supra* note 60, at 136.

73. Adriel Boals et al., *Adverse Events in Emerging Adulthood Are Associated with Increases in Neuroticism*, 83 J. PERSONALITY 202, 204 (2015).

74. Reniers et al., *supra* note 69, at 277–78. Studies show that risk-taking behavior is more frequent and more risky when a person in the eighteen-to-twenty-one age range is around peers or older adults, and multiple studies have concluded that the presence of peers or older adults heightens a young person’s sensitivity to the potential brain-chemical reward value of risky decisions. *Id.* at 277. Again, underlying neurophysiological developments may help explain this: risky behavior in the company of peers is correlated with increased activation of reward-related brain regions like the ventral striatum and orbitofrontal cortex, regions that are relatively overdeveloped in people ages eighteen to twenty-one. *Id.*

understand the reactions of others.”⁷⁵ They have a “lack of maturity and an underdeveloped sense of responsibility” that “often result[s] in impetuous and ill-considered actions and decisions”; they are “more vulnerable or susceptible to negative influences and outside pressures, including peer pressure”; and their characters are “not as well formed” and their personalities “more transitory, less fixed” than those of adults.⁷⁶

These traits, in turn, “render suspect any conclusion that a [person under twenty-one] falls among the worst offenders.”⁷⁷ As the Court has explained, unless the imposition of the death penalty on a particular class of offender measurably contributes to the penological justifications for capital punishment—retribution and deterrence—“it ‘is nothing more than the purposeless and needless imposition of pain and suffering,’ and hence an unconstitutional punishment.”⁷⁸ Executing youthful offenders serves neither goal.

Retribution is “the oldest theory of punishment” and “is imposed by society on criminals in order to obtain revenge.”⁷⁹ In the context of capital punishment, retribution is a valid justification only for “a narrow category of the most serious crimes” committed by the most culpable offenders.⁸⁰ Thus, once we recognize that youthful offenders have a diminished culpability because their brains are not fully developed, “it is evident that the penological justifications for the death penalty apply to them with lesser force than to adults.”⁸¹

Regarding deterrence—“the interest in preventing capital crimes by prospective offenders”—the *Atkins* Court observed that “it seems likely that ‘capital punishment can serve as a deterrent only when a murder is the result of premeditation and deliberation.’”⁸² As described above, new scientific research shows that people ages eighteen to twenty-one, like people under eighteen, are prone to act on impulse rather than premeditation. Thus, the likelihood that a person under twenty-one “has made the kind of cost-benefit analysis that attaches any weight to the possibility of execution is so remote as to be virtually nonexistent.”⁸³

In sum, post-*Roper* scientific research confirms the common-sense notion that people under twenty-one are less morally culpable than their adult counterparts because their brains are physiologically immature at least until

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

76. *Roper v. Simmons*, 543 U.S. 551, 569–70 (2005) (quoting *Johnson v. Texas*, 509 U.S. 350, 367 (1993)).

77. *Id.* at 570.

78. *Atkins*, 536 U.S. at 319 (quoting *Enmund v. Florida*, 458 U.S. 782, 798 (1982)).

79. 1 WAYNE R. LAFAVE, SUBSTANTIVE CRIMINAL LAW § 1.5(a)(6) (3d ed. 2018).

80. *Atkins*, 536 U.S. at 319.

81. *Roper*, 543 U.S. at 571.

82. *Atkins*, 536 U.S. at 319 (quoting *Enmund*, 458 U.S. at 799).

83. *Roper*, 543 U.S. at 572 (quoting *Thompson v. Oklahoma*, 487 U.S. 815, 837 (1988) (plurality opinion)).

the age of twenty-one. Their reduced culpability removes them, as a class, from the group of defendants that can reliably be considered the worst of the worst.

B. Society's Treatment of People Under Twenty-One

Society treats people under twenty-one more like teenagers than adults, acknowledging—at least tacitly—the fact that brain development is not complete by the age of eighteen. In *Roper*, the Court looked to age restrictions in various state laws unrelated to capital sentencing and concluded that states' prohibitions on “voting, serving on juries, or marrying without parental consent” were indications that states recognized “the comparative immaturity and irresponsibility of juveniles.”⁸⁴ Those same kinds of restrictions exist for people under the age of twenty-one.⁸⁵ Significantly, many of the restrictions on people under twenty-one have been adopted in the wake of *Roper*, as society's perceptions of youth have evolved.

For example, all fifty states and the District of Columbia impose a minimum-age restriction of twenty-one years for the consumption, purchase, or possession of alcohol, while many impose a similar restriction for recreational marijuana.⁸⁶ Over 530 cities and counties in thirty-one states now prohibit the sale of tobacco to people under twenty-one, and in May 2019, Senators Mitch McConnell and Tim Kaine introduced a bipartisan bill that would federalize the prohibition on tobacco sales to people under twenty-one.⁸⁷ Forty-one states impose a minimum age of twenty-one to obtain concealed-carry permits for firearms,⁸⁸ and federal law prohibits licensed gun dealers from selling handguns and ammunition to people under the age of twenty-one.⁸⁹ Federal immigration law permits a parent of a U.S. citizen to petition for an immigrant visa for any “unmarried children under the age of

84. *Id.* at 569.

85. It is also worth noting that there is a social and moral difference between affirmative rights to engage in adult conduct and the negative right not to be subjected to adult punishment. This is because, as one scholar has explained, “[u]nlike other laws that regulate behavior, criminal punishment involves finding people morally blameworthy,” and the “defining characteristic” of criminal punishment is “state censure.” Kelsey B. Shust, *Extending Sentencing Mitigation for Deserving Young Adults*, 104 J. CRIM. L. & CRIMINOLOGY 667, 690–91 (2014). Thus, not extending *Roper* to people over eighteen “overlook[s] the important and unique goals for imposing criminal punishment of treating equally culpable offenders equally and making individualized inquiries of culpability for society's harshest punishments.” *Id.* at 691.

86. *Highlight on Underage Drinking*, NAT'L INST. ON ALCOHOL ABUSE & ALCOHOLISM, <https://alcoholpolicy.niaaa.nih.gov/underage-drinking> [<https://perma.cc/V9D6-6B7P>]; *State Medical Marijuana Laws*, NAT'L CONF. OF ST. LEGISLATURES (Oct. 16, 2019), <http://www.ncsl.org/research/health/state-medical-marijuana-laws.aspx> [<https://perma.cc/D4KD-DDNW>].

87. *State by State*, TOBACCO21.ORG, <https://tobacco21.org/state-by-state/> [<https://perma.cc/5DN8-C3UL>]; Tobacco-Free Youth Act, S. 1541, 116th Cong. (2019).

