

STATE OF MICHIGAN
IN THE SUPREME COURT

THE PEOPLE OF THE STATE OF MICHIGAN,

Plaintiff-Appellee

S.C. No. 160034

-v-

Rick Manning,

Defendant-Appellant /

AMICUS CURIAE BRIEF

BY

JOSEPH CARL BAZZETTA

Joseph Carl Bazzetta
M.D.U.C. No. 204987
Kinross Correctional Facility
4533 W. Industrial Park Drive
Kincheloe, Michigan 49788

TABLE OF CONTENT

| | |
|---|-------|
| Table of Content | (i) |
| Index of Authority | (ii) |
| Statement of Jurisdiction | (iii) |
| Question Presented | (iv) |
| Statement of Facts | (1) |
| Summary to Argument I | (2) |
| Argument I | (4) |
| Based on both a proportionality and compelling reasons analysis, under Michigan's Constitutional Cruel or Unusual Punishment clause, Miller's holding should be extended to include youthful offenders up to the age of (19) nineteen years old | |
| A. Introduction | (4) |
| (a) Proportionality | (5) |
| B. The Supreme Court's Determination in Miller limits the issue in Manning | (5) |
| C. This Court's Governing Limitation Against the Unprincipled Creation of Rights | (7) |
| D. The Constitution Amendment at Issue | (9) |
| E. The Compelling Reasons Standard | (9) |
| 1) The Textual Language of the Constitutions | (9) |
| a) Eighth Amendment of the United States Constitution | (9) |
| b) Michigan Constitution Art 1, § 16 | (9) |
| 2) Significance of Textual Differences between the State and Federal Constitution | (10) |
| 3) State Constitutional and Common Law History | (10) |
| 4) State Law Preexisting Adoption of the Relevant Constitutional Provisions | (11) |
| 5) Structural Differences Between State and Federal Constitutions | (12) |
| 6) Matters of Peculiar State or Local Interest | (12) |
| F. Other Compelling Reasons to Extend Greater Protection Under Michigan's Constitution | (13) |
| (b) Evolving Standard of Decency | (16) |
| (c) Rehabilitation | (37) |
| G. Prospective Relief | (40) |
| (i) A Bright-Line Rule | (40) |
| (ii) A Presumptive Rebuttal | (42) |
| (iii) Miller Should be Extended, at least, up to the age of 19 | (43) |

INDEX OF AUTHORITYState Authority

| | |
|--|-------|
| People v Bullock, 440 Mich 15; 435 N.W.2d 866 (1992) | 10-13 |
| People Collins, 438 Mich 8; 375 N.W.2d 684 (1991) | 8 |
| People v Lorentzen, 387 Mich 167, 194 N.W.2d 827 (1972) | 4, 12 |
| People v Manning, 2019 Mich LEXIS 2320; 2019 WL 6771157, S.C. No. 16J034 | 4 |
| Sitz v Department of State Police, 443 Mich 744, 506 N.W.2d 209 (1993) | 7 |

Federal Authority

| | |
|---|---------|
| Hall v Florida, 572 U.S. 701, 134 S. Ct. 1986, 158 L. Ed2d 1007 (2014) | 30 |
| Hill v Snyder, 2013 U.S. Dist LEXIS 12160 | 18 |
| Malvo v Mathena, 139 S. Ct. 1317, 203 L. Ed2d 563 (2019) | 16 |
| Miller v Alabama, 567 U.S. 460, 132 S. Ct. 2455; 183 L.Ed2d 407 (2012) | Passium |
| Pollock v Farmers' Loan & Trust Co., 157 U.S. 429, 15 S. Ct. 673m 39 L. Ed2d 759 (1895) | 7 |
| Rhodes v Chapman, 452 U.S. 337, 101 S. Ct. 2392, 69 L. Ed2d 59 (1981) | 17 |
| Roper v Simmons, 543 U.S. 551, 125 S. Ct. 1183; 161 L. Ed2d 1 (2008) | passium |
| Spazion v Florida, 468 U.S. 447, 104 S. Ct. 3154, 82 L. Ed2d 340 (1984) | 16 |

Constitution/Compiled Laws

| | |
|---|---------|
| United States Constitution, 8th Amendment | 9 |
| Michigan Constitution, Article 1, § 16 | passium |
| Michigan Compiled Laws 712A2 | 38-39 |
| Michigan Compiled Laws 762.11 | 40 |
| Michigan Compiled Laws 769.25a | 19 |
| Michigan Compiled Laws 791.234(6) | 18 |

Michigan Court Rule

| | |
|-----------------|----|
| MCR 3.945(B)(4) | 39 |
| MCR 3.952(C)(6) | 38 |

STATEMENT OF JURISDICTION

On December 11, 2019 this Court issued an order granting to interested parties the opportunity to submit a brief under the status of amicus curiae upon leave granted by the court. See People v Manning, 2019 Mich LEXIS 2320; SC No. 160034. Based on this Court's order granting Mr. Bazzetta leave to file his amicus curiae brief, this Court is vested with absolute authority to hear and determine the matter fully briefed herein.

QUESTION PRESENTED

Question I

Whether Based on both a proportionality and compelling reasons analysis, under Michigan's Constitutional Cruel or Unusual Punishment clause, Miller's holding should be extended to include youthful offenders up to the age of (19) nineteen years old?

Amicus Curiae Bazzetta would answer: Yes

Counsel in Opposition would answer: No.

STATEMENT OF FACTS

On August 1st, 1983 when Mr. Bazzetta was 18 years old, he admittedly took part in the death of his Step-Mother, Helen Bazzetta. Due to a lack of evidence developed during the investigation following that crime, Mr. Bazzetta was not arrested, tried, and convicted until 1989 when he was found "Guilty But Mentally Ill".

On December 11, 2019 this Court issued an order in People v Manning, S.C. No. 160034 inviting all interested individuals or groups to file brief as amicus curiae. Based on that invitation Mr. Bazzetta, being 18 years old at the time of his offense, is an interested party, and has filed a motion with this brief seeking leave to submit it in accord with the permission outlined in the December 11, 2019 order.

SUMMARY ARGUMENT

As to the question posed in People v Manning, 2019 Mich LEXIS 2320; SC No. 160034, whether Miller v Alabama, 567 U.S. 460, 132 S. Ct. 2455; 183 L. Ed2d 407 (2012) should be extended to those adolescents over 18 years old under the greater protection of Michigan's Constitutional protection against cruel or unusual punishment based on the compelling reason made out below, Mr. Bazzetta submits the following:

First, Justice Kagan has resolved the debate over whether a bright-line rule exists when she made clear that this was not the basis of Miller. Specifically, in Malvo v Mathena, 139 S. Ct. 1317, 203 L. Ed2d 563, during oral arguments in September of 2019, Justice Kagan rebuffed the Solicitor General's assertions that the Miller court's holding as to age was a categorical "bright-line rule", when she rejected that contention and stated with absolute certainty that the majority opinion in Miller, which she wrote, was based on the conclusion that "youth matters". (See Miller at S. Ct. 2465-2466).

Next, while many in opposition to the extension of Miller rely on that Court's failure to reject Roper's categorical "bright-line rule" in its opinion, Mr. Bazzetta points out that oppositional point must also fail as a basis to deny extension of Miller to those above 18 years old. Roper's rule was based on the potential misdiagnosis of the adolescent mind as psychopathic or sociopathic, based on the transitory characteristics which Dr. Steinberg, and the scientific community's studies identify as plaguing the adolescent mind. Roper 543 U.S. 560:

"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. See Steinberg & Scott 1014-1016. As we understand it, this difficulty underlines the rule forbidding psychiatrists from diagnosing any patient under 18 as having antisocial personality disorder, a disorder also referred to as psychopaths or sociopathy, and which is characterized by callousness, cynicism and contempt for the feelings, rights, and suffering of others."

As the Roper decision makes clear, the "bright-line rule" announced was premised on a psychiatric prohibition against a particular diagnosis premised on the

commonality of symptoms between the transient adolescent mind and the criteria for a particular psychological condition.

Any bright-line rule premised on the presence of the transitory characteristics of the adolescent mind must fail, as such a rule does not embrace the true extent to which those characteristics remain into the adolescent life. For that reason, and based on the fact that in both Roper and Miller, Dr. Steinberg's amicus briefing was limited to the age of eighteen based on the controversy in the case before the court, (See Exhibit A, page 70, line 9 to page 71, line 19); therefore, should this Court choose to announce a "bright-line rule", that rule should be at the definitive point where those transient behavioral hindering characteristics are no longer present. A point in the development of the adolescent mind, which Dr. Steinberg explains clearly when not limited from doing so:

"We have done this with people of different ages, then we can ask is the effect of being around your peers different, if you are an adolescent then if you are an adult. What we have found, as I said before, is that when people are in the presence of their peers, up until about the age of 24, or so, we get this peer effect where it increases their risk-taking and reward sensitivity, and we don't see that effect after age 24 where adults perform the same way when they are by themselves as when they are in a group." (See Exhibit A, page 24 line 7).

Clearly, any point at which a Bright-line rule is set should be where the reasons for lesser culpability no longer exist, which Dr. Steinberg submits is at the age of 24.

In the alternative, Mr. Bazzetta submits, that such a bright-line rule would be appropriate when coupled with a burden shifting point of rebuttal set at 21 years old, (See Exhibit A, page 70, line to page 71 line 19), while those under 21 are granted a full mitigation hearing automatically, and those over 21 years of age carry the burden to qualify for a mitigation hearing based the preponderance of evidence that those characteristics identified by Dr. Steinberg still are present.

It is based on this approach that Mr. Bazzetta submits that such a process is appropriate under Michigan's greater Constitutional protection of Art 1 § 16.

Argument I

Based on both a proportionality and compelling reasons analysis, under Michigan's Constitutional Cruel or Unusual Punishment clause, Miller's holding should be extended to include youthful offenders upto the age of (19) nineteen years old

A. Introduction

Mr. Bazzetta comes before this Court by way of invitation offered to interested individuals, groups, and organizations to submit an amicus curiae brief in the calendared case of People v Manning, 2019 Mich LEXIS 2320; 2019 WL 6771157. In that order this Court set out that "[o]ther persons or groups interested in the determination of the issues presented in this case may move the Court for permission to file briefs amicus curiae." Based on that order, Mr. Bazzetta, brings his pleading addressing the second question framed by that order:

"The appellant shall file a supplemental brief within 42 days of the date of this order addressing; (1) whether the defendant's successive motion for relief from judgment is "based on a retroactive change in law", MCR 6.502(G)(2), where the law relied upon does not automatically entitle him to relief; and (2) if so, whether the United States Supreme Court's decisions in Miller v Alabama, 567 U.S. 460, 132 S. Ct. 2455; 183 L. Ed2d 407 (2012), and Montgomery v Louisiana, 136 S. Ct. 718; 193 L. Ed2d 599 (2016) should be applied to 18 year old defendants convicted of murder and sentenced to mandatory life without parole, under the Eighth Amendment to the United States Constitution or Const 1963, art 1, § 16 or both."

It should be noted, the question posed does not convey the complexity and constitutional depth of the legal concepts necessary to the resolution of this very important issue to Michigan Jurisprudence. That is, that question and its resolution must embrace Michigan's Constitution, Michigan Statutes, and this Court's precedent. In fact, as recognized in People v Lorentzen, 387 Mich 167, 194 N.W.2d 827 (1972) this Court, in assessing the mandatory minimum of 20 years imprisonment for the sale of narcotics, indicated that essential to that inquiry is (a) whether the sentence is proportionate to the Crime, (b) the Evolving Standards of Decency, and (c) Rehabilitation. Beyond those three criteria announced in Lorentzen, this Court made clear its agreement with Mr. Bazzetta's contention that this issue before the Court

was complex and involved many different tests:

"It will be seen from the above discussion of the leading United States Supreme Court case and cases decided by this court that the dominant test of cruel and unusual punishment is that the punishment is in excess of any that would be suitable to fit the crime. As we shall see, other standards or tests are also applicable but, clearly, both the United States Supreme Court and this Court have equated an excessive sentence with one that is cruel or unusual."

Lorentzen, 387 Mich at 176.

The criteria recognized in Lorentzen, is as applicable today in Manning, as it was to Lorentzen. That is, as this Court recognized in Lorentzen that other standards and tests are applicable to the question, those criteria listed above are also essential to the inquiry here.

(a) Proportionality

B. The Supreme Court's Determination in Miller limits the issue in Manning

While the Supreme Court holding in Miller v Alabama, 567 U.S. 460, 132 S. Ct. 2455; 183 L. Ed2d 407 (2012) resolves the "disproportionate" nature of mandatory life without the possibility of parole sentences for juveniles, it also serves to frame the underlying question central to this Court's review in Manning:

"We therefore hold that the Eighth Amendment forbids a sentencing scheme that mandates life in prison without the possibility of parole for juvenile offenders. Cf Graham, 560 U.S., at ---, 130 S. Ct., 2030 ("A State is not required to guarantee eventual freedom," but must provide "some meaningful opportunity to obtain release based on demonstrated maturity and rehabilitation"). By making youth (and all that accompanies it) irrelevant to imposition of that harshest prison sentence, such a scheme poses too great a risk of disproportionate punishment. Because that holding is sufficient to decide these cases, we do not consider Jackson's and Miller's alternate argument that the Eight Amendment requires a categorical bar on life without parole for juveniles, or at least for those 14 and younger. But given all we have said in Roper, Graham, and this decision about children's diminished culpability and heightened capacity for change, we think appropriate occasions for sentencing juveniles to this harshest possible penalty will be uncommon. That is especially so 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." Roper, 543 U.S., at 573, 125 S. Ct. 1183; Graham, 560 U.S., at ---, 130 S. Ct., at 2026-2027. Although we do not foreclose a sentencer's ability to make the judgment in homicide cases, we require it to take into account how children are different, and how those

differences counsel against irrevocably sentencing them to a lifetime in prison."

Miller, 132 S. Ct. 2469.

