MILLER V. ALABAMA: A PROPOSED SOLUTION FOR A COURT THAT FEELS STRONGLY BOTH WAYS

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"There can be no keener revelation of a society's soul than the way in which it treats its children."

—Nelson Mandela

Speech at the Launch of the Nelson Mandela Children's Fund

Mahlamba Ndlopfu Pretoria South Africa, *May 8, 1995*

INTRODUCTION

Consider a fourteen-year-old boy whose entire life was spent moving in and out of foster care because his mother was an alcoholic and his stepfather was abusive. This boy suffered from early-onset depression, and had already attempted suicide four times by the age of fourteen. One night, the boy and his friend went to a trailer owned by his mother's drug dealer to drink and do drugs. After the adult drug dealer passed out from consumption, the boy—seeing an opportunity for some quick cash—took the dealer's wallet from his back pocket to steal his money. However, the dealer woke up and grabbed the boy by the throat. The boy's friend hit the dealer with a nearby baseball bat. Once the boy was released, he repeatedly struck the drug dealer with the bat until he believed the man to be dead. To hide the evidence of the crime, the boys set fire to the drug dealer's trailer, ultimately killing the man inside. This fourteen-year-old boy was sentenced to die in prison for his crimes, without any hope for release. This boy's name is Evan Miller.[1]

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The United States is the only country in the world that continues to sentence juveniles to die in prison.[2] The problem is pervasive—in 2008, the United States had at least 2,484 children serving sentences of life without the possibility of parole.[3]

On June 25, 2012, the United States Supreme Court held in *Miller v. Alabama* that sentencing schemes *mandating* life without the possibility of parole for juveniles were unconstitutional in violation of the Eighth Amendment.[4] The Court held that sentencers must give individualized consideration to a juvenile's "chronological age and [youth's] hallmark features" before imposing a life without the possibility of parole sentence.[5] The Court, in justifying its holding, explained why life without parole sentences were so inappropriate for juveniles like Evan Miller. However, the Court then proceeded to create a remedy that left courts free to impose life without parole sentences on juveniles at their discretion, so long as a lesser sentence was also considered.

In doing so, the Court set forth a constitutional standard that, at present, falls prey to an important shortcoming that the Court itself recognized in *Roper v. Simmons* and *Graham v. Florida*, two preceding cases concerning juvenile sentencing—that an "unacceptable likelihood exists that the brutality or cold-blooded nature of any particular crime would overpower mitigating arguments based on youth as a matter of course."[6] By declaring unconstitutional any juvenile sentencing scheme mandating life without parole, while still allowing courts to apply that sentence at their discretion,[7] the Court necessarily put its faith in the courts to give proper weight to both the "hallmark features"[8] of youth and the

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1. For further discussion of the facts of Evan Miller's case, see Miller v. Alabama, 132 S. Ct. 2455, 2462–63 (2012). *See also infra* Part II.A.

2. Connie de la Vega & Michelle Leighton, *Sentencing Our Children to Die in Prison: Global Law and Practice*, 42 U.S.F. L. REV. 983, 985 (2008).

3. *Id.*

4. *Miller*, 132 S. Ct. at 2464.

5. *Id.* at 2468.

6. Graham v. Florida, 560 U.S. 48, 78 (2010) (quoting Roper v. Simmons, 543 U.S. 551, 573 (2005)). The Court further noted that "it does not follow that courts taking a case-by-case proportionality approach could with sufficient accuracy distinguish the few incorrigible juvenile offenders from the many that have the capacity for change." *Id.* at 77; *see also Roper*, 543 U.S. at 573 ("It is difficult even for expert psychologists to differentiate between the juvenile offender whose crime reflects unfortunate yet transient immaturity, and the rare juvenile offender whose crime reflects irreparable corruption.").

7. *Miller*, 132 S. Ct. at 2469.

8. *See id.* at 2468 ("So *Graham* and *Roper* and our individualized sentencing cases alike teach

gravity of the crime during individualized sentencing.

In handing down the decision, the Court was careful to caution that "sentencing juveniles to this harshest possible penalty . . . [should be] uncommon."[9] However, without more, this requirement of "individualized consideration"[10] falls short of living up to the spirit of the Court's holding. Because the Court opted for the narrower of two holdings by banning only mandatory life without parole sentences rather than all life without parole sentences for juveniles,[11] states are charged with the task of ensuring that mitigating features of youth will actually make these sentences "uncommon."

Although the Court declined to make all life without parole sentences for juveniles unconstitutional, this Note argues that additional measures must be taken to guarantee that courts give meaningful consideration to the "hallmark features" of youth. Specifically, this Note proposes two changes that states should make in order to comply with the reasoning underlying *Miller*'s constitutional standard. First, the age at which an individual is considered a juvenile must be adjusted to comport with brain science, social science, and parental knowledge. Second, states should apply a "youth discount"[12] at sentencing if "hallmark features" of youth were present during the commission of the crime. In calculating "youth discounts" for juvenile offenders, this Note advocates for indeterminate sentence reductions based on the juvenile's actuarial life expectancy calculations. This way, a juvenile's sentence will account for socioeconomic status and family history, among other factors.

Part I of this Note gives an overview of the Court's Eighth Amendment jurisprudence for juvenile sentencing. Part II outlines the principles underlying the decision in *Miller* and explains the spirit of the law. Part III argues that the age at which an individual is considered a juvenile should be adjusted to comport with scientific evidence regarding the "hallmark features" of youth. Finally, Part IV considers a "youth discount" in the form of a sentence reduction for those cases in which the

that in imposing a State's harshest penalties, a sentencer misses too much if he treats every child as an adult.").

9. *Id.* at 2469.

10. *Id.* at 2469–70. *See id.* at 2469 (holding that sentencers must consider certain factors before sentencing juveniles to life without the possibility of parole).

11. *Id.* at 2469; Brief for Petitioner at 8, *Miller*, 132 S. Ct. 2455 (No. 10-9646).

12. *See generally* Barry C. Feld, *Abolish the Juvenile Court: Youthfulness, Criminal Responsibility, and Sentencing Policy*, 88 J. CRIM. L. & CRIMINOLOGY 68 (1997) [hereinafter Feld, *Abolish the Juvenile Court*] (proposing an age-based "youth discount," a sliding scale of developmental and criminal responsibility for sentencing younger offenders).

mitigating factors of youth are present.

I. KENNEDY'S LEGACY: THE EVOLUTION OF EIGHTH AMENDMENT JURISPRUDENCE FOR JUVENILE SENTENCING

Justice Kennedy delivered the opinion of the Court in two landmark cases establishing Eighth Amendment jurisprudence with respect to juvenile sentencing—*Roper v. Simmons* and *Graham v. Florida*. Kennedy declared categorically unconstitutional certain sentences for juveniles, classifying them as "cruel and unusual punishment"[13] under the Eighth Amendment.[14] As such, the Court modified its traditional Eighth Amendment analysis by shifting the constitutional inquiry from one that focused solely on the nature of the punishment itself, to one that also took into account the youthful characteristics of the offender.[15] The Court's Eighth Amendment juvenile jurisprudence hinged on a two-part analysis: (1) a consideration of the "objective indicia of consensus"[16] in the nation, and (2) an independent judgment by the Court of "whether [a particular sentence] is a disproportionate punishment *for juveniles*."[17]

A. *ROPER V. SIMMONS*

Roper marked the start of the Court's Eighth Amendment jurisprudence specifically designed to protect juveniles—a unique class of offenders—from "cruel and unusual punishment." In *Roper*, the Court categorically prohibited the sentencing of individuals who were under eighteen at the time of the commitment offense to the death penalty.[18] Relying on "the evolving standards of decency that mark the progress of a maturing society,"[19] as well as its own independent judgment, the Court overturned its prior holding in *Stanford v. Kentucky*, which had upheld the constitutionality of sentencing juveniles between the ages of sixteen and eighteen to death.[20]

13. U.S. CONST. amend. VIII.

14. *See Miller*, 132 S. Ct. at 2469 (declaring mandatory life without parole for juveniles unconstitutional); Graham v. Florida, 560 U.S. 48, 82 (2010) (prohibiting life without parole sentences for juveniles who had committed non-homicide offenses); Roper v. Simmons, 543 U.S. 551, 578 (2005) (holding that the death penalty is unconstitutional for juveniles).