88. Data set on file with authors.

89. 18 U.S.C. § 922(b)(1) (2012); 27 C.F.R. § 478.99(b) (2012).

twenty-one,”⁹⁰ but a child can only petition for an immigrant visa for his or her parents if the child is at least twenty-one.⁹¹

Further recognizing brain development continues into the twenties, most rental car companies will not rent to drivers under the age of twenty-one and apply added fees for drivers under the age of twenty-five.⁹² The Affordable Care Act authorizes children to stay on their parents’ health insurance plans until age twenty-six.⁹³ State and federal laws impose categorical age-of-candidacy requirements for individuals seeking public office. For example, the U.S. Constitution prohibits individuals under the age of twenty-five from running for the House of Representatives,⁹⁴ and twenty-seven states prohibit individuals from running for lower-house office before the age of twenty-one.⁹⁵

A 2014 report from the United States Department of Justice recommended that legislators raise the age for criminal court to at least twenty-one, in light of developmental neuroscience suggesting that “young adult offenders ages 18–24 are, in some ways, more similar to juveniles than to adults.”⁹⁶ Notably, these restrictions are all categorical: none of these laws permit a twenty-one-year-old to engage in the prohibited behavior if they can make an individualized showing of maturity. These laws provide further support for increasing the cutoff for execution to at least twenty-one years old.

III. Death Sentences and Executions of Youthful Offenders Since *Roper*

Roper’s evolving-standards analysis began with a count of states that abolished the death penalty for all offenders as a baseline measure against which the Court could compare juvenile offenders.⁹⁷ Using that mode of constitutional analysis here, between 2005 and July 2019, the number of states with the death penalty decreased. Specifically, twenty-one states and the District of Columbia abolished the death penalty, nine more states than

90. 8 U.S.C. § 1151(b)(2)(A)(i) (2012).

91. *In re Hassan*, 16 I. & N. Dec. 16 (B.I.A. 1976).

92. *E.g.*, *Can You Rent a Car Under 25 in the US and Canada?*, ENTERPRISE.COM, <https://www.enterprise.com/en/help/faqs/car-rental-under-25.html> [https://perma.cc/35J5-Q83B]; *Renting a Car Under 25*, ALAMO.COM, https://www.alamo.com/en_US/car-rental-faqs/age-requirements.html [https://perma.cc/YC8D-DTGY]. Only two states, Michigan and New York, require rental car companies to rent to drivers age eighteen and over. N.Y. GEN. BUS. LAW § 396-z(1)(a) (McKinney 2018); *Bickham v. Hertz Rent-a-Car*, MDCR No. 113521-PA32 (2000).

93. *See* CENTERS FOR MEDICARE & MEDICAID SERVS., *Adult Child Fact Sheet*, https://www.cms.gov/CCIIO/Resources/Files/adult_child_fact_sheet [https://perma.cc/52ZB-LYJ8].

94. U.S. CONST. art. I, § 2, cl. 2.

95. Data set on file with authors.

96. PHIL BULMAN, NAT’L INST. OF JUSTICE, NCJ No. 242653, *YOUNG OFFENDERS: WHAT HAPPENS AND WHAT SHOULD HAPPEN 2* (2014).

97. *Roper v. Simmons*, 543 U.S. 551, 564–65 (2005).

when *Roper* was decided fourteen years earlier,⁹⁸ and the governors of four additional states imposed moratoria on executions.⁹⁹ In twenty-five states, then, people under twenty-one are protected from execution. Even before taking account of actual sentencing practices, that number is greater than in *Graham* and in *Miller*, where the Court nevertheless found national consensus.¹⁰⁰ Furthermore, the fact that a particular sentence is an available option is not reliable evidence against the existence of a consensus if the states that authorize the penalty never impose it. Those states “should not be treated as if they have expressed the view that the sentence is appropriate.”¹⁰¹

When the Court identifies a national consensus, it does so based “not so much [on] the number of [the] States . . . , but the consistency of the direction of change.”¹⁰² Accordingly, “[a]ctual sentencing practices are an important part of the Court’s inquiry into consensus.”¹⁰³ Thus, in order to determine whether there is a national consensus against the execution of youthful offenders, our analysis began with trends in the number of states sentencing youthful offenders to death per year, the number of death sentences of youthful offenders per year, and the number of executions of youthful offenders per year.

This Essay focuses on two categories of data that the Court has deemed relevant in its capital evolving standards jurisprudence: sentencing decisions and actual executions. We considered executions because a decline in the

98. States that abolished the death penalty post-*Roper* (and did not bring it back) and the year of abolition are: New Jersey (2007); New York (2007); New Mexico (2009); Illinois (2011); Connecticut (2012); Maryland (2013); Delaware (2016); Washington (2018); and New Hampshire (2019). *State by State*, DEATH PENALTY INFO. CTR. (2019), <https://deathpenaltyinfo.org/state-and-federal-info/state-by-state> [<https://perma.cc/W3HU-ZLNV>]. Colorado’s legislature approved a bill to abolish the death penalty prospectively in February 2020; the governor has announced his intention to sign the bill into law. Conn. SB19-182, 72nd Gen. Assemb. (Feb. 26, 2020); Alex Burness, *Death Penalty Repeal Passes Colorado General Assembly*, THE DENVER POST, Feb. 26, 2020, <https://www.denverpost.com/2020/02/26/death-penalty-repeal-passes-colorado-legislature/> [<https://perma.cc/696R-VQ4K>].

99. *Statements of Governors Imposing Moratoria on Executions*, DEATH PENALTY INFO. CTR. (Mar. 13, 2019), <https://deathpenaltyinfo.org/stories/statements-from-governors-imposing-moratoria-on-executions> [<https://perma.cc/R3YJ-WZN8>]. In 2013, the governor of Colorado granted an indefinite stay of execution to the only one of the State’s three death row inmates who was facing imminent execution. The governor of Pennsylvania imposed a moratorium on the death penalty in 2015. The governor of Oregon extended that State’s moratorium in 2015. And in 2019, Governor Gavin Newsom imposed a moratorium on executions in California, the state with the largest death row in the country. *California Governor Announces Moratorium on Executions*, DEATH PENALTY INFO. CTR. (Mar. 13, 2019), <https://deathpenaltyinfo.org/news/california-governor-announces-moratorium-on-executions> [<https://perma.cc/6Y9J-JCJ7>].

100. See *Miller v. Alabama*, 567 U.S. 460, 482–83 (2012) (noting that twenty-eight states plus the District of Columbia required life without parole for some juvenile homicide offenders but nevertheless finding a consensus); *Graham v. Florida*, 560 U.S. 48, 62 (2010) (noting that thirty-seven states plus the District of Columbia permitted life-without-parole sentences for juvenile nonhomicide offenders but nevertheless finding a consensus).

101. *Graham*, 560 U.S. at 67.

102. *Atkins*, 536 U.S. at 315.

103. *Graham*, 560 U.S. at 62.

number of actual executions of young offenders relative to the number of death sentences is an indication of the extent to which juries, state courts, and members of the executive branch are increasingly unwilling to see a death sentence imposed on a young offender.¹⁰⁴ However, the extensive delays between sentencing and execution mean that sentencing decisions since *Roper* (as opposed to executions over the same time frame) present a more accurate picture of society's view of the mitigating impact of youth. Additionally, based on prior research identifying racial disparities in sentencing juvenile and young defendants,¹⁰⁵ we also reviewed our data to determine whether there is evidence of racial disparity in the sentencing of youthful offenders.