While it is clear, that Miller held that mandatory life without the possibility of parole for juvenile offenders violates the Eighth Amendment, that decision put to rest that portion of the question before this Court in Manning, the Miller Court did not resolve the age at which the term "juvenile" no longer applied. In fact, the Supreme Court in Miller emphasized the "great difficulty" in making such a determination, did not reach and decide that issue; the question central to this Court's review in Manning. In other words, the Supreme Court did not undertake review of a bright-line rule as to the age cutoff in Miller, but instead chose to rely exclusive on it's earlier decisions in Roper, and Graham. Of those two decisions, while both were predicated on the Eighth Amendment, it was the decision of Roper, as reiterated in Miller, which sought to draw the bright-line rule indicating that the term juvenile applied only up to 18:

"Drawing the line at 18 years of age is subject, of course to the objections always raised against categorical rules. The qualities that distinguish juveniles from adults do not disappear when an individual turns 18. By the same token, some under 18 have already attained a level of maturity some adults will never reach. For the reasons we have discussed, However, a line must be drawn. The plurality opinion in Thompson drew the line at 16. In the intervening years the Thompson plurality's conclusion that offenders under 16 may not be executed has not been challenged. The logic of Thompson extends to those under 18. The age of 18 is the point where society for many purposes draws the line between childhood and adults. It is we conclude, the age at which the line for death eligibility ought to rest."

Roper v Simmons, 543 U.S. 551, 560, 125 S. Ct. 1183, 161 L. Ed2d 1.

Admittedly, the rational of both Roper and Graham was adopted by extension in Miller. However, though adopted in Miller, the issue resolved in Roper was not the subject in Miller to what represents a judicial decision, which necessarily must be premised on full briefing, and be the result of an application of the judicial mind to the precise question of a categorical cutoff age, which is central to this Court's

review in Manning. Pollock v Farmers' Loan & Trust Co., 157 U.S. 429, 575; 15 S. Ct. 673; 39 L. Ed2d 759 (1895). For that reason, it must be noted that, the incorporation in Miller of those decisions in Roper and Graham does not change the analysis, all three of those decisions were based on the Eighth Amendment, a fact which must temper this review in light of what this Court has termed "the federal floor":

"Thus, appropriate analysis of our constitution does not begin from the conclusive premise of a federal floor. Indeed, the fragile foundation of the federal floor as a bulwark against arbitrary action is clearly revealed when, as here, the federal floor falls below minimum state protections. As a matter of simple logic, because the text were written at different times by different people, the protections afforded may be greater, lesser, or the same."

Sitz, 443 Mich at 761-762.

As acknowledged by this Court it must first be recognized that the federal floor, as it relates to the question before this Court, must be taken from the facts of Miller, where the two 14 year old Petitioners did not seek, nor did the Court resolve or create a bright line rule for the cutoff age of juveniles. In fact, as can be seen, the Miller Court did rely, through dicta, on the Supreme Court's earlier decision in Roper v Simmons, 543 U.S. 551, 560, 125 S. Ct. 1183; 161 L. Ed2d 1. In other words, it was Roper which set out 18 as the bright line cutoff age for the term juveniles. However, as explained below, this Court is not limited by either the decision in Miller or the decision in Roper which were based on the much higher hurdle in the Eighth Amendment's prohibition against Cruel and Unusual punishment, which does not provide the greater protection Michigan's Constitution art 1, § 16's does in its prohibition against Cruel or Unusual punishment. These distinct difference between the federal and state constitutions serve to provide basis to extend Miller's rational.

C. This Court's Governing Limitation Against the Unprincipled Creation of Rights

In Sitz v Department of State Police, 443 Mich 744, 761-762, 506 NW2d 209 (1993) this Court, called on to address the compelling reason test, explained that

test is "[a] convenient formulation of the overarching responsibility to find a principle basis in the history of our jurisprudence for the creation of new rights." Notably, this Court asserted that while it gleaned from its previous decision that, "the Courts of this state should reject unprincipled creation of state constitutional rights that exceed their federal counterparts, it emphasized and left little doubt, that even though the courts of this state have a duty of restraint against the unfettered creation of rights, "our courts are not obligated to accept what we deem to be a major contraction of citizens protections under our constitution simply because the United States Supreme Court has chosen to do so." Sitz, Mich at 763.

Prior to the decision in Sitz, this Court gave guidance in People v Collins, 438 Mich 8, 31-32; 375 NW2d 684 (1991) when it recognized the lack of Michigan precedent on the issue, and went on to explain what the Compelling Reason Standard embraced:

"Although a number of appellate decisions have referred to the compelling reason standard, little in the way of guidance has been provided concerning its contours and meaning. Surely, the beginning of consideration must be the axiomatic statement of this Court in Holland v Gardener City Clerk, 299 Mich 465, 470; 300 NW2d 777 (1941); 'It is a fundamental principle of constitutional construction that we determine the intent of the framers of the constitution and the people adopting it.' See Burdick v Secretary of State, 373 Mich 578, 584; 130 NW2d 380 (1964).

We believe that compelling reason for an independent state construction might be found if there were significant textual differences between parallel provision of the state and federal constitutions, and particularly, if history provided reason to believe that those who framed and adopted the state provision had a different purpose in mind."

Put more succinctly, though in a footnote, this Court recognized in Sitz that Collins, 438 Mich at 31, n 39 provided several factors for determining whether a state constitution affords protection different from the federal constitution:

1) the textual language of the state constitution, 2) significant textual difference between parallel provisions of the two constitutions, 3) state constitutional and common-law history, 4) state law pre-existing adoption of the relevant constitutional provisions, 5) Structural differences between the state and federal constitutions and 6) matters of peculiar state or local interest."

D. The Constitutional Amendment at issue

Central to the Compelling Reason Standard evaluation, as posed by the second question in Manning is the decision of the United States Supreme Court in Miller v Alabama, 132 S.Ct. 2455; 183 L.ED2d 407 (2012), and the decision in Roper v Simmons, 543 U.S. 551, 125 S. Ct. 1183; 161 L. Ed2d 1. In Miller, (a 5 to 4 decision), the Court struck down the mandatory imposition of life without parole sentences imposed against juvenile offenders, holding that the mandatory nature of that imposition offended the Eighth Amendment prohibition against cruel and unusual punishment:

"Graham, Roper, and our individualized sentencing decisions make clear that a judge or jury must have the opportunity to consider mitigating circumstances before imposing the harshest possible penalty for juveniles. By requiring that all children convicted of homicide receive lifetime incarceration without the possibility of parole, regardless of their age and age related characteristics and the nature of their crimes, the mandatory sentencing schemes before us violate this principle of proportionality, and so the Eighth Amendment's ban on cruel and unusual punishment." (emphasis added)

Miller, 132 S. Ct. 2466.

In Roper, the Supreme Court set out a bright line rule of 18 years as cutoff for the prohibition against the death penalty, holding it such a sentence against juveniles under 18 years old offended the Eighth Amendment prohibition.

E. The Compelling Reasons Standard

1) The Textual Language of the Constitutions

As the holdings in Miller and Roper were addressed under the constitutional prohibition of "cruel and unusual" punishment set out under the Eighth Amendment, the difference in that Amendment's language and the language of Michigan's Constitution art 1, § 16 prohibiting "cruel or unusual" punishment is significant.

a) Eighth Amendment of the United States Constitutions

"Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishment inflicted.

b) Michigan Constitution Art 1, § 16

"Excessive bail shall not be required; excessive fines shall not be

imposed; cruel or unusual punishment shall not be inflicted; nor shall witnesses be unreasonably detained."

2. Significance of Textual Differences Between the State and Federal Constitution

This Court agrees that, as it recognized in Bullock, supra, there are significant differences between the federal and state constitutional prohibition which are relevant and obviously applicable to the question posed in Manning:

"First, as we have already noted, the Michigan provision prohibits "cruel or unusual" punishments, while the Eighth Amendment bars only punishments that are both "cruel and unusual."

As this Court made note of the textual differences between the federal and state constitutions, it went on to explain in Bullock that its prior holding in Collins was still good law: a "significant textual difference[] between parallel provision of the state and federal constitutions may constitute a 'compelling reason' for a different and broader interpretation of the state provision." See Bullock at Mich 31, and Collins at 438 Mich 32. That is, since the decisions in Miller and Roper embraced the provision of the Eighth Amendment, and the extension of that holding in Manning is premised under Michigan's Constitution art 1 § 16, then logically it is Michigan's Constitution which should control the inquiry, even though the rationale of Miller and Roper are also central to and persuasively applicable to the issue before this Court.

3. State Constitutional and Common Law History

Again, as this Court explained, Michigan's Constitutional and common law history represents a clear intent of the framers and people of the state to diverge the specific protection of Michigan's Constitution from that of the federal constitutions Eighth Amendment where it adopted the distinctly different provision against "cruel" or "unusual" punishment under Art 1, § 16:

"This textual difference does not appear to be accidental or inadvertent. Language providing that "no cruel or unusual punishment shall be inflicted was included in Article II of the Northwest Ordinance of 1787. Michigan's first Constitution, adopted in 1835, provided that "cruel and unjust punishment shall not be inflicted." Const 1835, art 1, § 18

(emphasis added). The Constitution of 1850 provided that "cruel or unusual punishment shall not be inflicted . . ." Const 1850, Art 6, § 31 (emphasis added) Identical language was adopted as part of the 1908 and 1963 Constitution. See Const 1908, art 2, §15; Const 1963, art 1, § 16.

As this Court recognized in Bullock, Michigan's Constitution has remained the same language and provided the same protections since the adoption of Michigan's Constitution of 1850, Art 6, § 31, to Michigan's Constitution of 1908, Art 2, § 15 and again in Michigan's Constitution of 1963, Art 1, § 16.

4. State Law Preexisting Adoption of the Relevant Constitutional Provisions

As this Court addressed in People v Bullock, 440 Mich 15, 27; 485 N.W.2d 86 (1992), while Miller and Roper are binding and authoritative for purpose of applying the United States Constitution, it is only persuasive authority for purposes of this Court's interpretation and Application of Michigan's Constitution. This rational, though announced in Bullock in relation to Harmelin v Michigan, 501 U.S. 957; 111 S. Ct. 2680; 115 L. Ed2d 826 (1991), still holds true in relation to Miller and Roper, as it has always been solely this State Supreme Court's ultimate duty to determine the meaning and application of Michigan law. See In re Apportionment of State Legislature, 413 Mich 96, 116, n 11; 321 N.W.2d 565 (1982). This is especially true in the face of a sharply divided decision of the Supreme Court, as it is true of this Court's interpretation of Michigan's Constitution which is at odds with the federal constitution:

"To note that we have the authority to interpret the Michigan Constitution more expansively than the United States Constitution does not, of course, lead to the conclusion that we should or will choose to exercise that authority in any particular area. It is entirely possible, in a given case or area, that our independent judgment will lead to our agreeing with the reasoning of the United States Supreme Court. See, e.g., Doe v Dept of Social Services, 439 Mich 650, 487 N.W.2d 166 (1992)(rejecting a state constitutional right to abortion funding). For example, in the area of search and seizure law, governed by the Fourth Amendment of the United States Constitution and Const. 1963 art 1, § 11, this Court held, on the basis of a careful examination of the text and history of the latter clause, and the understanding of the voters who adopted it, that it should not be interpreted to afford any greater protection than the parallel federal clause, absent a "compelling reason" for doing so. See People v Collins, 438 Mich 8, 25-29; 475 N.W.2d 684 (1991); People v Perlos, 436

Mich 305, 313, n 7; 462 N.W.2d 310 (1990); People v Nash, 418 Mich 196 , 208-215; 341 N.W.2d 439 (1983) (opinion of Brickley, J.) See also People v Hill, 429 Mich 382, 393; 415 NW2d 193; People v Collier, 426 Mich 23, 39; 393 NW2d 346 (1986)(interpreting the Self-Incrimination Clause of Const. 1963 art 1, § 17)"

Bullock, Mich at 28-29.

In recognizing this principle of Michigan law, this Court went on to conclude that Michigan's Constitution art 1, § 16 controls over the Eighth Amendment of the United States Constitutional prohibition against "cruel and unusual" punishment:

"We believe the precedential weight of Lorentzen and its antecedents, as a matter of Michigan law, constitutes a very compelling reason not to reflexively follow the latest turn in United States Supreme Court's Eighth Amendment Analysis."

Just as this Court held in Bullock, it should hold under this case that Michigan's Constitution Art 1, § 16 provides greater protection to its citizens from cruel or unusual punishment.

5. Structural Differences Between State and Federal Constitutions

Where the word "and" is used it represents a conjunction and does not allow for reliance on either individual portion of the phrase where, e.g. the United States Constitution provides in the Eighth Amendment that "cruel and unusual" punishment is prohibited. That conjunctive relationship between "cruel" and "unusual" creates a higher burden to demonstrate that the sentence imposed offends that provision of the United States Constitution. In Michigan however, the language of Michigan's Constitution Art 1, § 16 is so structurally different to that of the federal provision, that its use of "or" provides that a sentence may demonstrate its unconstitutionality upon evidence that it is either "Cruel" or "Unusual".

6. Matters of peculiar state or local interest

Next, as this Court concluded in Bullock, Michigan's longstanding precedent controls. In fact, this court in Bullock reiterated the rationale of Lorentzen emphasizing that based on the weighty precedent under Michigan Law, this court would not reflectively follow the United States Supreme Court's limited Eighth Amendment

Analysis:

"It is unclear, in the wake of Harmelin, whether Lorentzen's or Solem's analysis survives as a matter of federal constitutional law, and that need not concern us in any event, Lorentzen's analysis, although relying in the alternative on the Eighth Amendment, was firmly and sufficiently rooted in Const. 1963, art 1, §16. Indeed, we preceded our proportionality analysis in Lorentzen with a lengthy review of Michigan case law dating back to 1879. See 387 Mich 173-176. We believe the precedential weight of Lorentzen and its antecedents, as a matter of Michigan law, constitutes a very compelling reason not to reflexively follow the latest turn in United States Supreme Court's Eighth Amendment analysis. We therefore continue to adhere, on the basis of the Michigan Constitution, to the analysis set forth in Lorentzen and later adopted in Solem."

Bullock 440 Mich 33-35.

Mr. Bazzetta points out that this Court's refusal to reflexively follow the United States Supreme Court based upon Michigan's weighty precedent, should also be the ruling here. That is, this Court's has and should exercise its exclusive authority over the interpretation of Michigan's Constitution and should reach the conclusion that this State's Constitution controls over any reflexive adoption of Miller. In re Apportionment of State Legislature, 413 Mich at 116.