15. *See Roper*, 543 U.S. at 552 (citing Atkins v. Virginia, 536 U.S. 304, 316 (2002)) (noting juveniles, like mentally retarded offenders, are less culpable than the average criminal).

16. *Id.* at 564.

17. *Id.* (emphasis added).

18. *Id.* at 578.

19. *Id.* at 551 (quoting Trop v. Dulles, 356 U.S. 86, 100–01 (1958)).

20. *Id.* at 551–52 (citing Stanford v. Kentucky, 492 U.S. 361, 370–71, 377–78 (1989)) (explaining that *Stanford* held there was no national consensus against the death penalty for some

The Court in *Roper* rested its decision on the premise that juveniles are different from adults, distinguishing them on three grounds.[21] "First, as any parent knows," and as social science has demonstrated,[22] juveniles understandably lack maturity and responsibility, which can result in "impetuous and ill-considered actions and decisions."[23] Second, juveniles are not only more susceptible to outside pressures, but also "lack the freedom that adults have to extricate themselves from a criminogenic setting."[24] And third, juveniles' personality traits are "more transitory"—making them more amenable to rehabilitation.[25] For these reasons, the Court held that juveniles were categorically undeserving of the death penalty, which should be reserved for only "the worst offenders."[26]

Notably, the Court found that an individualized sentencing framework—comprised of mitigating arguments based on youth—was insufficient to protect juveniles from receiving the death penalty.[27] The Court explained that this was because of the persisting "unacceptable likelihood" that mitigating arguments based on youth would be overshadowed by the brutality or severity of certain crimes.[28] The Court recognized that a rule could be devised to ensure that youthful characteristics would be mitigating factors, but also realized that crafting such a legal device would miss the point.[29] Because even trained psychiatrists refrain from diagnosing antisocial personality disorders until juveniles have reached adulthood, it would be presumptuous to require a judge or jury to make an even graver determination—whether a juvenile was so irredeemable that he deserved the death penalty.[30]

juveniles, and the Court should not use its own independent judgment in its Eighth Amendment analysis).

21. *Id.* at 569.

22. *Id.*

23. *Id.* (quoting Johnson v. Texas, 509 U.S. 350, 367 (1993)). The Court went on to point out that "[i]t has been noted that 'adolescents are overrepresented statistically in virtually every category of reckless behavior.'" *Id.* (quoting Jeffrey Arnett, *Reckless Behavior in Adolescence: A Developmental Perspective*, 12 DEVELOPMENTAL REV. 339, 339 (1992)).

24. *Id.* (quoting Laurence Steinberg & Elizabeth S. Scott, *Less Guilty by Reason of Adolescence: Developmental Immaturity, Diminished Responsibility, and the Juvenile Death Penalty*, 58 AM. PSYCHOLOGIST, 1009, 1014 (2003)).

25. *Id.* at 570.

26. *Id.*

27. *See id.* at 572–73 (explaining that giving judges the ability to sentence juveniles to the death penalty is too great a risk because juveniles' culpability is likely insufficient).

28. *Id.* at 573.

29. *Id.*

30. *Id.* at 573–74.

B. *GRAHAM V. FLORIDA*

In 2011, Justice Kennedy used the same two-part Eighth Amendment analysis to strike down life without parole sentences for non-homicide juvenile offenders in *Graham v. Florida*.[31] After finding a national consensus against sentencing non-homicide juvenile offenders to life without parole, the Court reiterated the reasons discussed previously in *Roper*, concluding that juveniles are categorically less culpable than adults.[32] In addition, the Court in *Graham* used brain science and psychology to bolster its conclusions about juveniles, noting that "parts of the brain involved in behavior control continue to mature through late adolescence."[33] Ultimately, the Court found that a juvenile "who did not kill or intend to kill has a twice diminished moral culpability."[34]

Like in *Roper*, the Court in *Graham* refused to prescribe any constitutional cure allowing for life without parole on a case-by-case basis.[35] The Court echoed the same three concerns expressed in *Roper*, and explained that it was too difficult for a judge to differentiate "the few incorrigible juvenile offenders from the many that have the capacity for change" at the time of sentencing.[36] Additionally, the Court argued that the same characteristics that make juvenile offenders less culpable also hinder youth from effectively assisting defense counsel.[37] These shortcomings disadvantage youth during criminal proceedings and can contribute to sentencing error. Finally, the Court's decision reiterated that just because juvenile offenders cannot receive life without parole sentences does not mean they are guaranteed release by the State; rather, a lesser sentence simply gives juveniles a chance to demonstrate rehabilitation and maturity in prison for possible future release.[38]

31. Graham v. Florida, 560 U.S. 48, 82 (2010).

32. *See id.* at 67–68 ("*Roper* established that because juveniles have lessened culpability they are less deserving of the most severe punishments.").

33. *Id.* at 68 (citing Brief for the American Medical Ass'n & the American Academy of Child & Adolescent Psychiatry as Amici Curiae in Support of Neither Party at 16–24, *Graham*, 560 U.S. 48 (Nos. 08-7412, 08-7621); Brief for the American Psychological Ass'n et al. as Amici Curiae Supporting Petitioners at 22–27, *Graham*, 560 U.S. 48 (Nos. 08-7412, 08-7621)).

34. *Graham*, 560 U.S at 69.

35. *See id.* at 77–78 ("'[T]he differences between juvenile and adult offenders are too marked and well understood to risk allowing a youthful person to receive' a sentence of life without parole . . . despite insufficient culpability." (quoting *Roper*, 543 U.S. at 572–73)).

36. *Id.* at 77.

37. *See id.* at 78 ("[T]he features that distinguish juveniles from adults also put them at a significant disadvantage in criminal proceedings. Juveniles mistrust adults and have limited understandings of the criminal justice system and the roles of the institutional actors within it.").

38. *Id.* at 75.

II. KAGAN'S VARIATION OF KENNEDY'S JUVENILE EIGHTH AMENDMENT JURISPRUDENCE IN *MILLER V. ALABAMA*

The Supreme Court in *Miller* applied *Roper* and *Graham*'s categorical Eighth Amendment analysis, in conjunction with individualized sentencing imported from death penalty jurisprudence, to ban mandatory life without parole sentences for juveniles.[39] The Court advanced an individualized sentencing framework, choosing to decide life without parole cases for juveniles on a "case-by-case" basis, despite having advised against such individualized consideration in *Roper* and *Graham*.[40] Without more, the holding set forth in *Miller* remains an ineffective constitutional remedy for juveniles facing life without parole sentences.

A. THE FACTS OF THE CASE

Evan Miller was transferred to adult court and sentenced to the mandatory minimum punishment of life without parole for murder in the course of arson.[41] He committed this crime when he was fourteen years old.[42] Miller's mother suffered from alcoholism and drug addiction, and his stepfather was abusive; as a result, he moved in and out of foster care.[43] Prior to the commitment offense, Miller had attempted suicide on four separate occasions—the first time at age six—and regularly abused drugs and alcohol.[44]

On the night of the offense, Miller was at home with a friend when Cole Cannon, a drug dealer, came over to complete a drug deal with Miller's mother.[45] Afterwards, Miller and his friend accompanied Cannon to his neighboring trailer, where they proceeded to drink and smoke marijuana.[46] When Cannon passed out, Miller stole his wallet and the two boys split the $300 cash they found inside.[47] But when Miller tried to put the wallet back in Cannon's pants, Cannon woke up and grabbed Miller by

39. Miller v. Alabama, 132 S. Ct. 2455, 2463–64 (2012).

40. *See id.* at 2468 (requiring consideration of the "hallmark features" of youth before sentencing a juvenile to life without parole); *Graham*, 560 U.S. at 77–78 (stating that even if some juveniles are deserving of life without parole sentences, judges are unable to distinguish the worst juvenile offenders from those amenable to rehabilitation); Roper v. Simmons, 543 U.S. 551, 572–73 (2005) ("An unacceptable likelihood exists that the brutality or cold-blooded nature of any particular crime would overpower mitigating arguments based on youth as a matter of course . . . .").