A. Methodology

To determine sentencing and execution practices for offenders in the eighteen- to twenty-year-old range, we developed a database with every death sentence and execution across the country between 2005 and December 2018. Execution data for all of the relevant years, including the individual's name, race, and jurisdiction of execution, were available from the Death Penalty Information Center,¹⁰⁶ as were death sentencing data beginning in 2012.¹⁰⁷ Prior to 2012, we identified individuals sentenced to death by

104. When examining the executions, it is important to note the length of time between a death sentence and an execution. Across the country, there are significant lags from when a sentence of death is announced to when the sentence is carried out. For example, in 2013, the most recent year for which accurate data is available, the average time between sentencing and execution in the United States was 186 months (or 15.5 years). *Time on Death Row*, DEATH PENALTY INFO. CTR., <https://deathpenaltyinfo.org/death-row/death-row-time-on-death-row> [https://perma.cc/WL5P-DTPN]. Thus, on average, a sentencing decision reached in 2005 when *Roper* issued would not be carried out until approximately 2020.

105. See *infra* Part IV.

106. *Execution Database*, DEATH PENALTY INFO. CTR., <https://deathpenaltyinfo.org/views-executions> [https://perma.cc/9RYS-2677]. The authors also relied on additional nonpublic data sets on file with the Death Penalty Information Center to verify the completeness of the data set used for this Essay.

107. *2012 Death Sentences by Name, Race, and County*, DEATH PENALTY INFO. CTR.: SENTENCING DATA, <https://deathpenaltyinfo.org/facts-and-research/sentencing-data/2019-death-sentences-by-name-race-county-and-year/2012-death-sentences-by-name-race-and-county> [https://perma.cc/W48G-495D]; *2013 Death Sentences by Name, Race, and County*, DEATH PENALTY INFO. CTR.: SENTENCING DATA, <https://deathpenaltyinfo.org/facts-and-research/sentencing-data/2019-death-sentences-by-name-race-county-and-year/2013-death-sentences-by-name-race-and-county> [https://perma.cc/Z5U3-9BZU]; *2014 Death Sentences by Name, Race, and County*, DEATH PENALTY INFO. CTR.: SENTENCING DATA, <https://deathpenaltyinfo.org/facts-and-research/sentencing-data/2019-death-sentences-by-name-race-county-and-year/2014-death-sentences-by-name-race-and-county> [https://perma.cc/E4TZ-VH6R]; *2015 Death Sentences by Name, Race, and County*, DEATH PENALTY INFO. CTR.: SENTENCING DATA, <https://deathpenaltyinfo.org/facts-and-research/sentencing-data/2019-death-sentences-by-name-race-county-and-year/2015-death-sentences-by-name-race-and-county> [https://perma.cc/JQD7-R4GN]; *2016 Death Sentences by Name, Race, and County*, DEATH PENALTY INFO. CTR.: SENTENCING DATA, <https://deathpenaltyinfo.org/facts-and-research/>

comparing the lists of individuals on death row in each jurisdiction as reported by the Legal Defense Fund in their quarterly *Death Row USA* reports.¹⁰⁸ Using these reports, we were able to identify when an individual was added to a jurisdiction's death row, indicating a new death sentence during that time period.

Once we compiled a list of every individual sentenced to death and executed since 2005, we determined the offender's age at the time of the crime, race and gender, the race and gender of the victim(s) (where available), and the final outcome of the case (i.e., execution, reversal resulting in a sentence of less than death, or pending). This data was compiled through searching vital records, reviewing reported judicial decisions, and searching local newspaper archives.¹⁰⁹

We identified 1,351 death sentences, 165 of which were imposed on youthful offenders (eighteen- to twenty-year-olds) (12%). Of the 1,351 people sentenced to death post-*Roper*, 42% were white, 41% were black, 15% were Latinx, 2% were Asian, and 1% were Native-American. Almost all death sentences were imposed on males (97%).

B. *Death Sentencing Since Roper*

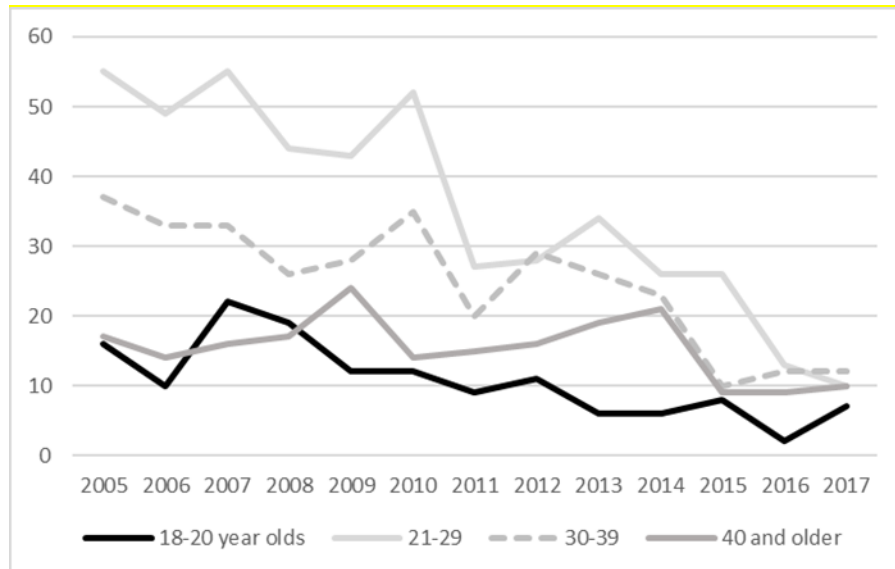
First, we asked whether there is a national consensus against executing offenders who were under twenty-one by examining the number of states engaging in the practice, the number of death sentences, and the number of executions. The data suggest there is. Since *Roper*, only 165 of the 1,351 death sentences were imposed on youthful offenders and the number of youthful offenders sentenced to death each year has been declining. During the same period, the number of all people sentenced to death per year has declined.

sentencing-data/2019-death-sentences-by-name-race-county-and-year/2016-death-sentences-by-name-race-and-county [https://perma.cc/ZU83-TEG5]; *2017 Sentences by Name, Race, and County*, DEATH PENALTY INFO. CTR.: SENTENCING DATA, https://deathpenaltyinfo.org/facts-and-research/sentencing-data/2019-death-sentences-by-name-race-county-and-year/2017-death-sentences-by-name-race-and-county [https://perma.cc/R3L2-77ED]; *2018 Sentences by Name, Race, and County*, DEATH PENALTY INFO. CTR.: SENTENCING DATA, https://deathpenaltyinfo.org/facts-and-research/sentencing-data/2019-death-sentences-by-name-race-county-and-year/2018-death-sentences-by-name-race-and-county [https://perma.cc/XKQ7-Y582].