F. Other Compelling Reasons to extend greater protection under Michigan's Constitution

Additionally, providing more, a compelling basis to avoid the reflexive adoption of Miller's age limitation or and Roper's bright-line rule, is that Miller's adoption of Roper was dicta, and Roper's rational for its bright-line rule to begin with:

"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. See Steinberg & Scott 1014-1016. As we understand it, this difficulty underlies the rule forbidding psychiatrists from diagnosing any patient under 18 as having antisocial personality disorder, a disorder also referred to as psychopathy or sociopathy, and which is characterized by callousness, cynicism, and contempt for the feelings, rights, and suffering of others. American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders 701-706 (4th ed. text rev. 2000); see also Steinberg & Scott 1015. If trained psychiatrists with the advantage of clinical testing and observation refrain, despite diagnostic expertise, from assessing any juvenile under 18 as having antisocial personality disorder, we conclude that States should refrain from asking jurors to

issue a far greater condemnation -- that a juvenile offender merits the death penalty. When a juvenile offender commits a heinous crime, the State can exact forfeiture of some of the most basic liberties, but the State cannot extinguish his life and his potential to attain a mature understanding of his own humanity.

Drawing the line at 18 years of age is subject, of course to the objections always raised against categorical rules. The qualities that distinguish juveniles from adults do not disappear when an individual turns 18. By the same token, some under 18 have already attained a level of maturity some adults will never reach. For the reasons we have discussed, however, a line must be drawn. The plurality opinion in Thompson drew the line at 16. In the intervening years the Thompson plurality's conclusion that offenders under 16 may not be executed has not been challenged. The logic of Thompson extends to those under 18. The age of 18 is the point where society for many purposes draws the line between childhood and adults. It is we conclude, the age at which the line for death eligibility ought to rest."

Roper v Simmons, 543 U.S. 551, 560, 125 S. Ct. 1183, 161 L. Ed2d 1.

Mr. Bazzetta submits that beyond the language above and the rationale for the line drawn at the age of 18, no court has revisited either. In fact, the Miller court did not reach and decide any substantive arguments for or against Roper's conclusions. That fact is indisputable, as evidenced by the Miller court's conclusory remark: "[w]e therefore hold that mandatory life without parole for those under the age of 18 at the time of their crimes violates the Eighth Amendment's prohibition on "cruel and unusual punishments", and the actual opinion in Miller, both demonstrate that beyond dicta, the Miller court did not apply its judicial mind to the vital question now before this court:

"We therefore hold that the Eighth Amendment forbids a sentencing scheme that mandates life in prison without the possibility of parole for juvenile offenders. Cf. Granam, 560 U.S., at ---, 130 S. Ct., 2030 ("A State is not required to guarantee eventual freedom," but must provide "some meaningful opportunity to obtain release based on demonstrated maturity and rehabilitation"). By making youth (and all that accompanies it) irrelevant to imposition of that harshest prison sentence, such a scheme poses too great a risk of disproportionate punishment. Because that holding is sufficient to decide these cases, we do not consider Jackson's and Miller's alternate argument that the Eighth Amendment requires a categorical bar on life without parole for juveniles, or at least for those 14 and younger. But given all we have said in Roper, Graham, and this decision about children's diminished culpability and heightened capacity for change, we think appropriate occasions for sentencing juveniles to this harshest possible penalty will be uncommon. That is especially so because of the great difficulty we noted in Roper and Graham of distinguishing at this

issue a far greater condemnation -- that a juvenile offender merits the death penalty. When a juvenile offender commits a heinous crime, the State can exact forfeiture of some of the most basic liberties, but the State cannot extinguish his life and his potential to attain a mature understanding of his own humanity.

Drawing the line at 18 years of age is subject, of course to the objections always raised against categorical rules. The qualities that distinguish juveniles from adults do not disappear when an individual turns 18. By the same token, some under 18 have already attained a level of maturity some adults will never reach. For the reasons we have discussed, however, a line must be drawn. The plurality opinion in *Thompson* drew the line at 16. In the intervening years the *Thompson* plurality's conclusion that offenders under 16 may not be executed has not been challenged. The logic of *Thompson* extends to those under 18. The age of 18 is the point where society for many purposes draws the line between childhood and adults. It is we conclude, the age at which the line for death eligibility ought to rest."

Roper v Simmons, 543 U.S. 551, 560, 125 S. Ct. 1183, 161 L. Ed2d 1.

Mr. Bazzetta submits that beyond the language above and the rationale for the line drawn at the age of 18, no court has revisited either. In fact, the Miller court did not reach and decide any substantive arguments for or against Roper's conclusions. That fact is indisputable, as evidenced by the Miller court's conclusory remark: "[w]e therefore hold that mandatory life without parole for those under the age of 18 at the time of their crimes violates the Eighth Amendment's prohibition on "cruel and unusual punishments". That summary statement and the actual opinion in Miller both demonstrate that beyond dicta, the Miller court did not apply its judicial mind to the vital question now before this court:

"We therefore hold that the Eighth Amendment forbids a sentencing scheme that mandates life in prison without the possibility of parole for juvenile offenders. Cf. *Graham*, 560 U.S., at ---, 130 S. Ct., 2030 ("A State is not required to guarantee eventual freedom," but must provide "some meaningful opportunity to obtain release based on demonstrated maturity and rehabilitation"). By making youth (and all that accompanies it) irrelevant to imposition of that harshest prison sentence, such a scheme poses too great a risk of disproportionate punishment. Because that holding is sufficient to decide these cases, we do not consider Jackson's and Miller's alternate argument that the Eighth Amendment requires a categorical bar on life without parole for juveniles, or at least for those 14 and younger. But given all we have said in *Roper*, *Graham*, and this decision about children's diminished culpability and heightened capacity for change, we think appropriate occasions for sentencing juveniles to this harshest possible penalty will be uncommon. That is especially so 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." Roper, 543 U.S., at 573, 125 S. Ct. 1183; Graham, 560 U.S., at ---, 130 S. Ct., at 2026-2027. Although we do not foreclose a sentencer's ability to make the judgment in homicide cases, we require it to take into account how children are different, and how those differences counsel against irrevocably sentencing them to a lifetime in prison."

Miller, 132 S. Ct. 2469.

The rationale above has been underscored where Justice Kagan has most recently reiterated that Miller decision's limitation to those juveniles under 18 years old was not a bright-line rule when, during oral arguments in Malvo v Mathena, 139 S. Ct. 1317, 203 L.Ed2d 563, she rebuffed the Solicitor General's assertions that the Miller court's holding as to age was a categorical "bright-line rule". Justice Kagan, rejecting that contention, stated with absolute clarity that the majority opinion in Miller, which she wrote, was based on "youth matters", (See Miller, S. Ct. 2465-2466) not a bright-line rule.

For that reason, taking Roper for what it was, and Miller's adoption of Roper for what it is, no other conclusion can be appropriate under Michigan's Constitution; This Court should extend greater protection to Michigan's youthful offenders, up to 19 years old, as both, the compelling reasons above, and the evolving standards of decency analysis below demonstrates, Miller's holding does not rest on a "bright-line rule".

(b) Evolving Standard of Decency

In Spaziano v Florida, 468 U.S. 447, 471, 104 S. Ct. 3154, 82 L. Ed2d 340 (1984) (quoting Gregg v Georgia, 428 U.S. 153, 173), while the court explained their cases have established the appropriate mode of analysis, they elaborated on those cases emphasizing "there must be an assessment of contemporary values concerning the infliction of a challenged sanction," to determine whether punishment has been imposed in a way that offends an Evolving Standard of Decency."

In another case embracing a "evolving standard of decency analysis, Rhodes v Chapman, 452 U.S. 337, 346, 101 S.Ct. 2392, 69 L. Ed2d 59 (1981), that Court, addressing a condition of confinement claim, concluded:

"No static test can exist by which courts determine whether conditions of confinement are cruel and unusual, for the Eighth Amendment 'must draw its meaning from the evolving standard of decency that mark the progress of a maturing society.' Trop v Dulles, 356 U.S. 86, 101 (1958)(plurality opinion). The Court has held, however, that Eighth Amendment judgments should neither be, nor appear to be merely the subjective views of judges. Rummel v Estelle, 445 U.S. 263, 275 (1980). To be sure "the Constitution contemplates that in the end [a court's own judgment will be brought to bear on the question of the acceptability" of a given punishment. Coker v Georgia, supra, at 597. (plurality opinion); Gregg v Georgia supra, at 182 (joint opinion). But such "[Judgments] should be informed by objective factors to the maximum possible extent." Rummel v Estelle, Supra at 274-275, quoting Coker v Georgia, supra at 592 (Plurality Opinion). For example, when the question was whether capital punishment for certain crimes violated contemporary values, the court looked for "objective indicia" derived from history, the action of state legislature, and the sentencing by juries. Gregg v Georgia, supra, at 176-187, Coker v Georgia, supra at 593-596."

While couched in relation to capital punishment, those principles announced in Rhodes, still have relevance here. (See Miller at S.Ct. 2464 where the Supreme Court acknowledged Graham's likening of life without parole to the death penalty). Further, in Spaziano, despite those qualifications above, the Court emphasized that "[a]lthough the judgment of legislatures, juries, and prosecutor's weigh heavily in the balance, it is ultimately for us to judge whether the Eighth Amendment is violated by a challenge practice", Id at 471. That Court went on to explain that "legislative measures adopted by the people's chosen representative weigh heavily in ascertaining contemporary standards of decency." Spaziano at 472 (quoting Woodson v North Carolina, 428 U.S. 280, 294-295, 96 S. Ct. 2978, 49 L. Ed2d 944 (1976). Mr. Bazzatta contends that is not the case here.

No Deference Should be Paid to the Legislative Enactment of MCL 769.25a

While Mr. Bazzatta agrees that it is for this court to decide whether "Mandatory Life" for 18 year olds offends Article 1, § 16 of the Michigan Constitution, he disputes whether this court should give deference to MCL 769.25 and

MCL 769.25a as a legislative measure entitled to weighty consideration in this Court's evolving standard of decency analysis.

The reasons for such a stance rest in the fact that the Michigan Legislature's adoption of MCL 769.25 and MCL 769.25a were not a "measured" adoption of MCL 769.25 and MCL 769.25a, but both were, in relation to the issue before this court, based completely on Miller's dicta, and a preemptive effort against the Order in Hill v Snyder, 2013 U.S. Dist LEXIS 12160 (January 30, 2013) which announced that MCL 791.234(6)'s provision was unconstitutional as it applied to juveniles non-parolable life sentences, contrary to Miller.

This can be seen from Judge O'Meara's orders in Hill v Snyder, 2013 U.S. Dist. LEXIS 12160 (January 30, 2013) where the Court struck down Michigan Compiled Law 791.234(6) as unconstitutional as applied to juveniles and emphasized the Court's striking down of non-parolable life sentences would be enforced immediately if the state failed to act.

Further, in direct response to that holding, Michigan's legislature introduced Bill 319 on March 16, 2013. See 2013 Bill Tracking LEXIS Mi S.B. 319. Later, that bill was adopted and codified as MCL 769.25 and MCL 769.25a. Specifically, those bills provided that each provision would be made effective, only upon the United States Supreme Court's subsequent determination that Miller was retroactive. This short and hasty sponsoring and enacting of MCL 769.25 and MCL 769.25a can not be considered a "measured" act of the legislature. In fact, at the time the bill was sponsored, the Michigan Attorney General's office had consistently been opposing the application of Miller to Michigan juvenile offenders sentenced to mandatory life. Despite that opposition, the office of the Attorney General, in an alternative approach sought to have Senate Bill 319 sponsored to avoid the order of Judge O'Meara, (Hill v Snyder, 2013 U.S. Dist LEXIS 112981 *4, and 821 F 3d 763, 767 (6th Cir 2016), which set out that compliance was mandated by a specific deadline.

Finally, it should make no difference whether this court recognizes MCL 769.25a reliance on Miller as being a measured legislative act or not. The fact that MCL 769.25 and MCL 769.25a are premised on Miller's holding being made retroactive, as mentioned above, and Miller's reliance exclusively on the holding of Roper setting the categorical age at up to 18 years old, then no deference should be paid to either, Miller's adoption of Roper through dicta, or Michigan's legislature's unmeasured extension of that dicta when it enacted MCL 769.25a, but instead, this Court should exercise its exclusive authority to assess the evolving standard of decency and resolve at what point Michigan Constitution will tolerate the lesser culpability of the adolescent mind, and presumptively hold them to be culpable as an adult.

Roper and its basis

It can not be overlooked, much of the historical background relied in Roper, as adopted in Miller, is an advantageous starting point for this aspect of consideration:

"Three general differences between juveniles under 18 and adults demonstrate that juvenile offenders cannot with reliability be classified among the worst offenders. First, as an parent knows and the scientific and sociological studies respondent and his amici cite tend to confirm, '[a] lack of maturity and an underdeveloped sense of responsibility are found in youth more often than in adults and are more understandable among the young. These qualities often result in impetuous and ill-considered actions and decisions. Johnson, supra, at 367, 125 L. ed2d 290, 113 S. Ct 2658; see also Eddings, supra, at 115-116, 71 L. Ed2d 1, 102 S.Ct. 869 ("Even the normal 16 year-old customarily lacks the maturity of an adult"). It has been noted that "adolescents are overrepresented statistically in virtually every category of reckless behavior." Arnett, Reckless Behavior in Adolescence: A Developmental Perspective, 12 Developmental Review 339 (1992). In recognition of the comparative immaturity and irresponsibility of juveniles, almost every State prohibits those under 18 years of age from voting, serving on juries, or marrying without parental consent. See Appendixes B-D, *infra*.

The Second of difference is that juveniles are more vulnerable or susceptible to negative influences and outside pressures, including peer pressure. Eddings, supra, at 115, 71 L. Ed 2d 1, 102 S. Ct. 869 ("[Y]outh is more than a chronological fact. It is a time and condition of life when a person may be most susceptible to influence and to psychological damage"). This is explained in part by the prevailing circumstances that

juveniles have less control, or less experience with control, over their own environment. See Steinberg & Scott, Less Guilty by Reason of Adolescence: Developmental Immaturity, Diminished Responsibility, and the Juvenile Death Penalty, 58 Am. Psychologist 1009, 1014 (2003)(hereafter Steinberg & Scott) ("[A]s legal minors, [juveniles] lack the freedom that adults have to extricate themselves from a criminogenic setting").

The third broad difference is that the character of a juvenile is not as well formed as that of an adult. The personality traits of juveniles are more transitory, less fixed. See generally E. Erikson, Identity: Youth and Crisis (1968)." (Roper, U.S. 569-560.