41. ALA. CODE §§ 13A-5-40(a)(9), 13A-6-2(c) (2014); *Miller*, 132 S. Ct. at 2462–63.

42. *Miller*, 132 S. Ct. at 2462.

43. *Id.*

44. *Id.*

45. *Id.*

46. *Id.*

47. *Id.*

the throat.[48] Miller's friend grabbed a nearby baseball bat and hit Cannon, who then let go of Miller.[49] Once released, Miller took the bat and repeatedly hit Cannon.[50] He then covered Cannon with a sheet and stated, "I am God, I've come to take your life."[51] Then Miller struck him for the last time.[52] The boys went back to Miller's trailer, but returned shortly thereafter to set fire to Cannon's trailer to hide evidence of the crime.[53] Cannon died from smoke inhalation and from the injuries he sustained from the attack with the baseball bat.[54]

Miller contended that his life without parole sentence was unconstitutional. He requested that the court invalidate his sentence, arguing three separate grounds for why mandatory life without parole sentences should not be imposed on fourteen-year-old juvenile defendants: such sentences (1) are barred under *Roper* and *Graham*, (2) are constitutionally impermissible under the Eighth Amendment, and (3) "wholly disregard" a juvenile's youthful characteristics in violation of the Constitution.[55]

B. THE HOLDING

In *Miller*, the Supreme Court prohibited mandatory life without parole sentences for juveniles as "cruel and unusual punishment."[56] Justice Kagan delivered the opinion of the Court, likening life without parole for juveniles to the death penalty.[57] However, instead of banning life without parole for juveniles in its entirety, the Court held that individualized sentencing was required before imposing life without parole on a juvenile.[58]

The Court precluded sentencing a juvenile to life without parole without first considering the "hallmark features" of youth, which include the following: (1) "immaturity, impetuosity, and failure to appreciate risks and consequences"; (2) the "family and home environment . . . from which [a juvenile] cannot usually extricate himself"; (3) the circumstances of the

48. *Id.*
49. *Id.*
50. *Id.*
51. *Id.*
52. *Id.*
53. *Id.*
54. *Id.*
55. Brief for Petitioner, *supra* note 11, at 8.
56. *Miller*, 132 S. Ct. at 2469.
57. *See id.* at 2466–67, 2470 ("So if . . . death is different, children are different too.").
58. *See id.* at 2468 (explaining that *Graham*, *Roper*, and death penalty jurisprudence show that children cannot be treated like adults at sentencing).

offense, including familial or peer pressures and the extent of participation in the crime; (4) the "incompetencies associated with youth," including the inability to interact with police officers or prosecutors and assist defense counsel; and (5) the juvenile's potential for rehabilitation.[59]

C. PITFALLS TO KAGAN'S CONSTITUTIONAL STANDARD SET FORTH IN *MILLER V. ALABAMA*

The Court used the same foundational principles found in *Graham* and *Roper* to bolster its decision in *Miller*.[60] *Miller* reinforced the notion that "children are constitutionally different from adults for purposes of sentencing."[61] The Court relied significantly on science and social science to support its conclusion.[62] It went so far as to summarize new findings in neuroscience, noting that "adolescent brains are not yet fully mature in regions and systems related to higher-order executive functions such as impulse control, planning ahead, and risk avoidance."[63] The Court cited differences between adult and adolescent neurological functioning as major support for its constitutional conclusion. However, it failed to acknowledge that neuroscience does not support drawing the line between juveniles and adults at age eighteen—the legal age of adulthood in many jurisdictions.

While Justice Kagan addressed many of *Graham* and *Roper*'s foundational principles in her opinion, her holding failed to provide the same constitutional remedy as the preceding cases.[64] Given the Court's reasoning in *Roper* and *Graham*, it is uncertain that individualized consideration will allow judges to distinguish between "the juvenile offender whose crime reflects unfortunate yet transient immaturity, and the rare juvenile offender whose crime reflects irreparable corruption."[65] Justice Kagan hoped to solve this issue simply by stating life without

59. *Id.*

60. *See id.* at 2465 ("[N]one of what [*Graham*] said about children—about their distinctive (and transitory) mental traits and environmental vulnerabilities—is crime-specific.").

61. *Id.* at 2464.

62. *Id.* at 2464 n.5 ("[A]n ever-growing body of research in developmental psychology and neuroscience continues to confirm and strengthen the Court's conclusions." (quoting Brief for the American Psychological Ass'n et al. as Amici Curiae in Support of Petitioners at 3, *Miller*, 132 S. Ct. 2455 (Nos. 10-9646, 10-9647) [hereinafter Brief for the APA, *Miller*])).

63. *Id.* (quoting Brief for the APA, *Miller*, *supra* note 62, at 4).

64. *Id.* at 2471 ("Our decision does not categorically bar a penalty for a class of offenders or type of crime—as . . . we did in *Roper* or *Graham*. Instead, it mandates only that a sentence follow a certain process . . . before imposing a particular penalty.").

65. *See id.* at 2469 (explaining that even trained psychiatrists refrain from categorizing juveniles with personality disorders until they have reached adulthood).

parole should be "uncommon."[66] But, as the Court acknowledged in *Roper*, an individualized sentencing framework does not guarantee that life without parole will be so rare.[67] In a parenthetical following her explicit holding, Kagan quoted from *Graham*: "A State is not required to guarantee eventual freedom, but must provide some meaningful opportunity to obtain release based on demonstrated maturity and rehabilitation."[68] Given these concerns, it is unclear why indeterminate life sentences—where juveniles could still spend the rest of their lives in jail—would not always be preferable to a life without parole sentence. It seems premature to require a judge to decide whether a juvenile is irredeemable at age seventeen, rather than have a parole board later evaluate the individual as an adult who has had a chance at rehabilitation.

Further, the Court considered the important role that the transfer from juvenile to adult court plays in determining a juvenile's sentencing fate.[69] The Court recognized that judges' and prosecutors' ability to make informed decisions at the moment of transfer is hindered by mandatory transfer laws, prosecutorial discretion, and limited evidence available to judges at the pretrial phase.[70] Pre-*Miller*, the Court had reasoned that the key moment for the exercise of discretion was at transfer—when the judge (or prosecutor) was faced with one of two extremes: life without parole or a "light punishment" in juvenile court.[71] While the Court determined that the "discretion available to a judge at the transfer stage cannot substitute for discretion at post-trial sentencing in adult court,"[72] procedures at the transfer stage of sentencing are in much need of reform.[73]

Still, the Court acknowledged the severity of a life without parole sentence for juveniles,[74] noting that life without parole "is an especially harsh punishment for a juvenile, because he will almost inevitably serve more years and a greater percentage of his life in prison than an adult offender."[75] Given this reasoning, the Court stressed that "appropriate

66. *Id.*

67. Roper v. Simmons, 543 U.S. 551, 573–74 (2005).

68. *Miller*, 132 S. Ct. at 2469 (quoting Graham v. Florida, 560 U.S. 48, 50 (2010)).

69. *Id.* at 2474–75.

70. *Id.* at 2474.

71. *Id.* at 2474–75 ("In many States, for example, a child convicted in juvenile court must be released from custody by the age of 21.").

72. *Id.* at 2475.

73. While such improvements are outside the scope of this Note, see Ioana Tchoukleva, *Children Are Different: Bridging the Gap Between Rhetoric and Reality Post* Miller v. Alabama, 4 CALIF. L. REV. CIRCUIT 92 (2013), for suggestions regarding change at the transfer stage of sentencing.

74. *Miller*, 132 S. Ct. at 2466 (likening life without parole for a juvenile to the death penalty).

75. *Id.* at 2466 (internal quotation marks omitted).

occasions for sentencing juveniles to this harshest possible penalty will be uncommon."[76] The *Miller* framework fails, at present, to ensure that life without parole sentences remain "uncommon." As a scholar has noted, "[t]he Court's admission that children are constitutionally different from adults for purposes of sentencing does not match the experience of juveniles in the criminal justice system."[77]

Therefore, this Note suggests that *Miller*'s holding was constitutionally inadequate, and should have followed in the footsteps of Justice Kennedy's Eighth Amendment jurisprudence by categorically banning all life without parole sentences for juveniles. In the absence of such a categorical ban, this Note proposes that states implement two new procedures to comply with the reasons underlying *Miller*'s holding. These protective procedures are set out below in Parts III and IV.