108. *Death Row USA: Quarterly Reports*, NAACP LEGAL DEF. & EDUC. FUND, https://www.naacpldf.org/our-thinking/death-row-usa/ [https://perma.cc/H887-ZE2C].

109. The complete database is on file with the authors.

Figure 1: Death Sentences by Year and Age Group



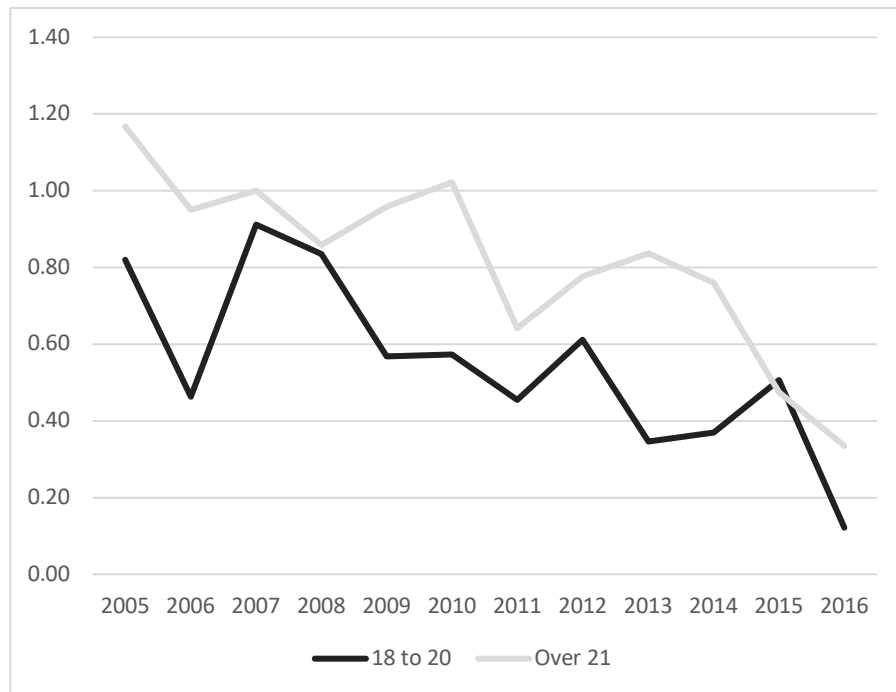
Note: The figure displays the number of death sentences imposed each year by age of the offender at the time of the crime.

As Figure 1 indicates, the proportion of death sentences given to young offenders has remained very low, even as the overall number of people sentenced to death has greatly declined since 2005. The peak for young-offender death sentences post-*Roper* was in 2007, when twenty-five youthful offenders nationwide were sentenced to die. Since 2013, at most nine youthful offenders have been sentenced to die in one year. Moreover, since *Roper*, death sentences for young offenders have constituted between 5% and 17% of all death sentences. This tends to be slightly less than the portion of homicide arrests: between 2004 and 2015, eighteen- to twenty-year-olds were 14%–19% of all homicide offenders with a known age.¹¹⁰ This fact indicates that even when youthful offenders are arrested for homicide offenses, they are increasingly unlikely to receive death sentences when compared to older homicide offenders. The consistent downward trend in death sentencing for all age groups, including youthful offenders, suggests that there is a growing consensus against the death penalty nationwide.

110. *Uniform Crime Reporting Program Data Series*, NAT'L ARCHIVE OF CRIM. JUSTICE DATA, <https://www.icpsr.umich.edu/icpsrweb/NACJD/series/57> [<https://perma.cc/W629-BBCF>] [hereinafter *Supplementary Homicide Reports*] (enter "Uniform Crime Reporting Program Data: Supplementary Homicide Reports" into the search box under the "Studies" tab) (yearly data compiled in individual data files). As of May 2018, 2015 was the last year for which homicide data was available.

Additionally, the rate at which people are sentenced to death relative to the number of homicide arrests has remained low since 2005. As displayed in Figure 2, the number of death sentences per 100 homicide arrests in the previous year is below 1.42 for both adult and youthful offenders between 2005 and 2016.

Figure 2: Death Sentences Per 100 Homicides with Known Offenders

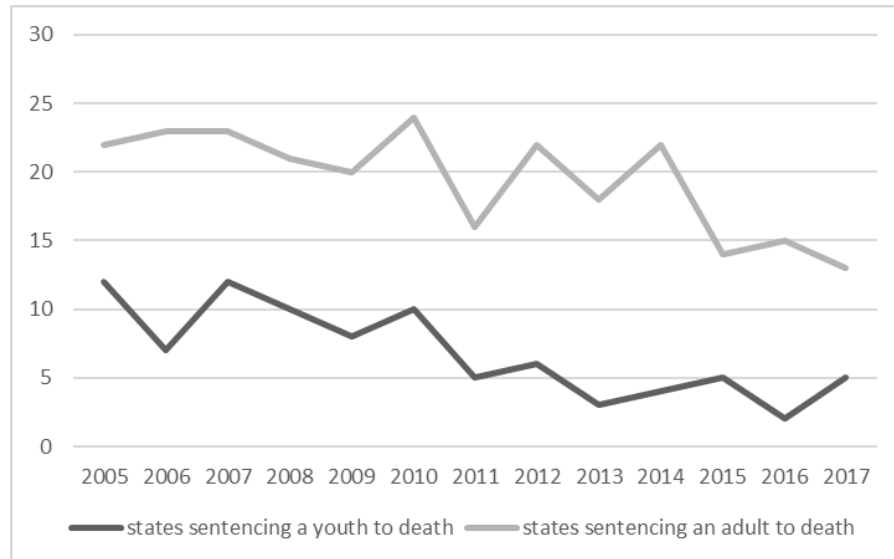


Note: The figure displays the number of death sentences imposed each year per 100 homicides with known offenders by age of the offender at the time of the crime.

Youthful-offender death sentences are concentrated in a few jurisdictions. The five jurisdictions that have sentenced the most youthful offenders to death are California (thirty-eight), Florida (twenty-four), Texas (twenty), Alabama (sixteen), and the federal government (eight). Together these five jurisdictions make up 65% of all death sentences of youthful offenders since *Roper*. Twenty-eight states and the military have not sentenced a youthful offender to death since *Roper*, compared to eighteen states that have not sentenced an adult offender. Each year, this trend toward increasing geographic concentration in application of the death penalty has grown, with fewer jurisdictions sentencing youthful offenders to death. As displayed in Figure 3, at the peak in 2005, thirteen jurisdictions sentenced a

youthful offender to death. In each of the last five years, at most five jurisdictions have sentenced a youthful offender to death.

Figure 3: The Number of States that Sentenced at Least One Person to Death Per Year



Note: The figure displays the number of states that imposed death sentences each year by age of the offender at the time of the crime.