Ultimately, in Roper the Court went on to conclude that neither retribution nor deterrence provided an adequate basis to impose the harshest possible sentences against juveniles:

"In concluding that neither retribution nor deterrence provides adequate justification for imposing the death penalty on juvenile offenders, we cannot deny or overlook the brutal crimes too many juvenile offenders have committed. See Brief for Alabama et al. as Amici Curiae. Certainly it can be argued, although we by no means concede the point, that a rare case might arise in which a juvenile might arise in which a juvenile offender has sufficient psychological maturity, and at the same time demonstrates sufficient depravity, to merit a sentence of death. Indeed, this possibility is the linchpin of one contention pressed by petitioner and his amici. They assert that even assuming the truth of the observation we have made about juveniles' diminished culpability in general, jurors nonetheless should be allowed to consider mitigating arguments related to youth on a case-by-case basis, and in some cases to impose the death penalty if justified. A central feature of death penalty sentencing is a particular assessment of the circumstances of the crime and the characteristics of the offender. The system is designed to consider both aggravating and mitigating circumstances, including youth, in every case. Given this Court's own insistence on individualized consideration, petitioner maintains that it is both arbitrary and unnecessary to adopt a categorical rule barring imposition of the death penalty on any offender under 18 years of age.

We disagree. The difference between juvenile and adult offenders are to marked and well understood to risk allowing a youthful person to receive the death penalty despite insufficient culpability. 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, even where the juvenile offender's objective immaturity, vulnerability, and lack of true depravity should require a sentence less severe than death. In some cases a defendant's youth may even be counted against him. In this very case, as we noted above, the prosecutor argued Simmons' youth was aggravated rather than mitigating. Surpa, at 558, 161 L. Ed.2d. at 14. While this sort of overreaching could be corrected by a particular rule to ensure that the mitigating force of youth is not overlooked, that would not address our larger concerns.

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. See Steinberg & Scott 1014-1016. As we understand it, this difficulty underlines the rule forbidding psychiatrists from diagnosing any patient under 18 as having antisocial personality disorder, a disorder also referred to as psychopathy or sociopathy, and which is characterized by callousness, cynicism, and contempt for the feelings, rights, and suffering of others. American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders* 701-706 (4th ed. text rev. 2000); see also Steinberg & Scott 1015. If trained psychiatrists with the advantage of clinical testing and observation refrain, despite diagnostic expertise, from assessing any juvenile under 18 as having antisocial personality disorder, we conclude that State should refrain from asking jurors to issue a far graver condemnation -- that a juvenile offender merits the death penalty. When a juvenile offender commits a heinous crime, the State can exact forfeiture of some of the most basic liberties, but the State cannot extinguish his life and his potential to attain a mature understanding of his own humanity.

Drawing the line at 18 years of age is subject, of course to the objections always raised against categorical rules. The qualities that distinguish juveniles from adults do not disappear when an individual turns 18. By the same token, some under 18 have already attained a level of maturity some adults will never reach. For the reasons we have discussed, however, a line must be drawn. The plurality opinion in *Thompson* drew the line at 16. In the intervening years the *Thompson* plurality's conclusion that offenders under 16 may not be executed has not been challenged. The logic of *Thompson* extends to those under 18. The age of 18 is the point where society for many purposes draws the line between childhood and adults. It is we conclude, the age at which the line for death eligibility ought to rest."

Roper v Simmons, 543 U.S. 551, 560, 125 S. Ct. 1183, 161 L. Ed2d 1.

Clearly, the Roper Court's rational and basis for drawing the line at 18 years old rest in large part on the scientific evidence set forth in the 2003 report of Steinberg & Scott. See Roper U.S. 569-570. Based on that fact, Mr. Bazzatta points out the obvious, that report and the basis for it, issued 17 years ago, was not revisited or challenged in Miller, despite the significant changes that have developed in the evidence, testing, and confidence in the scientific community that Dr. Keating and Steinberg are the correct. This can be seen from the summary of Dr. Daniel P. Keating Ph.d, of the University of Michigan, addressing some of those changes in the developmental scientific evidence recorded on the mapping of the juvenile brain since Roper, and in some instances, beyond the basis of proof

available at the time of Miller, which seems to paraphrase Roper's conclusions. It this developmental science which should be a central consideration in this Court's decision in Manning, and should form the basis for this Court to extend Miller's "Youth Matters" stance. (See Miller 5. Ct. 2465-2466).

In other words, since many of those new developments were not available to the Court for the Roper decision, and since the question framed by this Court was not briefed, argued or decided in Miller, then Dr. P. Keating's summary providing an overview of what each scientific methodology represents, should serve to give some guidance to this Court and promote a useful understanding of the sources of the evidence referenced in Dr. Keating's summary in support of his and potentially this Court's conclusions:

Structural neuroscience: This refers to evidence on the changing structure of the "static" brain, that is, when it is not performing a task. There are several methods for this, but most prominent currently is diffusion tensor imaging (DTI), collected during a session of magnetic resonance imaging (MRI). This allows the characterization of the size of various parts of the brain, how they differ with age, and how they are connected with each other.

Functional neuroscience: This assesses how the brain is working while it is engaged in a task, most prominently in functional MRI (fMRI) and various forms of electrical encephalography (EEG), such as evoked response potential (ERP). These use different physical methods (blood flow in fMRI, electrical signals in ERP), but they have the same goal, to elucidate the time and location of brain activity.

Cognitive and behavioral evidence: In addition to the brain imaging evidence above there are large amounts of behavioral and cognitive evidence that are relevant to the DMM, including self-report of sensation seeking, impulsivity, and risk judgments, among others, as well as performance on cognitive task that assess EF, risk-reward trade-offs, and others."

In addressing these differing types of scientific methodologies Dr. Keating explained that while the conclusions arising from the methodologies above represent a "Convergence of Findings" the scientific community has strong confidence in those, all of which have become accepted across their profession and community:

"with respect to the confidence that is warranted with respect to the findings described above, one of the most important criteria (used in this summary) is to focus on findings where there is a convergence of methods

across methods and content. Specifically, where the same developmental pattern emerges from structural brain imaging, functional brain imaging, cognitive and behavioral evidence, and the epidemiology of risk behavior, we can have strong confidence in the major findings."

Dr. Keating's confidence should carry significance, as should the scientific communities, in the consideration of the issue before this Court. In fact, Mr. Bazzetta submits that in addressing issues which go to the core of the questions to be decided, Dr. Keating's summary directed at a) " the immaturity of the prefrontal cortex and executive functions; b) the elevation of socioemotional and incentive systems, and c) the developmental maturity mismatch between those two brain systems", when viewed together with the testimony of Dr. Steinberg, provides a complete picture of the data and studies not fully considered or available to Miller, or Roper. Each of these systems are relevant to the determination to be made by this Court in People v Manning, as to whether it is that "youth matters" or whether Michigan's constitution will tolerate a "bright-line rule":

"Immaturity of Prefrontal Cortex (PFC) and Executive Function (EF)

Executive Function, judgment, and decision making. The prefrontal cortex of the brain (the PFC) has long been understood to have the principal function of carrying out what are known as the "executive functions" (EF). These included basic functions such as working memory and planning, as well as the direction of cognitive resources (known as "effortful control") and, especially relevant here, impulse control (also known as the "inhibition of prepotent responses") and decision-making in complex situations. The PFC is known to begin development in early childhood and to continue that development through the childhood, adolescent, and early adult years, showing full adult maturity in the early to mid 20s. It is the functioning, and especially its immaturity, that is referenced in discussions of suboptimal adolescent judgment, especially in complex decision-making context that include competing demands. Another key aspect of the PFC is that it has limited capacity. When fully engaged in one task involving effortful control, it has limited or no capacity to undertake additional tasks that require judgment. This has two implications: (1) having to embarked on a plan to undertake a risky behavior, the execution of that plan may use up available PFC resources compromising the individual's ability to adjust behavior when circumstances warrant (2) engagement with other activities that demand PFC resources, such as maintaining status among peers, may make the limited PFC resource unavailable.

Governance of other brain systems. In addition to the EF developments just described, the PFC shows development in a related function, the governance

of other brain systems. This is also a gradual series of developments, as peripheral systems are brought more fully under the direction of the PFC. (This is the basis of the colloquial designation of the PFC and its projections to other brain regions as the "top brain") It is not until the early to mid-20s that the ability to delegate tasks efficiently to other brain systems, relieving the PFC of its role to maintain effortful control and freeing up PFC space for other demands."

(Exhibit B)

This summation of Dr. Keating finds support in the field of neuroscience where research depicts adolescence as a period of continuing brain growth and change. In fact, neuroimaging studies in 1999, showed continued development through adolescence of the brain's frontal lobe - essential for such functions as anticipating consequences, planning, and controlling impulses. Recognized in these studies was that Gray brain matter in the frontal lobe has been shown to spike just prior to adolescence, and then decrease between adolescence and early adulthood in a process known as pruning. ("Like sculpting a tree, pruning mirrors "cutting back branches [to] stimulate[] health and growth.") That is, the gray matter reduction is accompanied by a white matter increase. Through the cellular maturation process known as myelination, the increase of white matter correlates with improved cognitive functioning." See "Extending Sentencing Mitigation for Deserving Young Adults, 104 J. Crim. L. & Criminology 667, 677-679. ("When a team of neuroscientists finally mapped the trajectory of brain maturation using sample of individual ranging in age from seven to eighty-seven, they observed gray matter density changes continuing beyond adolescence into adulthood.") Id.

Put differently, as the studies relied on above demonstrate the PFC has an inability to delegate its resources during its formative years, which is not based on theory, but is in fact based on a physical limitation in the PFC caused by the absence of "white brain matter" and directly correlates by the amount available to be engaged, with the PFC's ability to share resources with the functions of the other brain systems. Absent sufficient "white brain matter" there are not enough PFC

resource available to engage in more than one task at a time, until the early to mid 20's. In the face of that absence then, as recognized through the mapping of the trajectory of white brain matter development, those deficiencies in someone who has not attained the age of maturity, represents that those individuals suffer not from a phantom illness or mental defect, but from a physical absence of needed white brain matter, which beyond that individual's control, almost certainly makes it an impossibility for them to engage in two separate and distinct activities as the exhaustion of PFC resources serves to "compromise the individual's ability to adjust behavior when circumstance warrant". It is only once the PFC is relieved of a task it is performing that it's resources will become available for the PFC to maintain effortful control over the next task to be performed.

Importantly, while Dr. Keating's summary provided an overview of the PFC's limitations based on the neuroscience studies, Dr. Steinberg in the simplest terms, clarified to the Court that the cognitive control system is responsible for self-regulation, and advanced thinking abilities:

"A. The prefrontal cortex is the area of the brain that's located directly behind the forehead. It's mainly responsible for advance thinking abilities like logical reasoning and planning ahead, but it's also responsible for what psychologists refer to as self-regulation, the ability to control our behavior and our thoughts and our emotions"

(See Exhibit A; Cruz v United States, 11-cv-787-JCH (U.S. Dist. Connecticut. 2017) page 8, line 3-8).

Notably, Dr. Steinberg went on to explain that the prefrontal cortex, impacted by puberty on the brain, develops gradually, remaining immature over much of the middle and late adolescence years. (Exhibit A, page 9, line 2-12). Importantly, Dr. Steinberg emphasized that among the scientific community, adolescence is described as spanning 10 to 21, (Exhibit A, page 6 line 15-16,) with early adolescence being 10 to 13, middle adolescence being 14 to 17, and late adolescence being 18 to 21. (Exhibit A, page 11, line 7 to 11) In fact, while Dr. Steinberg

provided these age categories as reference points, he opined that he could concede that all brain systems with respect to psychological function, and brain development would not be complete until the age of 22 or 23 years old was reached. (Exhibit A, page 12, line 18 to page 13, line 8.

Next, not unrelated to the physical limitation and gradual development of the PFC, as an aspect of the limitedly available white brain matter, Dr. Keating's summary contends that beyond that limitation, there are significant impediments to the processes above caused by or through the involvement of the Socioemotional and Incentive System. These also, Dr. Keating explained, effect the youthful mind and its decision making:

Elevation of Socioemotional and Incentive Systems

Incentive systems: Beginning in early to mid-adolescence, there is a sharp increase in what are termed "incentive systems" that entail complex neural circuitry, including emotional arousal (associated most strongly with the amygdala), sensation seeking (mediated by activity in the ventral striatum), and the heightened experience of rewards (mediated by a sharp increase in dopamine receptors) - a coordinated limbic system often referred to colloquially as the "bottom brain". These developments also coincides with (and may be partially explained by) significant changes in the hormonal balance associated with pubertal shifts, principally as an activation of the HPG-axis (Hypothalamic-pituitary-gonadal) whose endpoint is the production of the steroids testosterone and estrogen (among others). These developments are observed behaviorally and cognitively as a significant increase in exploratory and sensation seeking behaviors during this same period of development when the governing capabilities of the PFC are limited (a mismatch described further below).

Benefits over risks. There is substantial evidence that the factors above lead adolescents to focus more heavily on the benefits of risky behavior than on the possible negative consequences of their actions. This is not because adolescents are incapable of understanding or evaluating possible consequences of risky behavior, which under conditions of "cold cognition" (where nothing arousing or incentivizing is activated) is roughly the same as adults. Rather, they value the potential benefits of the behavior more highly than adults, altering the risk/benefit ratio in favor of undertaking unwise risks.

Peer susceptibility. Among the most incentivizing and arousing contexts for adolescent risk behavior is the susceptibility to peers, sometimes in response to pressure (to maintain social status) but also because of the rewards (both behavioral and brain-activated) associated with peer influence. Under experimental conditions of peer presence, different neural circuits are activated than when performing a judgment task on one's own.

In combination with the limited PFC capabilities noted above, the impact of peers is substantially higher for adolescents than for adults."

(Exhibit B)

While Dr. Keating addressed "benefit-over-risks", and "peer susceptibility" of the incentive system as aspects of the adolescent mind, again Dr. Steinberg explained to the Court in Cruz that in regard to these two aspects of the adolescent mind it is appropriate to compare the prefrontal cortex as serving in the capacity of a brake, and the limbic system as serving as an accelerator. (See Exhibit A, Cruz HT at page 8, line 22 to 24). Dr. Steinberg explained that in that analogy, that the prefrontal cortex, significantly lacked regulation of the limbic system in relation to reward-seeking:

"Q. With regards to reward-seeking behavior, is the prefrontal cortex everything in terms of regulating that when it comes to rewards?