III. THE AGE AT WHICH AN INDIVIDUAL QUALIFIES FOR INDIVIDUALIZED CONSIDERATION MUST BE ADJUSTED TO COMPORT WITH FINDINGS IN NEUROSCIENCE

The Court used scientific advancements in neuroscience to bolster *Miller*'s constitutional mandate.[78] In its opinion, the Court specifically stated that new scientific evidence made the conclusions in *Graham* and *Roper* "even stronger."[79] For instance, the Court noted that "[i]t is increasingly clear that adolescent brains are not yet fully mature in reasons and systems related to higher-order executive functions such as impulse control, planning ahead, and risk avoidance."[80] Accordingly, if the Court found such scientific evidence convincing as a mitigator of culpability, the line separating juveniles from adults should be drawn to comport with findings in neuroscience. As of the *Miller* holding, understandings of neuroscience indicate that the brain continues to mature well into early adulthood.[81] Thus, the Court should alter the age at which individualized

76. *Id.* at 2481.

77. Tchoukleva, *supra* note 73, at 102 (internal quotation marks omitted).

78. *Miller*, 132 S. Ct. at 2464–65.

79. *Id.* at 2464 n.5.

80. *Id.* (quoting Brief for the APA, *Miller*, *supra* note 62, at 3).

81. *See, e.g.*, Laurence Steinberg, *The Influence of Neuroscience on US Supreme Court Decisions About Adolescents' Criminal Culpability*, 14 NATURE REVS.: NEUROSCIENCE 513, 515 (2013) [hereinafter Steinberg, *Influence of Neuroscience*]; Melinda Beck, *Delayed Development: 20-Somethings Blame the Brain*, WALL ST. J. (Aug. 23, 2012, 12:01 AM), http://online.wsj.com/news/articles/SB10000087239639044371370457760153220876074 6 (suggesting that people are better equipped to make decisions in their late twenties than in their early twenties). *Cf.* Steinberg & Scott, *supra* note 24, at 1011 (explaining that there are good reasons to question whether age differences in decision-making disappear by mid-adolescence).

consideration of the "hallmark features" of youth becomes required. As the Court made clear in *Miller*, "[a]n offender's age . . . is relevant to the Eighth Amendment, and so criminal procedure laws that fail to take defendants youthfulness into account at all would be flawed."[82]

A. SCIENTIFIC EVIDENCE SUPPORTS AN INCREASE IN THE AGE AT WHICH AN INDIVIDUAL QUALIFIES FOR SENTENCING UNDER THE *MILLER* FRAMEWORK

Just as "evolving standards of decency" continue to progress, so do advancements in neuroscience. Researchers are discovering that the brain is maturing later than was previously believed.[83] An adolescent's brain is only eighty percent developed.[84] The frontal lobe—which affects reasoning, planning, and judgment—is the last section of the brain to connect with the cerebral cortex.[85] These two parts of the brain do not fully merge until an individual is somewhere between twenty-five and thirty years old.[86] Consequently, individuals in their late twenties are significantly better at communicating between the parts of the brain that process emotions and social information, plan ahead, control impulses, and balance risk and reward than those in their early twenties.[87]

Similarly, psychologists have recently discovered that the relationship between age and risk-taking behavior is best understood by the way "sensation-seeking" and "impulse control" develop in individuals.[88] "Sensation-seeking" is "the tendency to pursue novel, exciting and rewarding experiences."[89] Such behavior increases greatly during puberty and remains frequent until an individual's early twenties, which is when the behavior starts to decline.[90] Similarly, individuals have low impulse control during childhood, which increases gradually throughout adolescence and into adulthood.[91] The time period during which sensation-seeking increases

82. *Miller*, 132 S. Ct. at 2466 (internal quotation marks omitted).

83. *See* Debra Bradley Ruder, *A Work in Progress: The Teen Brain*, HARV. MAG. (Sept.–Oct. 2008), http://harvardmagazine.com/2008/09/the-teen-brain.html (stating that the merger between the frontal lobe and the cortex in the brain is not complete until an individual is twenty-five or thirty, which is much later than neurologists previously thought).

84. *Id.*

85. *Id.*

86. *Id.*

87. Beck, *supra* note 81.

88. Steinberg, *Influence of Neuroscience*, *supra* note 81, at 515–16.

89. *Id.* at 516.

90. *Id.*

91. *Id.*; Laurence Steinberg, *A Dual Systems Model of Adolescent Risk-Taking*, 52 DEVELOPMENTAL PSYCHOBIOLOGY 216, 222 (2010) [hereinafter Steinberg, *Adolescent Risk-Taking*]

and impulse control is still developing sheds light on why teenagers and young adults might participate in criminal activity.[92] Because there is strong evidence that the brain regions impacting impulse control and self-regulation continue to mature well into an individual's twenties,[93] the Court should extend the threshold for individualized consideration to comport with this evidence. Many individuals in their twenties still possess the "hallmark features" of youth, which include "immaturity, impetuosity, and failure to appreciate risks and consequences."[94] For this reason, mandating that courts consider the mitigating factors of youth for individuals into their early twenties would better fit the Court's own constitutional standard.

Despite advancements in understanding the brain, neuroscientists have cautioned that this new scientific evidence should only be used to confirm what behavioral science and common knowledge have already demonstrated.[95] So it is important to note that "adolescents and individuals in their early 20s are more likely than either children or somewhat older adults to engage in risky behaviour."[96] This finding has been confirmed behaviorally.[97] It is also exemplified in the age-crime curve, which illustrates that the amount of crime engaged in by a particular age group increases starting at puberty, peaks at age twenty, and decreases thereafter (following an inverted U-shaped curve).[98] Most importantly, "more than 90% of all juvenile offenders desist from crime by their mid-20s and . . . the prediction of future violence from adolescent criminal behaviour, even serious criminal behaviour, is unreliable and prone to error."[99] This suggests that criminal behavior exhibited by individuals in their early twenties is likely an unreliable indicator of persistent criminal activity, supporting the idea that life without parole sentences are likely inappropriate for these individuals—particularly when such sentences are handed down without consideration of mitigating neurological and behavioral science findings.

(explaining that impulse control continues to develop between adolescence and adulthood).

92. Richard J. Bonnie & Elizabeth S. Scott, *The Teenage Brain: Adolescent Brain Research and the Law*, 22 CURRENT DIRECTIONS IN PSYCHOL. SCI. 158, 159 (2013) ("[T]eenagers are attracted to novel and risky activities, including criminal activity, particularly with peers, at a time when they lack the judgment to exercise self-control and to consider the future consequences of their behavior.").

93. Steinberg, *Adolescent Risk-Taking*, *supra* note 91, at 222.

94. Miller v. Alabama, 132 S. Ct. 2455, 2468 (2012).

95. Steinberg, *Influence of Neuroscience*, *supra* note 81, at 517.

96. *Id.* at 515.

97. *Id.*

98. *Id.* ("[T]he relationship between age and crime remained the same and was virtually identical across three very different types of offences (robbery, burglary, and rape).").

99. *Id.* at 516.

Neuroscience (with accompanying support from behavioral science and common sense) is a persuasive mitigator and thus should be available to people in their early twenties who, like children and teenagers, also exhibit inferior impulse control and an increase in sensation-seeking behavior. This scientific evidence bears on the culpability of an offender insofar as the difference between the offender's brain and an adult brain can be "plausibly linked to differences in individuals' ability to control their impulses and to stand up to peer pressure . . . [which suggests that individuals' criminal actions] are at least partly due to factors that are not entirely under an individual's control."[100] Given that scientific evidence of an underdeveloped brain bears on a defendant's culpability—and that an offender's age is relevant to the Court's Eighth Amendment analysis—the threshold at which individualized consideration is required must be readjusted.