Death sentences of youthful offenders are also concentrated in a few counties. Of the over 3,000 counties in the United States, eighty-five have sentenced a youthful offender to death since *Roper* and only thirty have sentenced more than one youthful offender to death in that time period. Two counties, Los Angeles and Riverside, both in California, are responsible for 15% of all death sentences of youthful offenders since *Roper* (fourteen and eleven death sentences, respectively). Together these counties make up approximately 4% of the U.S. population.¹¹¹ All other counties have had seven or fewer death sentences since *Roper*.¹¹²

111. *Quick Facts: Los Angeles County, California*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/losangelescountycalifornia,US/PST045218> [<https://perma.cc/5V54-KXUU>]; *Quick Facts: Riverside County, California*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/riversidecountycalifornia,US/PST045218> [<https://perma.cc/33YB-3L7L>].

112. The counties with the next highest numbers of death sentences of youthful offenders are Duval, FL (7); Jefferson, TX (6); Maricopa, AZ (6); Houston, TX (5); and Oklahoma, OK (5). See FAIR PUNISHMENT PROJECT, *TOO BROKEN TO FIX: PART I* 8, 14, 47 (2016), <http://fairpunishment.org/wp-content/uploads/2016/08/FPP-TooBroken.pdf> [<https://perma.cc/4HGY-E3J6>] (cataloguing

C. Executions of Youthful Offenders Since *Roper*

From January 2005 to December 2018, 546 people were executed in all jurisdictions in the United States; 106 (19%) were under twenty-one at the time of their crimes. All of those men received their death sentences prior to *Roper*,¹¹³ and they received their death sentences on average nine years before the Supreme Court decided *Roper*.

Like death sentencing, executions are highly concentrated in a few areas. Between 2005 and the end of 2018, fifteen states have executed a person who was under twenty-one at the time of his offense. Texas, with fifty-six executions of youthful offenders, accounted for 55% of all of the young offender executions between 2005 and the end of 2018.¹¹⁴ Ohio and Georgia, each with nine executions, executed the next highest number of youthful offenders since *Roper*. On the other hand, since *Roper*, thirty-five states have not executed a youthful offender. Three of these states—Kansas,¹¹⁵ Idaho,¹¹⁶ and Kentucky¹¹⁷—have had youthful offenders on their death rows. Twenty-two states and the federal government have also not executed an adult since *Roper*.¹¹⁸

the number of death sentences in U.S. counties, including Maricopa County, Harris County, and Duval County).

113. *But see supra* note 104 and accompanying text (describing the considerable delay between death sentences and executions).

114. Hollis A. Whitson & Eric A. Samler, Execution of Youth Under Age 21 on the Date of Offense: Ending with a Bang or a Whimper? 14–15 (Sept. 25, 2019) (unpublished manuscript), <https://ssrn.com/abstract=3453830> [<https://perma.cc/M2CD-G54F>]. None of those individuals received his death sentence after *Roper*.

115. Jonathan Carr, twenty at the time of the offense, was sentenced in 2002. *See State v. Carr*, 331 P.3d 544, 573 (Kan. 2014), *rev'd*, 136 S. Ct. 633 (2016) (stating that Carr was born in 1980 and committed the offense in 2000, making him twenty years old at the time of the offense).

116. James Hairston, twenty at the time of the offense, was sentenced in 1996. *State v. Hairston*, 988 P.2d 1170, 1175–76 (Idaho 1999); Associated Press, *Judge Sentences Man to Death 20-Year-Old James Hairston Killed Elderly Couple for Money*, SPOKESMAN-REV. (Nov. 16, 1996), <http://www.spokesman.com/stories/1996/nov/16/judge-sentences-man-to-death-20-year-old-james/> [<https://perma.cc/G38U-2FV4>].

117. Karu Gene White, nineteen at the time of the offense, was sentenced in 1980, and Ronnie Lee Bowling, twenty at the time of the offense, was sentenced in 1992. Charles Montaldo, *Kentucky Death Row Inmates: Profiles of Kentucky Criminals Sentenced to Be Executed*, THOUGHTCO. (July 3, 2019), <https://www.thoughtco.com/kentucky-death-row-inmates-4122946> [<https://perma.cc/9DH5-HJWB>]; *Cases of Suspected Miscarriages of Justice: Ronnie Lee Bowling*, INNOCENT IN PRISON PROJECT INT'L (Oct. 8, 2015), <http://cases.iippi.org/ronnie-lee-bowling/comment-page-1/> [<https://perma.cc/LE2F-MU7D>].

118. Since *Roper* was announced in March 2005, the following jurisdictions that then had the death penalty have not executed anybody: the federal government, Colorado, Connecticut, Illinois, Kansas, New Mexico, Oregon, Pennsylvania, and Wyoming. *Executions Overview: Executions by State and Region Since 1976*, DEATH PENALTY INFO. CTR., <https://deathpenaltyinfo.org/executions/executions-overview/number-of-executions-by-state-and-region-since-1976> [<https://perma.cc/5RPG-B3EC>]; *Executions Overview: States With No Recent Executions*, DEATH PENALTY INFO. CTR., <https://deathpenaltyinfo.org/executions/executions-overview/states-with-no-recent-executions> [<https://perma.cc/AE3J-G3RU>] (last updated July 8, 2019). The sixteen remaining states have not authorized the death penalty since *Roper*.

There is a clear national consensus against executing offenders who were under twenty-one at the time of their offense. Since *Roper*, there has been a consistent downward trend in the number of states that sentence youthful offenders to die. Youthful offenders are wholly protected from execution in twenty-three states, and in thirty-five states a youthful offender would not be executed—fifteen more than in *Roper*, twenty-two more than in *Graham*, and fourteen more than in *Miller*. Such a consistent and deepening movement away from executing a class of defendant is a hallmark indication that a national consensus exists.

IV. Racial Disparity in Youthful-Offender Sentencing

Given the persistent, pernicious effects of race in capital sentencing documented in numerous empirical studies, our work would not be done if we did not also consider race effects.¹¹⁹ Based on historical indicators of racial disparities in sentencing young people, we expected to find racial disparities in our data set. The results were stark, revealing that 73% of youthful offenders sentenced to death since *Roper* were black or Latinx, as compared to 53% of adults sentenced to death in that time.

A. *Historical Evidence of Racial Disparity in the Sentencing of Young People*

In the pre-*Furman* era of capital sentencing, young black and Latinx people were disproportionately sentenced to die.¹²⁰ Now black youth are overrepresented in life-without-parole sentences.¹²¹ Youth of color likely do

119. See, e.g., *State v. Gregory*, 427 P.3d 621, 633–37 (Wash. 2018) (crediting KATHERINE BECKETT & HEATHER EVANS, THE ROLE OF RACE IN WASHINGTON STATE CAPITAL SENTENCING, 1981-2014 (Oct. 13, 2014) (Updated Beckett Report) and striking down Washington’s death-penalty statute as unconstitutional because the punishment was “administered in an arbitrary and racially based manner”); U.S. GOV’T ACCOUNTABILITY OFFICE, GGD-90-57, DEATH PENALTY SENTENCING: RESEARCH INDICATES PATTERN OF RACIAL DISPARITIES 5 (1990) (describing a “remarkably consistent” pattern of race of victim influence in capital cases “at all stages of the criminal justice system process”); John H. Blume & Sheri Lynn Johnson, *Unholy Parallels Between McKleskey v. Kemp and Plessy v. Ferguson: Why McKleskey (Still) Matters*, 10 OHIO ST. J. CRIM. L. 37, 58–59 (2012) (noting that “race permeates the entire capital punishment system”); Carol S. Steiker & Jordan M. Steiker, *The American Death Penalty and the (In)Visibility of Race*, 82 U. CHI. L. REV. 243, 294 (2015) (analyzing “the extent to which the American death penalty is and has been ‘soaked’ in racism”).