A. No. Because reward-seeking is a combination of an urge to go after a reward and the ability to put the reins on that urge. So in order to understand reward-seeking at a given age, you have to ask both about how the prefrontal cortex is functioning, but also about the arousal of the limbic system that might lead to reward-seeking.

I think I said before, but it is worth repeating, that the metaphor that I and other scientists use to describe this is having the accelerator pressed down without a good braking system in place. That would be true of mid adolescence as well as late adolescence."

(Exhibit A, page 21, line 13 to 22 line 1.

Following the discoveries observed of the adolescent mind during the numerous studies, Dr. Keating went on to explain that deficits in the adolescent mind are physical in nature, as the evidence demonstrates, which he explains in his summary on "Developmental Maturity Mismatch". In that summary Dr. Keating explains the physical pathways and their divergence as a factor affecting the systems of the prefrontal cortex and the limbic region: see processes:

Developmental Maturity Mismatch (DMM) (dual process models)

Divergent developmental pathways: The developmental pathways of the "top" and "bottom" brain diverge, with the limbic system advancing rapidly from early adolescence while the prefrontal system continues to grow, but at a

slower pace, not reaching adult levels until the mid-20s. The term used to describe this is a "developmental maturity mismatch" (DMM), with significant consequences for the levels of all kinds of risk behaviors during the adolescent period."

(Exhibit B)

The schematic figure on page 4 of Exhibit B demonstrates this divergence and relative overriding of impulsive control between the "Cognitive control system" and the "Socioemotional, incentive processing system".

What Dr. Keating explains regarding that schematic, (From "Dr. Steinberg" 2013, fn1), is that emphasis must be made on the behavioral and cognitive functions' divergence, which graphically represents the effects and differences in the physical growth of each region:

"The behavioral and cognitive evidence converges with the developmental neuroscience evidence here, with highly similar age-risk behavior profiles for a number of areas, including crime (the age-crime curve), accidental injuries, serious driving mishaps, and so on. All show peaks by mid gradual drop-offs until an asymptote in the mid-20s or so.

Dual process models: The DMM is one version of a more general finding, known as dual process models. The research here is that when performing a complex decision making task, there are two systems functioning. One is a rational, judgment based system that takes considerable cognitive effort. The second is a more automatic, "intuitive", non-analyzed system that is accessed more often (because it requires less time and energy). This occurs for automated tasks (especially in domains where expertise is high) but also for "hot" cognition where there are competing demands - for example, from arousal and incentive systems."

(Exhibit B)

While Dr. Keating's summary provides an accurate representation of the schematic relied on, Dr. Steinberg has explained to the Court in Cruz the effects of that divergence of the "top and bottom" of the brain, with specific emphasis made as to the effects of "peer-pressure" and "reward-seeking" behaviors:

"A. In general, when people at that age are with their peers and where there are no adults present, it makes them even more inclined to take risks, and makes them even more reward-seeking than when they are by themselves. This actually is one of the main focuses of research that my team at Temple University has been doing for the last 15 years.

Q. Tell me about what kind of studies have you been doing on that?

A. Well, in a series of studies, we invite research participants to come to our lab. We invite them to come with one or two friends, then we randomly assign the people in the study to take a test battery either by themselves or with their friends watching them. In some of the experiments, the friends are in an adjacent room, but they can watch the subject's performance on a monitor.

In some of the studies, the person we're testing is inside a brain imaging machine. The friends would be also in an adjacent room watching the subject's performance on a monitor. And we administer a series of different kinds of tests, some risk-taking tests, some reward-sensitivity tests, some cognitive-control tests, then we compare how people respond when they're alone verse how they respond when they're in the presence of their peers.

We have done this with people of different ages, then we can ask is the effect of being around your peers different, if you are an adolescent than if you are an adult. What we have found, as I said before, is that when people are in the presence of their peers, up until about age 24, or so, we get this peer effect where it increases their risk-taking and reward sensitivity, and we don't see that effect after age 24 where adults perform the same way when they are by themselves as when they are in a group."

Exhibit A, page 24 line 7 to page 25, line 15.

Mr. Bazzetta points out that what is both significant to, and a compelling aspect of Dr. Keating's summary, and Dr. Steinberg's testimony is that these deficits are physical, with manifestation in the behavioral realm serving to represent the inability to adapt or adjust their behaviors as adults are capable of doing. These characteristics necessarily embrace the classification of those individuals recognized by the Supreme Court of the United States as "intellectually disability":

"No legitimate penological purpose is served by executing a person with intellectual disability. *id.* at 317, 320, 122 S. Ct 2242, 153 L. Ed2d 335. To do so contravenes the Eighth Amendment, for to impose the harshest of punishments on intellectually disabled person violates his or her inherent dignity as a human being. "[Punishment is justified under one or more of three principal rationales: rehabilitation, deterrence, and retribution." *Kennedy v Louisiana*, 554 U.S. 407, 128 S. Ct. 2641, 171 L. Ed2d 525 (2008). Rehabilitation, it is evident, is not an applicable rationale for the death penalty. See *Gregg v Georgia*, 428 U.S. 153, 183, 96 S. Ct 2909, 49 L. Ed2d 859 (1976)(joint opinion Stewart, Powell, and Stevens JJ.) As for deterrence, those with intellectual disability are, by reason of their condition, likely unable to make calculated judgments that are the premise for the deterrence rationale. They have a "diminished ability" to "process information, to learn from experience, to engage in logical reasoning, or to control impulses. . . [which] make[s] it less likely that they can process the information of the possibility of execution as a penalty and,

as a result, control their conducts based upon that information. Atkins, 536 U.S., at 320, 122 S. Ct. 2242, 153 L. Ed 2d 335. Retributive values are also ill served by executing those with intellectual disability. The diminished capacity of the intellectually disabled lessens moral culpability and hence the retributive value of the punishment."

Hall v Florida, 572 U.S. 701 708-709, 134 S. Ct. 1986, 158 L. Ed2d 1007 (2014). See also, Miller, 132 S. Ct. 2463-2464 (Thus Roper held that the Eighth Amendment bars capital punishment for children, and Graham concluded that the Amendment also prohibits a sentence of life without the possibility of parole for a child who committed a nonhomicide offense. Graham further likened life without parole for juveniles to the death penalty itself. . . .).

Of significance is that, in those characteristics of the "intellectually disabled", many are mirrored in the Miller decision which reiterated Roper and Graham:

"To start with the first set of cases: Roper and Graham establish that children are constitutionally different from adults for purposes of sentencing. Because juveniles have diminished culpability and greater prospects for reform, we explained "they are less deserving of the most severe punishments." Graham, 560 U.S., ___, 130 S. Ct. 2026. Those cases relied on three significant gaps between juveniles and adults. First, children have a "lack of maturity and an underdeveloped sense of responsibility," leading to reckless, impulsivity, and heedless risk-taking. Roper, 543 U.S., at 569, 125 S. Ct. 1183. Second, children "are more vulnerable . . . to negative influences and outside pressures," including from their family and peers; they have limited contro[l] over their own environment" and lack the ability to extricate themselves from horrific, crime-producing settings. Ibid. And third, a child's character is not as "well formed" as an adult's; his traits are "less fixed" and his actions less likely to be "evidence of irretrievabl[e] deprav[ity]." Id., at 570, 125 S. Ct. 1183."

Miller, 132 S. Ct., at 2464.

Mr. Bazzetta offers that those characteristics expressed in defining those who suffer "Intellectual Disability" in Hall, those listed in Miller, and those identified as transitory throughout adolescence by Dr. Keating and Dr. Steinberg, all make it a necessary and apparent consideration, under Michigan's Constitution that before the imposition of the most severe sentence can be entered as judgment against adolescents, the court must evaluate and weigh each factor of those who are said to

suffer from characteristics identified in those who are "intellectually disabled".

For these reasons Mr. Bazzetta suggest the most severe sentence in Michigan should not be imposed without consideration of those mitigating factors of an adolescent who suffers the transitory characteristics akin to someone who is "Intellectually Disabled".

Mr. Bazzetta's Case; An Example of Why Miller Should Be Extended up to 19 years old

Like Manning's position before this court, Mr. Bazzetta was sentenced to "life without the possibility of parole", without a single mitigating factor being considered, despite the "guilty but mentally ill" verdict. That is, not a single factor was weighed or considered by the sentencing court before it imposed a term of "life" in prison against an 18 year old defendant.

Had Michigan Law allowed Mr. Bazzetta, who was 18 years old at the time of the crime, to present evidence in mitigation of his behavior based on his documented character traits, coupled with the facts presented at trial, the trial court would have had to admit that the acts which the prosecutor set out at trial were the same as those traits consistent with peer-pressure, and a lack of risk-reward assessment, to say the least.

The 18 year old Joseph Bazzetta's personality traits and characteristics were identified before his arrest as he had sought the assistance of Social Worker Kathy Frank-Barton following the death of his step-mother. During Joseph's evaluation by the forensic center, Dr. Patricia L. Watson, summarized those encounters in the body of the court ordered report regarding criminal responsibility and diminished capacity:

"Phone consultation with the previous therapist occurred on January 18, 1989. Initially, Mrs. Frank-Barton said that, to her knowledge, no records regarding her treatment of the defendant are available. The apparent reason for the lack of treatment records, according to the social worker, related to the midwest Mental Health Clinic closing around the same period of time that the defendant had sought counseling services. Therefore, Mrs. Frank Barton provided information to this evaluator on the basis of her memory of her contact with him. The social worker stated that the defendant had been

referred to her by someone from the court system, although she believed that the defendant's father initiated contact with the clinic for services. Further, Mrs. Frank-Barton stated her contact with Mr. Bazzetta followed his having taken the lie detector test." (See Exhibit C, Page 12,).

From her sessions with Mr. Bazzetta, Mrs. Frank-Barton provided that she recalled:

- 1) Mr. Bazzetta presented himself as having knowledge and background with cult practices.
- 2) Mr. Bazzetta placed a curse on his Step-Mother as part of his occult practices.
- 3) Mr. Bazzetta seemed to be frightened when talking about his bizzare experiences associated with the occult practice.
- 4) Mrs. Frank-Barton described Mr. Bazzetta's casting of spells as appearing to be motivated by self-interest as demonstrated through his invocation of the alleged powers of a spell in order to pass a test at school, toward the stated goal of avoiding studying, and getting out of trouble or escaping consequence.
- 5) Despite those practices, Mr. Bazzetta reported coping with his sense of guilt in relation to his step-mothers disappearance, which was compounded by the curse he placed on her.
- 6) Mrs. Frank-Barton expressed she had concern at the time of her interview with the 18 year old Mr. Bazzetta's over the relationship with his girlfriend.
- 7) In regard to Mr. Bazzetta's relationship with his girlfriend, Mrs. Frank-Barton provided it was "fairly new and positive in terms of negative things" affecting Mr. Bazzetta.
- 8) Mrs. Frank-Barton indicated Mr. Bazzetta did not present any motivating factors, or evidence of aggressive behavior.
- 9) In elaborating on the curse Mr. Bazzetta placed on his step-mother, it was believed that it was placed "in a moment of rage" as Mrs Frank Barton indicated, because "that's how he acted out his anger toward her."
- 10) In reference to Mr. Bazzetta's other characteristics Mrs. Frank-Barton provided that she viewed Mr. Bazzetta as a "Pretty typical adolescent, arrogant, trying to be cool, want everyone to love me. Not atypical from an upper class family. Not different than other adolescents dealing with frustration and anger."
- 11) Ms. Frank-Barton concluded that she "viewed the defendant at that time in his life as a brat, didn't want to study, didn't want to work."

(Exhibit C, page 13-14).

While Ms. Barton's conclusions about Joseph represent the prevailing

dismissive attitude toward juveniles and adolescents in the 1980's, her therapy session revealed evidence of many of the same characteristics present in the 18 year old Joseph Bazzetta that are now identified in the scientific findings of Drs. Keating and Steinberg.

Next, Mr. Bazzetta's involvement with a satanic cult represents his susceptibility to outside influences in his decision making process, especially with the pressure of peers, i.e. members of the cult, or from his girlfriend who Ms. Barton said was positively a negative influence on Mr. Bazzetta. Additionally, while Mr. Bazzetta did present evidence of being withdrawn or standoffish, Dr. Frank-Barton's explanation that Mr. Bazzetta's susceptibility to influence in his decision making process was compounded by what she termed as a "pretty typical adolescent" -- "trying to be cool" and "want[ing] everyone to love" him. In fact, from Ms. Barton's standpoint, it is evident that Mr. Bazzetta was impulsive in acting out his anger through spells, insecure/needing approval of others, and easily influenced, as seen through his devotion to his then girlfriend, Michelle, an older, "somewhat more street-wise woman whom he idolized as a saintly figures.

Finally, when the prosecution delivered its opening statement, it was stated that Mr. Bazzetta was the step-son of Helen Bazzetta who had married Mr. Bazzetta's father two years before her death. (Vol II, pg 103). It was also said that Helen disapproved of Joseph girlfriend Michelle Grandis, who would later marry him, and be charged as a co-defendant. (Vol II, pg 204). According to the prosecution, at one point Mr. Bazzetta tried to physically assault his step-mother, but was prevented by his father. It was at that point, the prosecution contended, that Mr. Bazzetta had decided to kill Helen Bazzetta. (Vol II, pg 205).

The prosecution explained that Mr. Bazzetta's first attempt to cause Helen Bazzetta to die was in a plane crash. Helen Bazzetta was returning from a trip to Germany, when Mr. Bazzetta and Michelle held a "Satanic Ritual", during which they

sought to use magic to cause the airplane to crash. (Vol II, pg 206). Ultimately, the prosecution submitted that Helen Bazzetta did not die in the plane crash, but instead returned home the next day, August 1, 1983, and simply "disappeared". (Vol II, pg 206). According to the prosecution, Mr. Bazzetta, and Michelle, caused Helen Bazzetta to disappear by murdering her.