B. READJUSTING THE AGE AT WHICH AN INDIVIDUAL QUALIFIES FOR INDIVIDUALIZED CONSIDERATION AT SENTENCING UNDER *MILLER*

While the term "juvenile" generally refers to a person under the age of eighteen, the age at which a person reaches adulthood varies throughout our legal system.[101] For the purposes of excluding individuals from consideration for mandatory life without parole sentences and requiring due consideration of the mitigating features of youth, "juvenile" must be redefined to comport with current advancements in brain science. As discussed above, redefining the age at which a person reaches adulthood is not uncommon. The line must be redrawn because individuals in their early twenties exhibit the same youthful characteristics the Court discussed in *Miller*—"immaturity, impetuosity, and failure to appreciate risks and consequences."[102]

In his article detailing reckless behavior in adolescents, Dr. Jeffrey Arnett recommends defining "adolescence" in the United States as to include individuals ranging from puberty to their early twenties. In fitting with brain science, he suggests that this is an appropriate age range in the United States because the early twenties are when individuals generally begin taking on adult responsibilities—becoming financially independent,

100. *Id.* at 517.

101. The law does not uniformly draw a line between childhood and adulthood at age eighteen. In this country there are many different age cutoffs for privileges and protections under the law—an individual must be twenty-one to drink or gamble and eighteen to fight in a war. *See, e.g.*, ARIZ. REV. STAT. ANN. § 4-101(18) (2012) ("'Legal drinking age' means twenty-one years of age or older.").

102. Miller v. Alabama, 132 S. Ct. 2455, 2468 (2012).

starting their careers, and "entering the real world."[103] In that vein, it is reasonable to assume that persons in their early twenties may still have difficulties extricating themselves from difficult family or home environments.[104] However, although mitigating arguments under this *Miller* factor still exist for individuals in their early twenties, the case for youth under the age of eighteen remains far more compelling. For this reason, any "youth discount," as discussed in Part IV of this Note, should be applied on a graded scale—the older a criminal defendant is, the smaller the reduction in sentence.

In drawing the final line between juveniles and adults for purposes of qualifying for the *Miller* rule against mandatory life without parole sentences, it is important to note that one shortcoming of neuroscience is that it only provides "group data" and cannot determine the maturity of a particular individual's brain.[105] Because of the uncertainty associated with this data and the individual variability in brain maturity by age, some neuroscientists have emphasized "the inherent inadequacy of policies that draw bright-line distinctions between adolescence and adulthood."[106] Others have concluded that "[an] age boundary is justified if the presumption of immaturity can be applied confidently to most individuals in the group."[107]

Here, *Miller v. Alabama* does not truly deal with bright-line distinctions—juvenile court or adult prison, life without parole eligibility or ineligibility. Rather, the *Miller* decision simply requires courts to give juveniles individualized consideration of the hallmark features of youth before sentencing them to life without parole. Accordingly, because *Miller* shied away from a categorical bar on life without parole and opted for individualized consideration, it makes sense for courts to allow for more variability. Most importantly, the Court's Eighth Amendment jurisprudence requires that criminal law take into account a defendant's youthfulness. Carving out a significant population of youthful offenders (ages eighteen to twenty-three) despite their shared youthful character traits allows the State to impose its most severe penalty without due consideration of compelling

103. Arnett, *supra* note 23, at 340–41 ("Adolescence is a bridge between childhood and adulthood, during which the individual is gaining further education and training that will enable him/her to fulfill a useful role in adult society.").

104. *See Miller*, 132 S. Ct. at 2468 (explaining that juveniles have difficulty extricating themselves from their family and the home environment that surrounds them).

105. Bonnie & Scott, *supra* note 92, at 161.

106. Elizabeth Cauffman & Laurence Steinberg, *(Im)maturity of Judgment in Adolescence: Why Adolescents May Be Less Culpable than Adults*, 18 BEHAV. SCI. & L. 741, 759 (2000).

107. Steinberg & Scott, *supra* note 24, at 1016.

mitigating factors. For this reason, the Court's mandate and individualized sentencing framework should be extended to protect individuals at least until they have reached their early twenties.[108]

IV. YOUTH SENTENCING DISCOUNT: MAKING THE PUNISHMENT FIT THE CRIMINAL

Traditionally, juvenile offenders were dealt with through the juvenile justice system—a separate legal institution created to facilitate "individualized rehabilitation and treatment" through "informal procedure" and to mete out punishments specifically designed for youth offenders.[109] Juveniles most commonly served their sentences in juvenile hall because they could only be transferred to adult court "if a judge held a hearing and determined that transfer served the best interests of the child and the public."[110] After a spike in juvenile homicides and gang violence at the end of the 1980s, however, racially motivated "get tough" on crime policies began to sweep the nation, disproportionately affecting young black men.[111] "By the mid-1990s, nearly every state had adopted punitive laws to transfer more and younger offenders to adult criminal courts and to punish them more severely."[112] Many states have essentially eliminated the juvenile justice system by instituting mandatory transfer laws and continuing to allow broad prosecutorial discretion with respect to charging decisions.[113] Mandatory transfer laws require juveniles be charged and tried in adult court based on the nature of the commitment offense alone.[114] Prosecutorial discretion allows prosecutors to charge juveniles in adult court without having to follow any standards, protocols, or specified considerations.[115] Thus, the proliferation of mandatory transfer laws and

108. While this Note contends that the age at which an individual qualifies for a *Miller* sentencing should be increased, it does not suggest a definitive age at which this line should be drawn. Such a decision could more appropriately be decided by state legislatures with the input of experts in neuroscience and behavioral science.

109. Tchoukleva, *supra* note 73, at 98 ("For much of the twentieth century, youthful offenders were subject to the jurisdiction of the juvenile court, a court that recognized that the fundamental differences between children and adults called for lesser punishments.").

110. *Id.*

111. Barry C. Feld, *Unmitigated Punishment: Adolescent Criminal Responsibility and LWOP Sentences*, 10 J.L. & FAM. STUD. 11, 31 (2007).

112. *Id.* at 34. *See* Vega & Leighton, *supra* note 2, at 1016 ("[T]he sentence has not been consistently and historically applied to child offenders. Even in the United States, the [life without the possibility of parole] sentence was not used on a large scale until the 1990s when crime reached record levels. . . . Before this time, the sentence had been rarely imposed.").

113. Tchoukleva, *supra* note 73, at 99.

114. *Id.* at 94.

115. Miller v. Alabama, 132 S. Ct. 2455, 2472 (2012) (citing PATRICK GRIFFIN ET AL., U.S. DEP'T

the exercise of enhanced prosecutorial discretion has not only increased the number of juveniles tried in adult court, but also moved this critical decision out of judges' hands.

The *Miller* court recognized the problems caused by such a divergence in treatment between juveniles sentenced in adult court and juveniles dealt with in the juvenile justice system. As Justice Kagan noted in *Miller*, one of the most difficult issues presented to judges at the time of transfer—when judges are given any say at all—involves deciding between two extremes: (1) sentencing a juvenile to an extremely harsh sentence in adult court (such as life without the possibility of parole or an indeterminate sentence of twenty-five years to life), or (2) letting the defendant off with very little punishment in juvenile court (likely release at age twenty-five).[116] Kagan also considered it problematic that juveniles were being sentenced in adult court even though most states did not have "separate penalty provisions for those juvenile offenders."[117] Because of the extremely light punishments rendered in juvenile court, and extraordinarily heavy sentences meted out in adult court, judges must be provided with a more appropriate mechanism for sentencing juveniles convicted of serious crimes such as murder. The "youth discount," explained in the following section, provides judges with an objective and proportionate method for sentencing juvenile offenders.

A. CALCULATING THE YOUTH DISCOUNT

Barry Feld, one of the leading commentators on juvenile sentencing, advocates that courts should apply a "youth discount" at the time of sentencing.[118] More specifically, Feld's suggestion to reduce adult sentences by "categorical fractional"[119] amounts based on age for juvenile offenders works well within *Miller's* framework. Feld provides the following example of a youth sentencing discount: "A fourteen-year-old offender might receive, for example, 25-33% of the adult penalty, a sixteen-year-old defendant, 50-60%, and an eighteen-year-old adult the full

OF JUSTICE, OFF. OF JUVENILE JUSTICE AND DELINQUENCY PROTECTION, TRYING JUVENILES AS ADULTS: AN ANALYSIS OF STATE TRANSFER LAWS AND REPORTING 5 (2011), https://www.ncjrs.gov/pdffiles1/ojjdp/232434.pdf).