120. *Furman v. Georgia*, 408 U.S. 238, 364 (1972) (Marshall, J., concurring) (“[A] look at the bare statistics regarding executions [was] enough to betray much of the discrimination.”); *id.* at 256–57 (Douglas, J., concurring) (“[Death sentencing schemes] are pregnant with discrimination and discrimination is an ingredient not compatible with the idea of equal protection of the laws that is implicit in the ban on ‘cruel and unusual’ punishments.”); see also Sheri Lynn Johnson, John H. Blume & Hannah L. Freedman, *The Pre-Furman Juvenile Death Penalty in South Carolina: Young Black Life Was Cheap*, 68 S.C. L. REV. 331, 343 (2017) (“[O]ver 80% of all juvenile offenders executed in the United States between 1865 and 1972 were children of color.”).

121. See, e.g., John R. Mills et al., *Juvenile Life Without Parole in Law and Practice:*

not receive the same consideration of their mental and emotional development. At sentencing in capital cases, it is common practice for prosecutors to argue youth in aggravation when the defendant is a young person of color.¹²²

This disparity between the severity of punishment leveled against black and Latinx youth compared to white youth is best explained by the fact that legal decision makers perceive youth of color as dangerous predators likely to recidivate, while for young white men and boys, youth is mitigating.¹²³ One result of this institutional racial bias is that there are disproportionate percentages of black youth involved at every stage of the American juvenile justice system, from arrest, to pretrial detention, to transfers to adult court, to sentencing.¹²⁴

Chronicling the Rapid Change Underway, 65 AM. U. L. REV. 535, 576 (2016) (finding that 65.8% of juvenile life-without-parole sentences are imposed on black youth).

122. See, e.g., *Tucker v. Louisiana*, 136 S. Ct. 1801, 1801 (2016) (denying petition for a writ of certiorari over a dissent from Justices Breyer and Ginsburg); Appellant's Reply Brief, *State v. Tucker*, 181 So. 3d 590 (La. 2015) (No. 2013-KA-1631), 2015 WL 2358360, at *31–32 (explaining that—in a death-penalty case involving a young offender with intellectual deficits—the prosecutor used the defendant's deficits in aggravation); see also *Roper v. Simmons*, 543 U.S. 551, 558 (2005) (explaining that the prosecutor in that case told the jury “Seventeen years old. Isn't that scary? Doesn't that scare you? Mitigating? Quite the contrary I submit. Quite the contrary.”).

123. See, e.g., Kareem L. Jordan & Tina L. Freiburger, *Examining the Impact of Race and Ethnicity on the Sentencing of Juveniles in the Adult Court*, 21 CRIM. JUST. POL'Y REV. 185, 187–88 (2010) (noting that recent studies have found racial disparities in sentencing for young defendants); Peter S. Lehmann, Ted Chiricos & William D. Bales, *Sentencing Transferred Juveniles in the Adult Criminal Court: The Direct and Interactive Effects of Race and Ethnicity*, 15 YOUTH VIOLENCE & JUV. JUST. 172, 174, 185 (2017) (reviewing past literature and, after conducting a novel multivariate analysis, concluding that “the findings correspond with prior studies of adult offenders which have demonstrated that ‘young Black males’ are sentenced more harshly than other groups”); Darrell Steffensmeier et al., *The Interaction of Race, Gender, and Age in Criminal Sentencing: The Punishment Cost of Being Young, Black, and Male*, 36 CRIMINOLOGY 763, 787 (1998) (“Young black males were seen as lacking . . . social bonds that were thought to insulate individuals from future criminal involvement.”); Patricia Warren et al., *The Imprisonment Penalty for Young Black and Hispanic Males: A Crime-Specific Analysis*, 49 J. RES. CRIME & DELINQ. 56, 61 (2012) (noting studies that found young black and Latinx men are more likely to be sentenced to prison).

124. E.g., EILEEN POE-YAMAGATA & MICHAEL A. JONES, U.S. DEP'T EDUC., AND JUSTICE FOR SOME 5, 10–12, 28, 31 (2000) (finding that in 1997–1998, black youth comprised 15% of the population under eighteen, but made up 26% of youth arrests, 31% of referrals to juvenile court, 44% of those detained pretrial, 46% of those waived to adult court, and 58% of juvenile inmates in adult prison); see also Nancy Rodriguez, *The Cumulative Effect of Race and Ethnicity in Juvenile Court Outcomes and Why Preadjudication Detention Matters*, 47 J. RES. CRIME & DELINQ. 391, 393 (2010) (stating that sentencing reflects an accumulation of bias across multiple court outcomes that compound to amplify the bias at sentencing).

Numerous studies have examined how race influences assessments of juveniles, their crimes, the likelihood of recidivism, and sentence recommendations.¹²⁵ Research confirms that decision makers often rely on subconscious stereotypes that black youth are more prone to criminal behavior and therefore punish them more harshly.¹²⁶ Many studies have found that black and Latinx defendants receive longer prison sentences.¹²⁷ For example, a meta-analysis of seventy-one academic studies found that

125. See, e.g., Phillip Atiba Goff et al., *The Essence of Innocence: Consequences of Dehumanizing Black Children*, 106 J. PERSONALITY & SOC. PSYCHOL. 526, 526 (2014); Sandra Graham & Brian S. Lowery, *Priming Unconscious Racial Stereotypes About Adolescent Offenders*, 28 L. & HUM. BEHAV. 483, 483 (2004).

126. See, e.g., George S. Bridges & Sara Steen, *Racial Disparities in Official Assessments of Juvenile Offenders: Attributional Stereotypes as Mediating Mechanisms*, 63 AM. SOC. REV. 554, 555, 560–61 (1998) (examining 233 narrative reports by probation officers and finding that reports were more likely to include (1) negative *internal* attributions—i.e., personality traits—about black youth compared to white youth, but (2) negative *external* attributions—i.e., environmental influences—about white youth compared to black youth). Disproportionally harsh treatment of black youth in areas outside the criminal justice system also indirectly impacts sentencing. Recent studies have shown that black students are more likely to be disciplined in school when the decision of whether or not to engage disciplinary processes is discretionary. TONY FABELO ET AL., COUNCIL OF STATE GOV'TS JUSTICE CTR. & TEX. A&M UNIV. PUB. POLICY RESEARCH INST., *BREAKING SCHOOLS' RULES* 42, 66 (2011) (finding that African-American high school students were disproportionately punished for discretionary offenses and were nearly three times as likely to receive a suspension for their first violation). This can have collateral consequences, as a student who has been suspended or expelled is almost three times more likely than his or her peers to come into contact with the criminal justice system the following school year. *Id.* at 70. For a student of color with a disability, the risk of being channeled into the criminal justice system is at its height: students of color with disabilities are disproportionately “deprived of an appropriate education that could have changed their School-to-Prison Pipeline trajectory.” NAT'L COUNCIL ON DISABILITY, *BREAKING THE SCHOOL-TO-PRISON PIPELINE FOR STUDENTS WITH DISABILITIES* 5 (2015). For example, African-American students with disabilities represent 18.7% of the population receiving aid under federal disability laws, but 49.9% of students receiving that aid in correctional facilities are African-American. *Id.* at 11.