Notably, Mr. Bazzetta did not dispute his responsibility in the disappearance and death of Helen Bazzetta, but through counsel he offered an affirmative defense. In doing so, it was established through trial that the 21 year old Michelle (then Grandis) Bazzetta was a driving force and persuasive influence on the 18 year old Joseph Bazzetta. In fact, witness Frank Bazzetta indicated that he believed Joseph killed his step-mother in retaliation for her attitude about, and actions directed toward, Michelle. (TT 326). In Joseph's mind this was compounded by what he then saw as Helen Bazzetta trying to take away his treasured memories of his natural mother, Joann Bazzetta. (See TT 974). One example of this was the wearing of Joann Bazzetta's scarf when Helen Bazzetta wed Joseph Bazzetta's father. (TT 977-978). Another example was when Helen Bazzetta moved into the home, and immediately commenced eliminating Joann Bazzetta's belongings, except some of her clothing, which she would wear without a consideration for Joseph's feelings. (TT 977).

As time passed, Helen's efforts taken at eliminating the memories of Joann Bazzetta seemed to propel Joseph into self-destructive behavior, and into the arms of Michelle, who Joseph Bazzetta sought out as a safe-haven (See TT 1123-1128 and 1132). Interestingly, Michelle even resembled Joseph Bazzetta's deceased mother, Joann Bazzetta. (See TT 893-894 and 1381).

Some of these effects were explained in the testimony of Dr. Michael Abramsky where he described Joseph's psychological make-up during that time:

"Q. All right. Could you highlight the more significant areas in terms of his history to your evaluation?

A. Well, the first thing we looked at was, was there a history of head

injury. There had been several instances of Joe losing consciousness and reporting what are called generally rage attacks where he felt surges of energy and rageful or angry kinds of behavior. That's often associated with temporal lobe disorder part of the brain, part of the brain, in a sense. And that's one of the reasons why the neurological consultations became important.

q. Okay.

A Most important, from a psychological viewpoint, was, as the start of this, if you will, the death of Joe Bazzetta's mother and her illness leading up to that death. It was very significant, the age at which it occurred. Joe was thirteen years old when the illness was diagnosed and around fifteen when his mother died. The developmental stage of an individual is very important. That is a time in a person's life where they tend to be somewhat disorganized, impulsive, and not very able to handle stressful events; early adolescence and middle adolescence, especially for males, are times of great change. And this death hit him at a time in his life where I think he was extremely vulnerable. And subsequent to that death, he reported depression, including flirting with killing himself with a gun. And there were marked changes in his school behavior and his social behavior subsequent to that. And it's very important to look at. Joe was a good student, had good reports in school from the school records I reviewed, and began to lose it over the next few years until school became unimportant and his functioning in school deteriorated markedly.

Q. All right. Now, is there something that you can attribute this deterioration to in terms of some type of impairment on his part?

A. Well, it began, of course, with the death of his mother. And then after that he began to -- although he flirted with some, what we call soft drugs, marijuana, before -- he began using with a friend harder drugs: cocaine, qualudes, LSD; mind altering kinds of substances. I think it was very significant that at the time -- and it is very typical of individuals who get involved in cult behavior -- that he was looking for something; he had no guidance in his life. He met a young man who was, I think, about a year older than he was, who introduced him to drugs and introduced him to the occult. And I think at that point he began to devote his energies to those kinds of things. And that took him away from normal pursuits of an adolescent." (Dr. Abramsky, TT pg 1370-1372).

Dr. Abramsky explained the psychological repercussions of the loss of Joseph Bazzetta's mother, the use of drugs, and how easily Mr. Bazzetta was influenced during the years following his Mother's death. Those influences and the escape he sought through drugs were escalated when Helen Bazzetta entered Joseph Bazzetta's life and (in his mind) sought to take from him those precious memories as well as Michelle. In fact, Dr. Abramsky explained that Joseph's relationship with Michelle was most significant back then, as he essentially was substituting that relationship

for the loss of his mother:

"A. I interviewed Michelle Bazzetta and I saw the photograph of his mother.

Q. All right. And what, if any similarity or resemblance did you see as part of your evaluation?

A. I think they do look similar. Most importantly, of course, is Joe's perception that they were the same kind of person. But I think there is some objective similarity also.

Q. Okay. Now getting into this aspect of Joe's relationship with Michelle, what-- what history did you obtain specifically as to that area?

A. Well, again I think what's more important is when he met Michelle and what was going on in his life. He met her during this period of heavy drug-taking and when he was involved in Satanism. He met her at I think what's called a punk rock kind of club where the kind of garb and the kind music played there is, I guess, Satanic; it's a supernatural kind of thing. And I think most significant, though, was that Joe had performed a ritual where he had wished to meet a woman and met her afterwards and they formed this relationship. It reinforced in his mind the idea that he had powers and that he could imagine and pray for something and it would come true. And, in fact, in this relationship, it did. He was, as I understand it, totally involved with her. She became his entire life. In fact, the man that introduced him to drugs, he stopped the relationship with him and became totally involved with her. And all of his energy, all his emotional energy became focused on her.

Q. Okay. What role did Michelle play in his life, say, back in 1983?

A. I think virtually every role. She was lover, mother, he wanted to involve her in every aspect of his life. I believe she's three years older than he was and somewhat more mature, somewhat more streetwise, and he began to build every aspect of his life around her, his relationship with her. He would have tremendous jealous fits when she would not want to be with him at times. He wanted to be around her all the time. He was totally enamored of her."

(Dr. Abramsky, TT pg 1381-1382.

While the effects of the relationship between Joseph Bazzetta and Michelle, were an overwhelming force on him as recognized in the testimony above, the significance of her influence became clear, as Dr. Abramsky explained how Joseph seemed to look upon her as a saintly figure:

"Q. Okay. Do you recall whether or not the -- Joe had described to you getting Michelle involved in his Satanic practices?

A Yes, he did.

Q. Did you attach any significance to that?

A. Well, again, I think that he wanted her -- he began to define their relationship as a sort of cosmic one; you know, he prayed for her and she came to him and there was something special and unique about the relationship and wanted her to be a participant in that other level of consciousness that he possessed, supernatural level of consciousness.

Q. All right. Did he detail to you or did he describe how he had Michelle formally introduced in to Satanism?

A. I'm not sure what you mean. I know she, for instance, served as that, as part of the ritual, the candles, and, at times, even served as the altar of the practice.

Q. All right. Do you recall Joe describing what he called a formal black mass?

A. Yes.

Q All right. Now, when he was describing Michelle as being an altar, is there anything significant there in terms of your evaluation?

A. Well, I think as a psychologist, to put her into such religious and central place clarifies a lot about the relationship. I think basically he saw her as almost religious or saintly in some way."

It is evident that the 18 year old Joseph Bazzetta exhibited many of the same traits identified by Dr. Keating and Dr. Steinberg: he was easily influenced, and highly susceptible to those influences because of the overwhelming stresses in his life brought about by the loss of his mother, drug abuse and his involvement in the occult. The drug abuse, coupled with Joseph's immaturity, made him more susceptible to the influences of others, especially Michelle, whom he held in the highest regards. That fact was clear from the proofs elicited at Joseph Bazzetta's trial, as is the fact that many of the character traits of the 18 year old Joseph are the same as those subsequently identified through the scientific studies of Drs. Keating and Steinberg.

(c) Rehabilitation

As to the criteria of Rehabilitation Dr. Keating has explained that the potential for rehabilitation into late adolescence is well known:

"In addition to mitigation of sanctions owing to diminished culpability by

"). It is beyond dispute, Michigan Law furthers the belief that rehabilitation can occur in adolescents up to the age of 21.

Beyond that continued jurisdiction premised on the rehabilitative potential of the committed juvenile, ~~Michigan's Legislature went further~~ in what appears to be an outright adoption of Dr. Steinberg's scientifically supported conclusion that the age of (24) is the point at which it is clear that the peer effects on the youthful mind are absent:

"We have done this with people of different ages, then we can ask is the effect of being around your peers different, if you are an adolescent then if you are an adult. What we have found, as I said before, is that when people are in the presence of their peers, up until about age 24, or so, we get this peer effect where it increases their risk-taking and reward sensitivity, and we don't see that effect after age 24 where adults perform the same way when they are by themselves as when they are in a group."

(See Exhibit A, page 24 line 7 to page 25, line 15).

Clearly, the Michigan Legislature's adoption of 24 as a cutoff point to the Holms Youthful Training Act, as amended, represents a recognition that rehabilitation potential is present in adolescents until they reach the age of 24 years old. (See MCL 762.11; (Effective Until October 1, 2021)).

(G) Prospective Relief

(i) A Bright-Line Rule:

To reiterate, Miller, according to Justice Kagan, was not based on a bright-line rule, but was actually based on "Youth Matters". In fact, as can be seen in the absence of full briefing on the issue, as the issue of a categorical age was not before the court in Miller. Therefore that Court's adoption of Roper was purely "dicta":

"We therefore hold that mandatory life without parole for those under 18 at the time of their crime violates the Eighth Amendment's prohibitions on "cruel and unusual punishments."

Amazingly, the only reference to the source of this limitation in Miller to those under the age of 18 at the time of their crimes, is what the Court mentions in

reasons of developmental immaturity, another implication of the developmental neuroscience evidence is that there are increased prospects for change among juveniles. This is supported by the evidence above that major changes continue during this period. In addition, there is very substantial evidence for neural plasticity by way of 'synaptic pruning.'" Simply put, neural circuitry is shaped by the individual's experiences, such that the resulting mature circuitry is not settled until the mid-20s. (Some plasticity continues throughout life, but never again as strongly as in adolescence.)

(See Exhibit B).

In fact, even Michigan's Legislature and this Court have recognized the relevant truth of Dr. Keating's summary. In MCL 712A.2d Michigan's Legislature set out that in order to try a juvenile as an adult the court must consider six (6) different factors, of which four (4) of the criteria are directed at the character of the juvenile and the potential treatment and programming available to the juvenile:

"(b) The juvenile's culpability in committing the alleged offense, including, but not limited to, the level of the juvenile's participation in planning and carrying out the offense and the existence of aggravating or mitigating factors recognized by the sentencing guidelines.

(c) The juvenile's prior record of delinquency including, but not limited to, any record of detention, any police record, any school record, or any other evidence indicating prior delinquent behavior.

(d) The juvenile's programming history, including, but not limited to, the juvenile's past willingness to participate meaningfully in available programming.

(e) the adequacy of the punishment or programming in the juvenile system."

While the amenability of treatment assessment was also recognized by this Court, and reiterated in MCR 3.952(C)(b) - (e), the Michigan Legislature's stance underscores their recognition in the potential for rehabilitation when it expressed that in all other circumstances where a Juvenile is not waived to be tried as an adult, but is committed to state custody, that commitment may continue until the age of 21:

"(5) If the court has exercised jurisdiction over a juvenile under section 2(a)(1) of this chapter for an offense that, if committed by an adult, would be a violation or attempted violation of section 72, 83, 84, 96, 88, 89, 91, 110a(2), 186a, 316, 317, 520b, 520c, 520d, 520g, 529, 529a, 530 or 531 of the Michigan penal code, 1931 PA 328, MCL 750.72, 750.83, 750.84,

750.86, 750.88, 750.89, 750.91, 750.110a, 750.186a, 750.316, 750.317, 750.349, 750.520b, 750.520c, 750.520d, 750.520g, 750.529, 750.529a, 750.530, 750.531, or section 7401(2)(a)(i) or 7403(2)(a)(i) of the public health code, 1978 PA 368, MCL 333.7401 and 333.7403, jurisdiction may be continued under section 18d of this chapter **until the juvenile is 21 years of age.**"

See MCL 712A2a(5).

Beyond the provision above, this Court also premised its procedure for the determination of juvenile up to their 19th birthday on criteria which has been identified and recognized through Dr. Steinberg's scientific research as relevant:

"(4) Burden of Proof; Findings. The court must extend jurisdiction over the juvenile until the age of 21, unless the juvenile proves by a preponderance of the evidence that the juvenile has been rehabilitated and does not present a serious risk to public safety. In making the determination, the court must consider the following factors:

- (a) the extent and nature of the juvenile's participation in education, counseling or work programs;
- (b) the juvenile's willingness to accept responsibility for prior behavior;
- (c) the juvenile's behavior in the current placement;
- (d) the juvenile's prior record, character, and physical and mental maturity;
- (e) the juvenile's potential for violent, as demonstrated by prior behavior;
- (f) the recommendations of the institution, agency, or facility charged with the juvenile's care regarding the appropriateness of the juvenile release or continuing custody; and
- (g) any other information the prosecuting attorney or the juvenile submits.

(See MCR 3.945(B)(4))

Clearly this criteria centers on many of the same characteristics recognized by Dr. Keating and Dr. Steinberg. However, it is from the rules governing "periodic review" that this Court's reliance on Rehabilitation can be seen specifically and more clearly in MCR 3.945(C)(2) ("[i]f the institution, agency, or facility to which the juvenile was committed believes that the juvenile has been rehabilitated . . .

passing that "[f]ollowing *Roper v Simmons*, 543 U.S. 551, 125 S. Ct. 1183, 161 L. Ed2d 1 (2005) in which this Court invalidated the death penalty for all juvenile offenders under the age of 18. . . .". *Miller*, 132 S. Ct. 2461. That fact, clearly represents an adoption through "dicta".

Next, *Roper's* decision to set a categorical age limit to the Eighth Amendment's prohibition was premised on the scientific community's prohibition against "diagnosing any patient under 18 as having antisocial personality disorder, a disorder also referred to as psychopathy or sociopathy, and which is characterized by callousness, cynicism, and contempt for the feelings, rights, and sufferings of others" *Roper*, 543 U.S. 551, 560:

"If trained psychiatrists with the advantage of clinical testing and observations refrain, despite diagnostic expertise, from assessing any juvenile under 18 as having antisocial personality disorder, we conclude that States should refrain from asking jurors to issue a far greater condemnation -- that a juvenile offender merits the death penalty."

This basis for drawing a line at the age of 18 is no longer a "good foundation" for the categorical rule, as it is not based on an absolute fact, but is simply a refusal of the psychiatric community's to confuse the normal transitory traits of an underdeveloped juvenile mind with a personality disorder which simply share some of the same characteristics until adulthood is reached. While that restraint is respected and appreciated as a protective truth of doubt, the scientific community has determined the point, where all doubt is gone, where all character traits are absent. It is that point which should be the absolute categorical cutoff.

On that basis, Mr. Bazzetta posits that as far as bright-line rules go, Dr. Steinberg's findings from numerous scientific studies in neuroscience is what is most appropriate as a basis for a categorical cut-off -- that is the point at which there is an absence of the transient traits in the adolescent mind:

"We have done this with people of different ages, then we can ask is the effect of being around your peers different, if you are an adolescent then if you are an adult. What we have found, as I said before, is that when people are in the presence of their peers, up until about age 24, or so, we

get this peer effect where it increases their risk-taking and reward sensitivity, and we don't see that effect after age 24 where adults perform the same way when they are by themselves as when they are in a group."