116. *Id.* at 2474–75 ("In many States, for example, a child convicted in juvenile court must be released from custody by the age of 21.").

117. *Id.* at 2473.

118. *See generally* Feld, *Abolish the Juvenile Court*, *supra* note 12 (proposing the abolition of the juvenile court and formal recognition of youthfulness as a mitigating factor in criminal sentencing).

119. *Id.* at 118 ("A statutory sentencing policy that integrates youthfulness, reduced culpability, and restricted opportunities to learn self control with principles of proportionality would provide younger offenders with categorical fractional reductions of adult sentences.").

penalty, as presently occurs."[120] Applying this concept in the context of *Miller*, whenever one of the "hallmark features" of youth is present, the "youth discount" should be applied to the lowest sentence set forth in the relevant statutory guideline. By allowing youthfulness to be treated as a categorical mitigator, the "youth discount" recognizes youthfulness for what it really is—a "developmental reality."[121] Ultimately, a "youth discount" would essentially create a categorical bar on life without parole sentences for juveniles, creating an easy-to-follow sentencing procedure for juveniles facing life without parole in adult court.

Under the *Miller* framework, the "youth discount" will often need to be applied to indeterminate sentences. For example, where the indeterminate sentence is twenty-five years to life, a sixteen-year-old might receive 50 percent of the adult penalty—a sentence of twelve years to 50 percent of the sixteen-year-old's "actuarial life expectancy";[122] similarly, a twenty-two-year-old might receive 90 percent of the adult penalty—a sentence of twenty-two years to 90 percent of the twenty-two-year-old's actuarial life expectancy. Thus, an individual's actuarial life expectancy provides a basis for calculating the maximum time a youthful offender can remain in prison. Parts IV.B and IV.C of this Note provide an in-depth discussion of how the use of actuarial science, imported from civil law, can be used within the *Miller* framework to calculate life expectancies and discounted sentences.[123]

As demonstrated in the example, if the line between juveniles and adults is redrawn to accommodate advancements in neuroscience, the "youth discount" effectively prescribes sentences on "a sliding scale of diminished responsibility."[124] By reducing sentences by "categorical

120. *Id.*

121. Barry C. Feld, *A Slower Form of Death: Implications of* Roper v. Simmons *for Juveniles Sentenced to Life Without Parole*, 22 NOTRE DAME J.L. ETHICS & PUB. POL'Y 9, 57–59 (2008) [hereinafter Feld, *A Slower Form of Death*] ("Because all adolescents share characteristics of immature judgment, impulsiveness, and lack of self-control that systematically reduce their culpability, all young offenders should receive categorical reductions of adult sentences. The principle of youthfulness as a mitigating factor represents a moral and criminal policy judgment that no child deserves to be sentenced as severely as an adult convicted of a comparable crime . . . . Even if there are a few juveniles who could be among the worst of society's offenders, jurors will make errors of unacceptable frequency and magnitude. For this reason, we cannot trust ourselves to decide that a child is culpable enough to be punished as an adult . . . ." (internal quotation marks omitted)).

122. Life expectancy should be based on actuarial science. This way, the worse of a background the defendant has, the lower the defendant's life expectancy (and sentence) will be. See *infra* Parts IV.B–C for an in-depth discussion of how actuarial science can be used to calculate life expectancy—as is common practice in the life insurance industry.

123. *See infra* Parts IV.B–C.

124. Feld, *Abolish the Juvenile Court*, *supra* note 12, at 119.

fractional amounts" based on age, a "youth discount" creates an objective and rational means of ensuring that punishments in adult court are appropriate for juveniles (and young adults), without ignoring the obvious developmental differences between a fourteen-year-old and a twenty-two-year-old.

Further, creating a "youth discount" that allows for indeterminate sentences, rather than only determinate terms (as advanced by Feld),[125] is particularly appropriate given the concerns underlying *Miller*. Indeterminate prison terms incentivize youthful offenders to work towards rehabilitation so that they may be paroled at their earliest release date. Indeterminate sentences thus provide a "meaningful opportunity to obtain release based on demonstrated maturity and rehabilitation," in a way that individualized consideration at the time of sentencing cannot.[126] As Kagan herself recognized, "[t]hat is especially . . . [important] because of the great difficulty we noted in *Roper* and *Graham* of distinguishing at this early age between the juvenile offender whose crime reflects unfortunate yet transient immaturity, and the rare juvenile offender whose crime reflects irreparable corruption."[127]

In sum, application of the "youth discount" provides judges with a mechanism to mete out punishments proportionate to juvenile culpability based upon age. To do otherwise is to ignore a body of science that is now available to us. The continued use of prior statutory frameworks would only ignore *Miller*'s constitutional instruction:

> The Eighth Amendment's prohibition of cruel and unusual punishment guarantees individuals the right not to be subjected to excessive sanctions. That right, we have explained, flows from the basic precept of justice that punishment for crime should be graduated and proportioned to both the offender and the offense.[128]

Based on this constitutional precept and a growing body of neurological science, states should revise their statutory sentencing schemes to incorporate the concept of a "youth discount" to achieve fairness for the most vulnerable in our society.

125. *See* Feld, *A Slower Form of Death*, *supra* note 121, at 61–63 (explaining that "youth discounts" would be calculated using the average time an adult inmate would spend in prison for a particular sentence as a base).

126. Graham v. Florida, 560 U.S. 48, 75 (2010).

127. Miller v. Alabama, 132 S. Ct. 2455, 2469 (2012) (quoting Roper v. Simmons, 543 U.S. 551, 573 (2005); *Graham*, 560 U.S. at 68) (internal quotation marks omitted).

128. *Miller*, 132 S. Ct. at 2463 (citations omitted) (internal quotation marks omitted).

B. IMPORTING ACTUARIAL SCIENCE FROM CIVIL LAW TO CALCULATE YOUTH SENTENCING DISCOUNTS UNDER *MILLER*

As mentioned in the previous section, actuarial science, imported from civil law, can be used within the *Miller* framework to calculate a "youth discount" at sentencing. For the purposes of calculating a "youth discount," the actuarial life expectancy for a particular juvenile should serve as the basis for calculating the maximum time that individual could spend in prison if sentenced to an indeterminate term of imprisonment in adult court, such as twenty-five years to life.[129]

Previously, actuarial science has only been applied in the criminal law context as a basis for predicting the likelihood of recidivism for a particular offender.[130] Using actuarial science in this manner created much controversy, but nonetheless was not struck down by courts on constitutional grounds.[131] "By calling attention to the inherently problematic task of assessing future risk, these challenges questioned the constitutionality of locking up people for future crimes that they might—or might not—commit. The courts were unimpressed, and confirmed the basic constitutionality of risk-based deprivations of liberty, despite well-known shortcomings in the prediction of dangerousness."[132]

Using actuarial science to calculate life expectancies for the purposes of a "youth discount" is much less intrusive on an individual's constitutional rights than the actuarial risk assessment previously used in a criminal law context. This Note is the first to advance the use of actuarial science in calculating life expectancies for the purpose of determining youth sentence reductions. Here, because actuarial science is being employed to reduce sentences, risk-based deprivations of liberty are less of an issue, although courts have upheld them in other cases. The way

129. *See supra* Part IV.A.

130. Tracy Bateman Farrell, *Admissibility of Actuarial Risk Assessment Testimony in Proceeding to Commit Sex Offender*, 20 A.L.R.6th 607, 607 (2007); Eric S. Janus & Robert A. Prentky, *Forensic Use of Actuarial Risk Assessment with Sex Offenders: Accuracy, Admissibility and Accountability*, 40 AM. CRIM. L. REV. 1443, 1444–46 (2003); John Monahan, *A Jurisprudence of Risk Assessment: Forecasting Harm Among Prisoners, Predators, and Patients*, 92 VA. L. REV. 391, 408–18 (2006). In many states, actuarial risk assessments are used to calculate the likelihood of re-offense for sex offenders—and are admissible at "sexually violent predator commitment proceeding[s]." Farrell, *supra*, at 607.