127. E.g., Cassia Spohn & Jerry Cederblom, *Race and Disparities in Sentencing: A Test of the Liberation Hypothesis*, 8 JUST. Q. 305, 315–17 (1991) (finding that race had an indirect effect on sentence length—black defendants were more likely to be detained before trial and were more likely to be tried by a jury, and both of these factors predicted increased sentence length—but failing to identify a direct effect of race on sentence length); Darrell Steffensmeier & Stephen Demuth, *Ethnicity and Sentencing Outcomes in U.S. Federal Courts: Who Is Punished More Harshly?*, 65 AM. SOC. REV. 705, 715–16 (2000) (finding that white defendants received shorter sentences compared to black and Hispanic defendants in a sample of cases under the federal sentencing guidelines); Darrell Steffensmeier & Stephen Demuth, *Ethnicity and Judges' Sentencing Decisions: Hispanic-Black-White Comparisons*, 39 CRIMINOLOGY 145, 160 (2001) (finding that Hispanic defendants received the harshest penalties in a sample of Pennsylvania cases); Jeffery T. Ulmer & Brian Johnson, *Sentencing in Context: A Multilevel Analysis*, 42 CRIMINOLOGY 137, 159, 165 (2004) (using hierarchical modeling to examine cases in Pennsylvania and finding that black and Hispanic defendants received longer sentences overall and were even more likely to receive longer sentences in counties with high percentages of members of their race).

black criminal defendants received sentences that were statistically significantly harsher than those of white defendants.¹²⁸

In short, psychological research on the effects of race in sentencing confirms that race plays a significant role at all stages of a criminal prosecution. In the context of capital sentencing, we expected to see that white but not black or Latinx criminal defendants benefit from the mitigating effects of youth. Analysis of our data set supports this prediction.

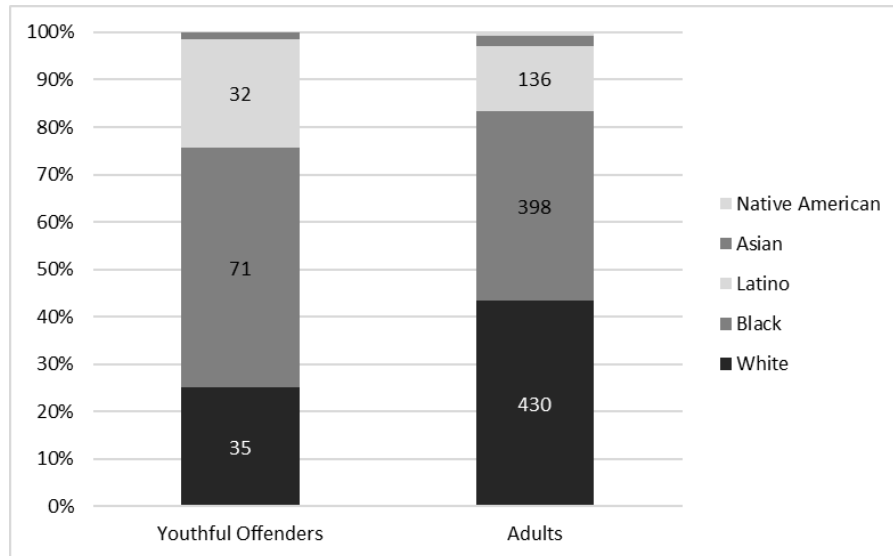
B. Racial Disparity in Youthful Offender Death Sentences and Executions Since Roper

As displayed in Figure 4, the racial composition of people sentenced to death who are under twenty-one is very different from the composition of people sentenced to death who are twenty-one and older. This difference is significant, with $p < 0.001$ on a two-sided Fisher's Exact test.¹²⁹ More specifically, 25% of youthful offenders are white and 73% are black or Latinx. A higher portion of adult offenders are white (45%) compared to black and Latinx (53%).

128. Ojmarrh Mitchell, *A Meta-Analysis of Race and Sentencing Research: Explaining the Inconsistencies*, 21 J. QUANTITATIVE CRIMINOLOGY 439, 454 (2005) (finding 76% of non-federal data indicate that black defendants are sentenced more harshly than white defendants). While this effect was reliably significant, it was also small and variable. *Id.* A few studies have found that race does not significantly influence the sentence length. *E.g.*, Cassia Spohn & David Holleran, *The Imprisonment Penalty Paid by Young, Unemployed Black and Hispanic Male Offenders*, 38 CRIMINOLOGY 281, 291–93 (2000) (examining defendants seventeen years and older in Chicago, Miami, and Kansas City and finding that in Chicago and Miami, young black and Hispanic males are more likely to be sentenced to prison, but finding race had no effect on the length of the sentence). The different findings may be caused by the variables used in the statistical models. For example, black defendants are more likely to receive pretrial detention, and people who receive pretrial detention are less likely to be released (causing an indirect effect of race on sentencing). *See, e.g.*, Spohn & Cederblom, *supra* note 127, at 322 (finding race to have indirect effects on sentence length).

129. This remains significant when the groups are collapsed into the binary variable of white or person of color, $\chi^2(1, N = 1133) = 22.74, p < 0.001$.

Figure 4: Death Sentences by Race and Age at Crime, 2005–2017

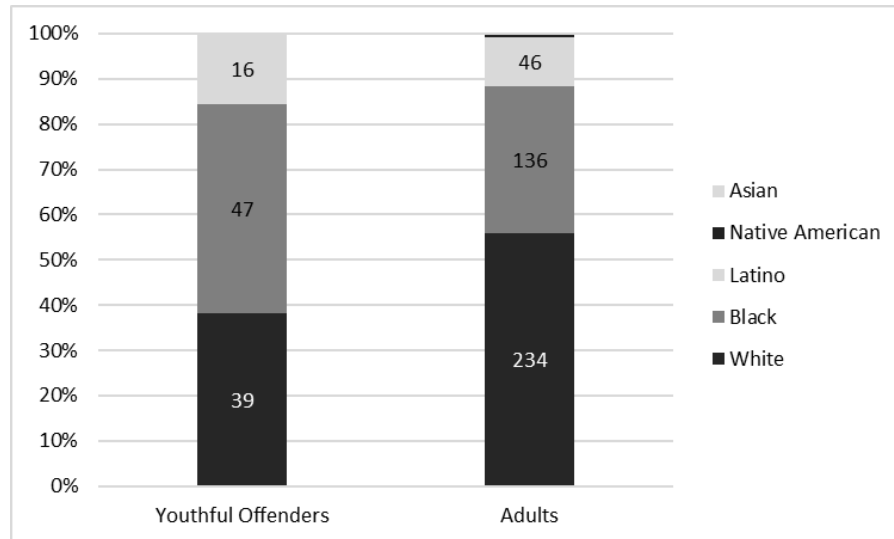


Note: The figure displays the percentage of death sentences by offender race and age at the time of the crime (counts are reported in the cells). These include 162 youthful-offender cases and 1,156 adult-offender cases. Asian and Native-American offenders make up less than 3% of death sentences in both age groups.