(See Exhibit A, page 24 line 7 to page 25, line 15).

For this reason, based on the fact that the transitory characteristics are considered absent at the age of 24, that basis is far more absolute than the respectful restraint against making a particular diagnosis because of the commonality of characteristics. Dr. Steinberg's conclusion above sets out that in the absence of those traits, and therefore in the absence of potential mistaken diagnosis, any Bright-line Rule should be set at the age of 24.

(ii) A Presumptive Rebuttal:

In the alternative, or in conjunction with any bright-line rule, Mr. Bazzetta submits that any rule setting the age below the age of 24 should be subject to rebuttal as was explained at 104 J. Crim. L. & Criminology, 667 in the article: "Extending Mitigation for Deserving Young Adults at page 698:

"2. Permissive and rebuttable for Defendants Up to Age Twenty-Five

Still, like candle flickers that outlast a birthday blow, youthfulness does not always disappear when an offender turns eighteen. Youthful defendants up to the age of twenty-five should therefore have the opportunity to seek mitigation. Defendants could argue that their youthfulness excludes society's harshest penalties as cruel and unjust. They would have to reasonably show -- like the younger defendants protected by Roper, Graham and Miller -- that they (1) lacked maturity and had an underdeveloped sense of responsibility, (2) were vulnerable to negative influences and had limited control over their environment, and (3) lacked characters that could be rehabilitated. This showing would unravel the irrevocable punishments' penological goals and preclude courts from imposing them under the Eighth Amendment. Unlike, mitigation for younger defendants, however, the burden would then shift to the prosecution, which could show by a preponderance of the evidence that the defendants were sufficiently mature to be punished according to the legislative design. The prosecution could undermine the defendants' evidence or introduce new evidence showcasing the offenders culpability, not the crimes grievousness." (Exhibit D)

While the author, Kelsey B. Shust, suggests the age of 25 as the categorical cut off, Mr. Bazzetta points out that suggestion of 25 years old predates Dr. Steinberg's testimony as to the scientific studies which sets the categorical age at

24. Nonetheless, Mr. Bazzetta submits that any rule this Court sets as to categorical age, 18, 19, 20, 21, 22, or 23 up to 24, that limitation should be subject to rebuttal up to the age of 24, the point at which Dr. Steinberg provides none of the transitory characteristics of the adolescent mind are present any longer.

(iii) Miller Should Be Extended, at the least, up to the age of 19

Based on Michigan's long standing precedent that Art 1, §16 of the Michigan Constitution provides greater protection than the Eighth Amendment does, based on the compelling reason Mr. Bazzetta provides for doing so, based on the obvious physical deficit in "white brain matter" which makes it virtually impossible for a juvenile to overcome the transitory characteristics identified through the studies relied on by the scientific community, and based on Mr. Bazzetta having those characteristics, this court should extend Miller under Michigan Law to include those adolescents up to 19 years old:

THE COURT: Just based on something that you said a moment ago or it was imbedded in a very long answer of something you said a moment ago, I want to have the record be clear. Is it your opinion to a reasonable degree of psychological science certainty that the findings which underpinned your conclusions as to the petitioner's in, for example, Graham, under 18, actually they were 14 but the opinion says under 18, you have the same opinion as to 18?

THE WITNESS: Yes. And had that been the question that was asked in Graham, I would have said the same things. I would have changed the age in the brief.

THE COURT: The number would have changed?

THE WITNESS: Exactly.

THE COURT: If someone said could you change it to 21, would you have been able to do that based upon your expertise as a psychologist?

THE WITNESS: I don't think I would be confident enough. I think I would be confident enough about 20, but not 21, but we're really, you know, in terms of reasonable scientific certainty, I am more certain about 20 than I am about 21.

THE COURT: As to 18?

THE WITNESS: Absolutely certain.

THE COURT: All right. I don't have if you have questions on that.

MR. KUCH: I have one follow-up questions. When you said 20, up to 20 or through 20?

THE COURT: I was asking and if you didn't understand me, when I was using 18, 20, 22, I was referring to a person who nominally has that age. In other words, but under, but is at the moment a 20-year-old, i.e. a person who could be 20 years and a day or 20 years and 11 months and 29 days.

THE WITNESS: That's how I understood your question.

MR. KUCH: Thank you, Professor."

(See Exhibit A, page 70, line 9 to page 71 line 19).

Clearly, Graham, Roper, and Miller were all restricted by the controversy before the court, which the parties' briefs were limited to. It was that limitation which restricted Dr. Steinberg's brief and he limited his conclusion to 18 years old. However, as his testimony makes clear, if he was not under that limitation he would have felt confident in specifying the age at under 21 years old.

Nonetheless, whether this court relies on the scientific data, or a modified approach, despite Miller's reliance on "Youth Matters", rather than on a bright-line rule, this court, if it instead choose a bright-line rule approach, that line should be extended to not less than up to 19 years old. Such a compromise is still reconcilable with the fact that the Scientific data clearly provides that all of the traits which make an adolescent less culpable, are still present. (See Exhibit A, page 14 to 22).

In closing Mr. Bazzetta thanks this Court for its consideration of this significantly important issue.

Dated: April 1, 2020


Joseph Bazzetta
M.D.O.C. No. 204987
Kinross Correctional Facility
4533 W. Industrial Park Drive
Kincheloe, Michigan 49788

EXHIBIT A
HEARING TRANSCRIPT
CURZ V UNITED STATES, Case No. 3:11-cv-787
(Connecticut 9/13/17)

1 UNITED STATES DISTRICT COURT.

2 DISTRICT OF CONNECTICUT

3

4 LUIS NOEL CRUZ) September 13, 2017
 Petitioner) 1:25 p.m.
 5 v.)
 6 UNITED STATES OF AMERICA) 3:11cv787 (JCH)
 Respondent)

7 141 Church Street
8 New Haven, Connecticut

9
10 HEARING

11
12 B E F O R E:
13 THE HONORABLE JANET C. HALL, U.S.D.J.

14
15 FOR THE PETITIONER: W. Theodore Koch , III
16 P.O. Box 222
17 Niantic, CT 06357

18 FOR THE RESPONDENT: Patricia Stolfi Collins
19 John Trowbridge Pierpont
20 William Nardini
21 United States Attorney Office
22 157 Church Street
23 New Haven, CT 06510
24
25

1 THE COURT: Good afternoon to you. We're here this
2 afternoon in the matter of Luis Noel Cruz versus the United
3 States of America. 11CV787. If I can have appearances
4 please.

5 MS. COLLINS: Patricia Collins, John Pierpont and
6 William Nardini for the United States, Your Honor. Also
7 present in the courtroom in the first few rows is the White
8 family.

9 THE COURT: Thank you. Good afternoon to all of
10 you.

11 MR. KOCH: Good afternoon, Your Honor. Theodore
12 Koch for Mr. Cruz who is to my left.

13 THE COURT: Good afternoon to you, Attorney Koch and
14 good afternoon to you, Mr. Cruz.

15 We're here this afternoon for an evidentiary hearing
16 on a 2255 petition filed by Mr. Cruz. My understanding is
17 we're ready to proceed to take the evidence, Attorney Koch.

18 MR. KOCH: Yes, Your Honor. We're ready.

19 THE COURT: If you would call your first witness.

20 MR. KOCH: Professor Laurence Steinberg.

21 THE COURT: Professor Steinberg, if you would come
22 up to the witness stand. And when you arrive, I ask that you
23 remain standing so the clerk may administer an oath to you.

24 LAURENCE STEINBERG

25 Having been called as a witness, was first duly

1 sworn and testified on his/her oath as follows:

2 THE CLERK: State your name for the record and spell
3 your last name.

4 THE WITNESS: Laurence Steinberg, Steinberg,
5 Philadelphia, Pennsylvania.

6 THE COURT: You may be seated, Professor. Good
7 afternoon to you and whenever you are ready, Attorney Koch,
8 you may begin.

9 MR. KOCH: Thank you, Your Honor.

10 DIRECT EXAMINATION

11 BY MR. KOCH:

12 Q. Good afternoon, Professor Steinberg.

13 A. Good afternoon.

14 Q. Can you tell the Court what's your present position?

15 A. I'm a professor of psychology at Temple University
16 in Philadelphia.

17 Q. Can you describe your educational background
18 starting with college?

19 A. Yes, I graduated from Vassar College with a
20 bachelors degree in psychology in 1974. I received my PhD in
21 developmental psychology from Cornell in 1977.

22 Q. What previous professional positions have you held
23 before being at Temple?

24 A. I came to Temple in 1988. Prior to that, I was on
25 the faculty of the University of Wisconsin Madison and prior

1 to that, I was on faculty of the University of California
2 Irvine.

3 Q. Can you summarize your publication credits starting
4 with the books that you published?

5 A. I've authored approximately 15 books, edited a
6 couple of other books. I have published 400 or so research
7 articles, about 250 of those in peer review journals.

8 Q. And scholarly articles are based on what research?
9 Whose research?

10 A. My research.

11 Q. Are you on any editorial boards?

12 A. Yes.

13 Currently on three editorial boards. One for a
14 Journal of Psychology and Law, one for a Journal of
15 Neuroscience and one for a Journal of Psychology and Public
16 Policy.

17 THE COURT: Could I interrupt you for a moment.
18 (Discussion Off the Record.)

19 Q. Professor Steinberg, what are your professional
20 memberships?

21 A. I'm currently a member of the Association for
22 Psychological Science, the Society for Research on
23 Adolescence and the Society for Research on Child
24 Development.

25 Q. What major honors have you received?

1 A. I have received honors from the American
 2 Psychological Association for contributions to the discipline
 3 of psychology and are for contributions to public policy. I
 4 have received lifetime achievement awards from the Society of
 5 Research on Adolescence and Society for Adolescent Medicine.
 6 I have been elected as a fellow to the American Academy of
 7 Arts and Science and I was the first recipient of the
 8 research prize given by a very large Swiss foundation several
 9 years ago.

10 Q. Have you previously testified as an expert?

11 A. Yes, I have.

12 Q. Where?

13 A. I testified in state court in Kentucky, in state
 14 court in Delaware, in federal court in Southern District of
 15 New York, in state court in Pennsylvania, and before a Parole
 16 Board in Arkansas.

17 Q. Have you ever been involved in the crafting of any
 18 amicus briefs to the United States Supreme Court?

19 A. Yes. In the cases of Roper versus Simmons and
 20 Graham versus Florida and Miller versus Alabama, I was the
 21 lead scientist for the American Psychological Association in
 22 drafting the amicus briefs filed with the court.

23 My responsibility there was to make sure that the
 24 science of adolescent development was accurately represented
 25 in the briefs filed by association.

1 Q. What would you say is your specific area of
 2 expertise?

3 A. Adolescence.

4 MR. KOCH: Your Honor, I ask that the court qualify
 5 Professor Steinberg as an expert of adolescence.

6 THE COURT: I don't have any question about it. I
 7 don't do that under the rules. I ask you to ask your
 8 questions. If there is an objection to a particular
 9 question, the Government thinks he's not qualified to answer
 10 it, I'm sure that I will heard that objection. Otherwise I'm
 11 assuming it won't be an issue.

12 Q. Thank you. Just from the start, Professor
 13 Steinberg, can you give us your working definition for our
 14 present purposes of adolescence?

15 A. I think of adolescence as the period spanning ages
 16 10 to up until 21.

17 Q. What are some of the hallmark behavioral
 18 characteristics of adolescent as you defined them, as
 19 compared to the adults?

20 A. Compared to adults, adolescents are more impulsive.
 21 They are more prone to engage in risky and reckless behavior.
 22 They are more driven by reward relative to adults and less so
 23 by punishment. They are more oriented toward the present and
 24 less oriented toward the future and they are susceptible to
 25 the influence of other people.

1 Q. Does the brain develop during adolescents?
2 A. Yes, the brain continues to develop during this
3 period of adolescence.
4 Q. For the purpose of this entire hearing, you're
5 defining adolescence as age 10 up to and including age 20?
6 A. Yes.
7 Q. Is the brain composed of various regions?
8 A. Yes. The brain is composed of various regions. As
9 scientists, we would be more likely to describe the brain as
10 composed of various systems because many brain systems
11 include multiple brain regions.
12 Q. Are certain regions or systems of the brain,
13 particularly significant during adolescence?
14 A. Yes.
15 Q. Which ones?
16 A. There's a brain system that we refer to as the
17 cognitive control system. It is responsible for
18 self-regulation as well as advanced thinking abilities. That
19 includes mainly the prefrontal cortex of the brain and its
20 connections to other brain areas.
21 There's a second system that's important during
22 adolescence that's referred to as the limbic system. It is a
23 deep structure of the brain. It is important in how we
24 process emotions and process social information and
25 experience reward and punishment.

1 Q. I apologize if you already did this. Can you just
2 describe the prefrontal cortex and its function?
3 A. The prefrontal cortex is the area of the brain
4 that's located directly behind the forehead. It's mainly
5 responsible for advanced thinking abilities like logical
6 reasoning and planning ahead, but it's also responsible for
7 what psychologists refer to as self-regulation, the ability
8 to control our behavior and our thoughts and our emotions.
9 Q. How did the limbic system and prefrontal cortex
10 interact?
11 A. We might think of the limbic system as kind of the
12 emotional center of the brain and the prefrontal cortex as
13 the logical, rational center of the brain. Both systems are
14 active all the time. They can communicate with each other.
15 Although they don't communicate as well with each other
16 during adolescence as they do during adulthood, but in a
17 situation that one is making a decision and let's say the
18 situation is an emotional arousing one, the limbic system
19 will be responsible for the emotional arousal and the
20 prefrontal cortex will be responsible for the
21 self-regulation.
22 One way to think is the limbic system sometime
23 serves as an accelerator and the prefrontal cortex serves as
24 the brakes.
25 Q. How is this interaction between these two systems

1 particularly significant during adolescence?

2 A. Well, at the beginning of adolescence until age 17
3 or 18 or so, the limbic system becomes increasingly easily
4 aroused. We know that that happens primarily because of the
5 impact of puberty on the brain and the prefrontal cortex
6 develops very gradually over time so during middle and late
7 adolescence, you have what we call a maturational imbalance
8 between the systems because the limbic system is very easily
9 aroused, but the prefrontal cortex, the cognitive control
10 system is still immature, so very often arousal of the limbic
11 system can overwhelm what the cognitive control system is
12 capable of doing.