131. Janus & Prentky, *supra* note 130, at 1443–44 ("These modern legislative initiatives for the management of sexual offenders have generated heated controversy, and their reliance on the assessment of risk has, in important ways, been central to the controversy.").

132. *Id.* (citing Kansas v. Hendricks, 521 U.S. 346, 358 (1997); Schall v. Martin, 467 U.S. 253, 278 (1984); State v. Post, 541 N.W.2d 115, 132 (Wis. 1995); *In re* Blodgett, 510 N.W.2d 910, 917 n.15 (Minn. 1994)).

actuarial science is employed in calculating youth sentencing discounts for the purposes of this Note is modeled after the way actuarial science is used in the life insurance industry.

1. Actuarial Life Expectancies: A Civil Law Comparison

For more than two centuries, actuarial science has been used in the life insurance industry to calculate life expectancies and structure life insurance policies.[133] Two major types of information go into calculating the risk tied to a particular policyholder: (1) "actuarial data proper," which is "the underlying statistical data used to price a category of risk"; and (2) "the application of the actuarial data to evaluation of a particular policyholder or risk, which is performed by an underwriter."[134] To calculate how much an insurer should charge for an individual life insurance policy, actuaries must first develop "mathematical models" to analyze data collected from doctors and medical researchers on causes of death and ages of the deceased.[135] Next, actuaries "creat[e] tables into which people of various ages with various traits and medical histories fall."[136] Once the tables have been created, it is then the underwriter's job to "apply those tables, with judgment, to an individual applying for life insurance and recommend a certain place on the table or recommend rejection."[137]

The specific considerations that go into the underwriting process are particularly difficult to come by. This is because insurance companies have a "proprietary" interest in keeping their actuarial data and underwriting processes secret.[138] "[I]t is industry standard for each company to develop its own product forms and underwriting systems."[139] Additionally, "insurers may fear that opening their books will open them to charges of misbehavior, such as price-fixing or redlining by racial data."[140] Actuarial expert Randall P. Mire, who has provided expert testimony in numerous life insurance cases, has shed some light on some of the factors that are

133. Kelly J. Bozanic, Comment, *An Investment to Die For: From Life Insurance to Death Bonds, the Evolution and Legality of the Life Settlement Industry*, 113 PENN ST. L. REV. 229, 238 (2008).

134. Michelle Boardman, *Risk Data in Insurance Interpretation*, 16 CONN. INS. L.J. 157, 162 (2009).

135. *Id.* at 163 (citing KENNETH S. ABRAHAM, DISTRIBUTING RISK: INSURANCE, LEGAL THEORY, AND PUBLIC POLICY 72 (1986)).

136. *Id.*

137. *Id.* ("The price that corresponds to a place on the table will depend on the insurer—their costs, profit expectations, and more.").

138. *Id.* at 198.

139. *Id.* at 199 (quoting Richter v. Mut. of Omaha Ins. Co., No. CV 05-498 ABC (PJWX), 2006 WL 1277906, at *1 (E.D. Wis. May 5, 2006)).

140. *Id.*

generally considered during the underwriting process.[141] Mire has explained that "age, gender,[142] build, family history[,] . . . socioeconomic factors such as occupation, income, personal habits and morals have been and still are used in the insurance industry as factors which are indicators of expected mortality."[143] In the past, race was also used as an indicator of expected mortality; however, "[b]y the late 1960s, insurers had converted to race-neutral actuarial tables," and "by the 1980s, insurers claimed not to use race classification at all."[144]

"Mortality tables," which are most relevant here, have been used for centuries in the life insurance industry to estimate the probable life expectancy of an individual, and ultimately determine damages as a result of personal injury or death.[145] For instance, when juries are charged with the task of calculating life insurance damages, they are often presented with the plaintiff's life expectancy at the start of trial.[146] The number of years the plaintiff is expected to live is taken from a mortality table, and may be assessed in conjunction with evidence relating to a plaintiff's "health, habits, and occupation."[147]

2. Fitting Actuarial Science Calculations into the *Miller* Framework

Like insurance companies do on a regular basis, the government should contract with actuaries to create a mathematical model of life expectancies based on age, family history, and socioeconomic factors such as income and habits. The legislature will be tasked with determining the appropriate mechanism for calculating life expectancies and will have to determine whether certain factors should be taken into account in these calculations. Significantly, legislators can choose to calculate life expectancy based on factors that often bear on both life expectancy and the

141. *See* Report of Actuarial Expert Randall P. Mire, FSA, MAAA, FCA ¶¶ 6, 12, Moore v. Liberty Nat'l Ins. Co. (*In re* Liberty Nat'l Ins. Cases), No. CV 02-C-2741-S (N.D. Ala. Oct. 3, 2005), 2005 WL 6337244 [hereinafter Randall P. Mire Expert Report] (stating Mire's qualifications and giving an overview of the underwriting process in life insurance cases).

142. Insurance companies' use of sex as a basis for determining an individual's insurance policy, through "gender-specific tables," has engendered debate over whether this practice constitutes sex discrimination. Jill Gaulding, Note, *Race, Sex, and Genetic Discrimination in Insurance: What's Fair?*, 80 CORNELL L. REV. 1646, 1661 (1995).

143. Randall P. Mire Expert Report, *supra* note 141, ¶ 22.

144. Gaulding, *supra* note 142, at 1660.

145. *See* GEORGE BLUM ET AL., AMERICAN JURISPRUDENCE EVIDENCE § 1348 (2d ed. 2014) (explaining when mortality tables are generally admissible in court).

146. *See, e.g.*, Colo. Pattern Jury Instr. Civ. 5:5 (ed. 2013) ("At the beginning of this trial, plaintiff (*name*), had a life expectancy of (*insert appropriate number of years*) years.").

147. *See, e.g.*, *id.* ("This table of life expectancy is not conclusive but may be considered together with other evidence relating to the plaintiff's health, habits, and occupation.").

culpability of youth (e.g., socioeconomic level, trauma, and exposure to alcohol and drug use). Ultimately, factors that the legislature deems inappropriate can be excluded from the mathematical model it creates to estimate an offender's life expectancy. Once a mathematical model has been created, it can be applied to all youthful offenders facing life without parole sentences in adult court.

In practice, defense counsel will have the burden of proving certain factors are true in order to have those traits included in the life expectancy calculation. For example, a defendant who is able to prove his family has an annual income of $20,000, a history of drug and alcohol abuse, and one deceased parent will have a much lower life expectancy and corresponding sentence than a defendant whose parents make $200,000 a year, do not abuse drugs or alcohol, and have no health-related issues. Conveniently, many of the factors underlying actuarial life expectancy calculations correspond with the factors the Court mandated that courts consider before sentencing a juvenile to life without the possibility of parole.

3. Justification for Using Actuarial Life Expectancy Valuations in Youth Sentencing Discount Calculations

Actuarial life expectancy valuations are ideal for calculating the upper limits of a youthful offender's sentence for two reasons. First, the legislature can selectively create an actuarial model with *Miller*'s "hallmark features" of youth in mind. Second, by creating a categorical and objective approach to youth sentencing that requires judges to systematically discount (at least the upper limits of) sentences based on socioeconomic status and family history, the blind discretion that leads to racially disparate treatment at sentencing can be prevented.

a. The Underlying Data Used in Actuarial Life Expectancy Calculations Is Aligned with the Mitigating Factors of Youth Described in *Miller*

Before sentencing a juvenile to life without the possibility of parole, the Court in *Miller* mandated that judges "tak[e] into account the family and home environment that surrounds [the defendant]—and from which he cannot usually extricate himself—no matter how brutal or dysfunctional."[148] The Court also explained that, "'just 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

148. Miller v. Alabama, 132 S. Ct. 2455, 2468 (2012).

defendant be duly considered' in assessing his culpability."[149] As noted by the Equal Justice Initiative, "[r]esearch has shown that juveniles subjected to trauma, abuse, and neglect suffer from cognitive underdevelopment, lack of maturity, decreased ability to restrain impulses, and susceptibility to outside influences greater even than those suffered by normal teenagers."[150] Because the actuarial life expectancy calculation includes considerations of socioeconomic status, family history, health, and habits, judges are objectively forced to take into account a juvenile's home environment and mental health at sentencing.