As with death sentencing, we also found differences in the racial composition of executions of youthful and adult offenders. As displayed in Figure 5, the racial composition of youthful offenders and adult offenders who are executed is significantly different.¹³⁰ Black and Latinx youth are overrepresented in executions of youthful offenders (48% and 15%, respectively), compared to adult offenders (32% and 12%, respectively).

130. Fisher's Exact test, $p = 0.006$. This remains significant when the groups are collapsed into white or person of color, $\chi^2(1, N = 546) = 10.87, p < 0.001$.

Figure 5: Executions by Offender Race and Age at Crime in 2005–2017



Note: The figure displays the percentage of executions by offender race and age at the crime (counts are reported in the cells). These include 102 youthful offender cases and 419 adult offender cases. There were two executions of Native American people and one execution of an Asian person, all of whom were over 21 at the time of the crime.

The difference in racial composition of youthful offenders and adult offenders cannot be explained by differences in homicide arrests: most youthful homicide offenders are white (59%) and fewer are black (38%).¹³¹ Most adult homicide offenders are also white (53%) and fewer are black (44%).¹³² In addition, Latinx youth are 25% of known youthful offenders and 29% of known adult offenders.¹³³

We also found a disparity when we focused on the race of the victim. In youthful offender cases with a single victim, two-thirds of death sentences involved a white victim, compared to 19% involving a black victim, 11% a Latinx victim, and 3% an Asian victim.¹³⁴ The percentages were similar for adult offenders. The overrepresentation of white victims is not as pronounced in homicide arrests. A little over half (53%) of homicides featuring offenders

131. Supplementary Homicide Reports, *supra* note 110.

132. *Id.*

133. *Id.* The Supplementary Homicide Reports include a binary measure of ethnicity (Hispanic/not Hispanic).

134. Seven hundred seven cases involved one victim (63%). Ninety-five of these cases involved youthful offenders and 612 involved adult offenders.

over the age of eighteen and one victim involve a white victim, 44% involve a black victim, and 2% involve an Asian victim.¹³⁵

Significantly, black youthful offenders are disproportionately likely to receive a death sentence for killing a white person. We found significant differences in the combination of offender and victim race across youthful and adult offenders.¹³⁶ Since *Roper*, white-offender–white-victim cases make up 39% of adult offender cases but only 21% of youthful offender cases, while black-defendant–white-victim cases make up 18% of adult-offender cases and 24% of youthful-offender cases.

Executions also overwhelmingly involved white victims. In youthful-offender cases with a single victim, 69% of the victims were white and 72% of victims in adult cases were white. There were significant differences in the combination of offender race and victim race across youthful and adult offenders.¹³⁷ Of the 382 cases with one victim that resulted in executions since *Roper*, 39% of adult cases involved a white offender and white victim, whereas white-offender–white-victim cases made up only 28% of youthful-offender executions. Black-defendant–white-victim cases constitute 22% of adult-offender cases but 38% of youthful-offender cases.

Our data also revealed significant association between offender race and whether or not the death sentence was vacated.¹³⁸ Three hundred fifty-four death sentences imposed since *Roper* have been vacated.¹³⁹ In death sentences imposed on both youthful and adult offenders, Latinx people have the lowest percentage of death sentences vacated (3% and 14%, respectively).¹⁴⁰ In comparison, 34% of white youthful offenders and 35% of black youthful offenders had their sentences vacated. Similarly, 27% of white adult offenders and 30% of black adult offenders had their sentences vacated.

Conclusion

In 1988, the Supreme Court determined that the execution of children under sixteen at the time of their offense violated the Eighth Amendment's evolving standards of decency.¹⁴¹ Eighteen years later, the Court extended the categorical ban to people who were under eighteen at the time of their

135. Supplementary Homicide Reports, *supra* note 110. There were 64,736 white offenders over the age of eighteen with white victims ($n = 121,659$). There were 1,440 offenders with unknown race.

136. Fisher's Exact test comparing the binary race variable for both victim and offender race, $p = 0.001$ ($n = 859$). There were 859 death-penalty cases with one victim. We were not able to identify the race of the victim in fifty cases involving one victim (6% of single-victim cases).

137. Using a binary variable for race, the Fisher's Exact test is significant, $p = 0.02$.

138. The Fisher's Exact test is significant, $p < 0.001$.

139. Forty-five (13%) vacated sentences were imposed on youthful offenders.

140. There are fewer Asian and Native-American defendants, but they also have few vacated sentences. Two Asian defendants' sentences were vacated (8%) and two Native-American defendants' sentences were vacated (22%).

141. *Thompson v. Oklahoma*, 487 U.S. 815, 838 (1988) (plurality opinion).

offense.¹⁴² Juveniles, the Court explained, are categorically less culpable than older people: as “any parent knows,” their brains are different from adult brains in ways that make them less morally responsible for their actions.¹⁴³ Simply put, youth is uniquely mitigating.

In the fifteen years since *Roper*, there have been dramatic developments in neuroscience, social attitudes, and most significantly, the law and attendant sentencing practices. The same considerations that motivated the Court to extend *Thompson* now apply to people under twenty-one: their reduced moral culpability—embodied in an increased reluctance by sentencing bodies to inflict the ultimate punishment—removes them from the category of people who can be considered the worst of the worst.

Moreover, sentencing youthful offenders to death carries the impermissible risk of arbitrariness. Black and Latinx youthful offenders disproportionately receive death sentences and have their death sentences stick. The risk of arbitrariness only increases when a young person of color is convicted of a crime against a white person.

The Court recognized in *Roper* that the eighteen-year cutoff was arbitrary. But it found scientific, societal, and legal justifications for drawing the line there. In the intervening years, those justifications have eroded. While it is too late to save Justin Fuller from the executioner, it is time for courts, especially the Supreme Court, to recognize that the relevant constitutional markers demand that the categorical bar be extended to age twenty-one.

142. *Roper v. Simmons*, 543 U.S. 551, 574 (2005).

143. *See Miller v. Alabama*, 567 U.S. 460, 471–72 (2012) (explaining why “children are constitutionally different from adults for purposes of sentencing”).