In the past, consideration of an individual's socioeconomic status has been rejected by the legal system in the United States. Take for instance, Richard Delgado's "rotten social background defense." Proponents of a "rotten social background defense" posit that socioeconomic deprivation—characterized as poverty, chronic unemployment, substandard living conditions, inadequate schools, poor treatment by police, development of an alternate value system, inadequate homes, and racism—leads to criminal behavior.[151] Delgado suggests that because these environmental factors are crime producing and (to a certain extent) outside of an individual's control, such factors should be considered in mitigation as an exculpatory defense.[152] The legal community, however, has never embraced such a defense.[153] Andrew Taslitz, for instance, has posited three reasons why a "rotten social background" defense has never been taken seriously by the courts or legislature: (1) the law does not require "comparative social responsibility"; (2) society does not share fault with the offender; and (3) "jurors cannot be trusted to exercise compassion in individual cases."[154]

However, allowing a juvenile criminal defendant's lower socioeconomic status and negative family history, among other things, to impact a youth's sentence does not fall prey to the same shortcomings as Delgado's "rotten social background" defense. First, although the law does

149. *Id.* at 2467 (quoting Eddings v. Oklahoma, 455 U.S. 104, 116 (1982)).

150. EQUAL JUSTICE INITIATIVE, CRUEL AND UNUSUAL: SENTENCING 13- AND 14-YEAR-OLD CHILDREN TO DIE IN PRISON 18 (2008), http://www.eji.org/cruelandunusual (citing Nancy Kaser-Boyd, *Post-Traumatic Stress Disorders in Children and Adults: The Legal Relevance*, 20 W. ST. U. L. REV. 319, 325–28 (1993)).

151. Richard Delgado, *"Rotten Social Background": Should the Criminal Law Recognize a Defense of Severe Environmental Deprivation?*, 3 LAW & INEQ. 9, 9, 24–34 (1985).

152. *Id.*

153. *Id.* at 9.

154. Andrew E. Taslitz, *The Rule of Criminal Law: Why Courts and Legislatures Ignore Richard Delgado's Rotten Social Background*, 2 ALA. C.R. & C.L. L. REV. 79, 82 (2011).

not generally require "comparative social responsibility,"[155] *Miller* explicitly states that a juvenile defendant's family and home environment is relevant to sentencing.[156] Therefore, an objective consideration of the home environment in which a juvenile defendant was raised is absolutely relevant for a youth sentencing discount. Second, while it is important that individuals are accountable for their own actions, juveniles are particularly vulnerable to environmental factors and thus have significantly less control over their home environments than their adult counterparts. Third, one of the reasons the youth sentencing discount is so compelling is that it avoids the major problem recognized in *Roper* and *Graham:* that an "unacceptable likelihood exists that the brutality or cold-blooded nature of any particular crime would overpower mitigating arguments based on youth."[157] The youth sentencing discount is particularly favorable because it not only creates a bright-line rule that protects every juvenile facing an adult sentence of life without parole, but it also allows for some variability in the upper limit of a juvenile's sentence based on relevant factors relating to the juvenile's age, socioeconomic status, health, and family history.

In sum, the youth sentencing discount effectively forces judges to quantifiably reduce a juvenile criminal defendant's sentence when his socioeconomic status, health, or family history, demand such a reduction. Having a uniform mathematical model determine the maximum term a juvenile may spend in prison limits judicial discretion, but still allows judges to take into account a child's difficult home environment.

b. Actuarial Calculations Used in Conjunction with the Youth Sentencing Discount Provide Objective Measures that Can Help Prevent Racially Disparate Treatment at Sentencing

The Supreme Court's decision to ban only sentencing schemes that mandate life without parole is particularly troubling given the racially disparate treatment of minorities at sentencing. *Miller*'s holding essentially only demands that judges be given the discretion to impose a sentence other than life without parole. Without more, *Miller*'s constitutional standard fails to protect racial minorities from disproportionately receiving

155. *See id.* at 100 ("Tort law . . . recognizes in some jurisdictions . . . the doctrine of comparative liability, apportioning the damages based upon the relative fault of the defendant and the plaintiff. But criminal law contains no such overt comparative fault doctrines. Criminal law thus does not ordinarily reduce a defendant's potential maximum sentence, or the degree of the defendant's crime, based upon the degree of fault of the 'victim,' or at least this is so on the face of the law.").

156. Miller v. Alabama, 132 S. Ct. 2455, 2468 (2012).

157. Graham v. Florida, 560 U.S. 48, 77–78 (2010) (quoting Roper v. Simmons, 543 U.S. 551, 573 (2005)).

life without the parole sentences:

> [B]lack youth are serving [life without parole] sentences at a rate ten times that of white youth on a per capita basis. This fact is consistent with the finding that youth of color "receive different and harsher treatment" throughout the criminal justice system. Seen in that light, the Court's conclusion that *some* youth can still be sentenced to [life without parole] is particularly problematic because it means that youth of color will likely be the ones considered "appropriate" for that sentence.[158]

The Court's failure to categorically ban all life without parole sentences for juveniles leaves judges with complete discretion to "inadvertently perpetuate pernicious racial disparities in sentencing."[159]

Given the Court's insistence in *Roper* and *Graham* that there remains an "unacceptable likelihood" that mitigating arguments based on youth will be overshadowed by the brutality of certain crimes,[160] the requirement that courts merely consider the "hallmark features" of youth at sentencing is rather toothless. Without additional constitutional safeguards, *Miller*'s limited holding fails to protect racial minorities.

In order to prevent the disproportionate treatment of racial minorities at sentencing, states should revise their statutory sentencing schemes to incorporate the concept of a "youth discount." The youth discount protects minorities in at least three ways. First, it categorically eliminates all life without parole sentences for juveniles, regardless of race. Second, it promotes sentencing uniformity by creating a structured method for sentencing juveniles in adult court. Third, it allows for sentencing variability based on the presence of *Miller* factors without compromising objectivity. Thus, application of the "youth discount" provides judges with a mechanism that creates punishments proportionate to juvenile culpability based upon their age and brain development. Further, by importing actuarial science methodologies from the life insurance industry, sentences are able to account for a defendant's family history, socioeconomic status, and health without needing to subject a youthful defendant to unbridled judicial discretion. By applying a "youth discount," judges are prevented from undergoing perfunctory considerations of the "hallmark features" of youth before sentencing a juvenile to life without the possibility of parole.

For these reasons, the youth sentencing discount provides a necessary safeguard against the continued disparate treatment of minorities at

158. Tchoukleva, *supra* note 73, at 99–100.
159. *Id.* at 100.
160. *Graham*, 560 U.S. at 77–78.

sentencing.

CONCLUSION

In conclusion, the Supreme Court's decision in *Miller v. Alabama* fails at present to adequately protect juveniles from "cruel and unusual punishment." In order for *Miller*'s holding to live up to the Court's own reasons for eliminating mandatory life without parole for juveniles, states must make changes to their current sentencing procedures—namely, categorically eliminating life without parole sentences for juveniles. This Note advocates for the implementation of two major changes to align current juvenile sentencing practice with the *Miller* Court's underlying reasons for eliminating mandatory juvenile life without parole sentences.

In Part I of this Note, I gave an overview of the Court's Eighth Amendment jurisprudence for juvenile sentencing. Then, in Part II, I outlined the principles underlying the decision in *Miller* and explained the Court's underlying reasoning behind its holding. Given the Court's reasoning in *Miller*, I argued in Part III that the age at which an individual is considered a juvenile should be adjusted to comport with scientific evidence regarding the "hallmark features" of youth. Finally, in Part IV, I considered creating a "youth discount," using actuarial mortality calculations previously used only in the life insurance context, to create proportionate punishments for juveniles being sentenced in adult court. Until these reforms are made, the true promise of Eighth Amendment juvenile jurisprudence as set forth in the cases of *Roper*, *Graham*, and *Miller* will not be realized, and the United States will continue to be the only country that continues to sentence its children to die in prison.