13 Q. Can you give us a definition of cognition please?

14 A. Cognition is a word that we use to refer to
15 thinking.

16 Q. Have you heard of the term hot cognition versus cold
17 cognition?

18 A. Yes, I have.

19 Q. Can you describe to us the differences between those
20 two please?

21 A. When we're making decisions about things, sometimes
22 we make them under situations that are very arousing, maybe
23 we're angry or we're enthusiastic or we're with other people
24 who arouse our emotions, and we refer to that situation as
25 the thinking in that situation as hot cognition. That can be

1 contrasted with situations which are very calm when we're by
2 ourselves. When we're not emotionally aroused and we refer
3 to that as cold cognition. To give you an example, if
4 somebody in a research study of mine is filling out a
5 questionnaire, let's say I put that person in a room by
6 herself. There's nothing to make her emotionally aroused
7 either positively or negatively and the situation is calm and
8 neutral, she would be using cold cognition when she
9 completed that questionnaire. If I took the same person and
10 administered the same questionnaire to her after making her
11 afraid or after making her angry or surrounding her with a
12 group of other people who are urging her to do something or
13 to not do something, filling out that questionnaire under
14 that circumstance would be considered an example of hot
15 cognition.

16 Q. How is the difference between hot cognition and cold
17 cognition salient to adolescence?

18 A. Cold cognition relies mainly on basic thinking
19 abilities that are in place and are mature by the time we're
20 16 or so. Hot cognition relies both on those abilities but
21 also on our capacity to regulate and control our emotions.

22 We have all had the experience of trying to make a
23 decision when we're upset. We know that our
24 decision-making abilities under that circumstance are not as
25 good as they are when we're making the same decision when

1 we're calm, and we know that the capacities necessary for
2 good decision-making in hot situations or hot cognition are
3 still immature during adolescence and aren't fully mature
4 until the early or to the midtwenties.

5 Q. Are there different phases of development within
6 adolescence?

7 A. The scientists who study adolescence would often
8 divide the period into three phases: early adolescence, let's
9 say approximately from 10 to 13, middle adolescence,
10 approximately 14 to 17, and late adolescence, approximately
11 18 to 21.

12 Q. Just basically what are the different
13 characteristics of each of those three phases of development
14 within adolescence?

15 MR. PIERPONT: The Government is not going to
16 object at this point. Can I have a moment with counsel
17 please?

18 THE COURT: Sure.

19 MR. PIERPONT: Thank you, Your Honor.

20 THE COURT: Do you want the question read?

21 (Question read by the Court.)

22 A. Well, there are many differences between the early,
23 middle and late phases but I assume that you would like me to
24 connect this to what we were discussing about hot and cold
25 cognition. During early adolescence both types of thinking

1 are still immature. Early adolescence compared to adults are
2 not as good in cold cognitive abilities and they are not as
3 good in hot cognitive abilities.

4 During middle adolescence, there are very few
5 differences between adolescence and adults in their cold
6 cognitive abilities, but they are still immature with respect
7 to their hot cognitive abilities. That is also true during
8 late adolescence. They are a little bit better. They still
9 are not as good as adults are in the area of hot cognition,
10 but they certainly would be comparable to adults in the area
11 of cold cognition.

12 Q. Do you have an opinion as to when psychological and
13 neurobiological maturity is attained?

14 A. The answer to that question is complicated because
15 different parts of the brain mature along different time
16 tables. And therefore, the psychological abilities that
17 those parts of the brain govern mature along different time
18 tables. If what you mean by your question is when is
19 everything completed in all systems of brain both with
20 respect to psychological functioning as well as brain
21 development, I think the concessions would be that this is
22 not the case until people are maybe 22 or 23 years old.

23 Q. What's the basis of your opinion?

24 A. There have been studies, my own as well those of
25 other scientists, that have administered psychological tests

1 to people in this age range and have asked at what point do
2 these abilities that are being measured stop improving.
3 There are brain studies that use brain imaging to look at
4 changes in the brain's anatomy and changes in the way the
5 brain functions that also have been done with people of
6 different ages and they have also asked at what point do we
7 no longer see major changes in the anatomy of the brain or in
8 the way that the brain functions.

9 Q. I want to turn now to the specific
10 characteristics of the late adolescence or what you have said
11 is 18, 19, and 20-year-olds. 18, 19, and 20-year-olds just
12 to be clear, do they fall within your definition of
13 adolescence?

14 A. Yes.

15 Q. Can you just backing up describe the history of
16 research on adolescent brain development specifically as it
17 relates ultimately to late adolescence?

18 A. Sure. Until the 1990s, it was assumed that the
19 brain was fully developed by the time we were 10 or
20 11-years-old. That's because the brain reaches its adult
21 size by that age. So if you measured the volume of the
22 brain, you wouldn't see big differences after that age in
23 terms of its growth. It wasn't until the advent of brain
24 imaging technology like MRI technology that scientists were
25 able to look inside the living brain. Obviously it was

1 possible to do an autopsy, cut open the brain and look at it.
2 When you do that, you can't see how the brain functions. You
3 can only look at the anatomy of the brain. It wasn't until
4 there was FMRI and brain imaging that scientists could look
5 at the living brain and see what's going on inside when it
6 was at work. Studies that began to be done during the late
7 1990s illustrated that the brain was continuing to change
8 during adolescence in ways that weren't visible by looking at
9 the exterior of the brain. This was not known. And the
10 first published studies of how the brain was changing during
11 adolescence didn't really appear until about the year 2000 so
12 relatively recently in terms of the history of science,
13 history of the study of development.

14 During the period, let's say from 2000 into the
15 middle or latter part of the decade, most of the research on
16 adolescence brain development focused on people who were 18
17 and younger. There was to my knowledge virtually no research
18 that went past that age and that looked at brain development
19 during late adolescence or young adulthood.

20 People began to do research on that period of time
21 toward the end of that decade and as we moved into 2010 and
22 beyond, there began to accumulate some research on
23 development in the brain beyond age 18, so we didn't know a
24 great deal about brain development during late adolescence
25 until much more recently.

1 Q. Okay. I would like to show you what I have
2 previously marked as Petitioner's Exhibit for Identification
3 One. I have shared this with the Government. May I
4 approach, Your Honor?

5 THE COURT: You may.

6 Q. That's an article titled "Young Adulthood as a
7 Transitional Legal Category: Science, Social Change and
8 Justice Policy" by yourself. Just briefly can you tell us
9 what's the central point of that article?

10 A. The central point of that article is that recent
11 discoveries in psychological science and in brain science as
12 well as changes in society, should ask us to rethink how we
13 view people in the late adolescence period and even to the
14 young adult period in terms of their treatment under the law
15 because a lot of the --

16 MR. PIERPONT: Your Honor, the Government is going
17 to object to the answer at this point. We understand that
18 Professor Steinberg is here to talk about brain sciences, but
19 to the extent we start to get to policy and how people should
20 be treated under the law, that goes a little further upfield
21 of what the Government expected testimony to be about here
22 today.

23 THE COURT: I will let the answer stand to the point
24 of the objection. I understand it is summarizing the point
25 of an article. I think the Government's objection has some

1 legs in the sense that he isn't here to tell us about what
2 the policy of the law should be. He's here to tell us what
3 might be a basis for law makers or courts to change.

4 Q. Let me ask you this: Does that article reliably
5 present the scientific knowledge as regards to late
6 adolescence as of the present moment?

7 A. Yes. And that was the part of the article that I
8 was responsible for writing.

9 Q. Okay. I would like to offer that as an exhibit at
10 this time, Your Honor.

11 MR. PIERPONT: Your Honor, the Government -- I have
12 spoken to Attorney Koch about this. The Government is not
13 going to object again to the extent that it is being offered
14 for the extent of what the current science is. If there was
15 a jury here, we might have some concerns about the policy
16 decisions, but with the understanding that the reason and
17 limited reason it is being offered, the Government does not
18 have an objection.

19 THE COURT: Do I fairly understand, Professor, that
20 if I read this article, I will be informed to the extent that
21 you understand it, the extent of scientific knowledge studies
22 that have been undertaken, et cetera, in the area of late
23 adolescence up to the time the article was written?

24 THE WITNESS: Yes, Your Honor.

25 THE COURT: Then on that basis, I will accept it.

1 MR. KOCH: Thank you, Your Honor.
 2 THE COURT: Exhibit 1 is a full exhibit, Diahann.
 3 MR. PIERPONT: Thank you.
 4 BY MR. KOCH:
 5 Q. Now I'm going to show you what's previously been
 6 marked for identification as Exhibit 2 which is an article
 7 entitle "When does a juvenile become an adult? Implications
 8 of law and policy." If I may approach, Your Honor.
 9 THE COURT: You may.
 10 Q. Do you recognize that article?
 11 A. Yes, I do.
 12 Q. I will cut right to the main question. Does that
 13 article, like the first one, reliably present the scientific
 14 knowledge as to late adolescence as of the present moment?
 15 A. Yes, it does.
 16 MR. KOCH: I would offer that, Your Honor, for the
 17 same purposes of the previous article.
 18 MR. PIERPONT: Again, Your Honor, subject to the same
 19 discussion that I had previously with the Court to the extent
 20 there's science in here, there's no objection. The
 21 Government does think to the extent there's policy
 22 discussions and things along those lines, it is beyond what
 23 we're here to do today.
 24 THE COURT: Is your offer -- do you have any
 25 objection to how the Government frames their lack of

1 objection to the purpose of the article?
 2 MR. KOCH: No, Your Honor. That's in accordance
 3 with our agreement.
 4 THE COURT: For example, there's a summary at the
 5 beginning of this article, it says at the end in this
 6 article, we summarized recent behavioral and neurological
 7 findings on cognitive capacity in young adults. That's what
 8 you are offering it for as opposed to and highlight several
 9 ways which they bear on legal policies. That's the thrust of
 10 your offer is the second part?
 11 MR. KOCH: Correct.
 12 THE COURT: That's fine then. Exhibit 2 is received
 13 as a full exhibit with that understanding.
 14 BY MR. KOCH:
 15 Q. About those articles, is there any question or
 16 debate in the scientific community about the findings in
 17 these articles?
 18 A. No.
 19 THE COURT: May I inquire as to where they were
 20 published. Before you add to your answer, could you tell me.
 21 One is Fordham Law Review.
 22 THE WITNESS: I believe the other is Temple Law
 23 Review.
 24 THE COURT: Thank you.
 25 A. Well, in accord with the back and forth questioning,

1 I will limit my answer to your question with respect to the
2 scientific findings that are discussed in the article rather
3 than the policy implications, but there's broad consensus
4 among scientists with respect to the scientific information
5 that's contained in each of these articles.

6 Q. Thank you. Are there ways in which the brains and
7 behavior of 18 to 20-year-olds are similar to adults?

8 A. Yes.

9 Q. Can you describe some of those similarities with
10 adults?

11 A. As we were discussing earlier, with respect to
12 behaviors that we might think of as cold cognitive driven so
13 things like logical reasoning or the ability to solve
14 problems under neutral nonarousing situations, people that
15 age period perform just as well as adults do.

16 Q. Are there any ways in which the brain's behavior of
17 18 to 20-year-olds are more similar to younger adolescence
18 than they were to adults?

19 A. There is still immaturity in certain brain systems
20 in the behaviors that those brain systems govern, so during
21 this age period, late adolescence relative to adults, still
22 show problems with impulse control and self-regulation and
23 heightened sensation seeking which would make them in those
24 respects more similar to somewhat younger people than to
25 older people.

1 Q. Thank you. I want to go down a few characteristics
2 of adolescence and ask you for each one of these whether late
3 adolescence are more similar to younger adolescence or to
4 adults. In terms of risk-taking, when does risk-taking peak
5 on average?

6 A. Well, it depends on the specific type of risk-taking
7 that you are talking about, but in general, people in the
8 late adolescent years are more likely to take risks than
9 people who are adults and more likely to take risks than
10 young adolescents are to, so if you were to -- if you were to
11 draw a graph showing the prevalence of risk-taking by age, it
12 would look like an upside down U. The peak would be
13 somewhere, you know, around 17, 18, 19, approximately that
14 age range. That's when most type of risky behavior are at
15 their height.

16 Q. What about impulsivity?

17 A. Impulsivity is still developing during the late
18 adolescent years. I'm sorry. Correct that. Impulse control
19 is still developing during the late adolescent years, so if
20 you were to draw a graph of that, you would see a straight
21 upward trending line that goes from age 10 to age 25 or so.

22 Q. How about susceptibility to the influence of one's
23 peers?

24 A. Susceptibility to peers is higher during late
25 adolescence than it is in adulthood. It is slightly lower

1 than it is during middle adolescence, but it is -- but the
2 ability to resist peer pressure is developing during the late
3 adolescent years.

4 Q. What about the capacity for change?

5 A. We think that people are more amenable to change
6 when they're younger than when they're older. We think that
7 people are still capable of change -- are more capable of
8 change when they're in their late adolescent years than when
9 they're adults. That would be supported by personality
10 research that shows that more changes are taking place during
11 that time than if you were looking at people who were in
12 their late 20s, 30s or 40s.

13 Q. With regards to reward-seeking behavior, is the
14 prefrontal cortex everything in terms of regulating that when
15 it comes to rewards?

16 A. No. Because reward-seeking is a combination of an
17 urge to go after a reward and the ability to put the reins on
18 that urge. So in order to understand reward-seeking at a
19 given age, you have to ask both about how the prefrontal
20 cortex is functioning, but also about the arousal of the
21 limbic system that might lead to reward-seeking.

22 I think I said before, but it is worth repeating,
23 that the metaphor that I and other scientists use to describe
24 this is having the accelerator pressed down without a good
25 braking system in place. That would be true of mid

1 adolescence as well as late adolescence.

2 Q. In 2003, you co-wrote an article called "Less Guilty
3 By Reason of Adolescence, correct?

4 A. Correct.

5 Q. Just tell us in terms of the psychology and not in
6 terms of the policy, what was the central point of that
7 article?

8 A. The central point of the article that adolescents
9 compared to adults are more impetuous. They are more
10 susceptible to peer pressure and their personalities are less
11 fully formed.

12 Q. How has the research changed since you wrote that
13 article?

14 A. I think that the conclusions are still the same
15 today as they were then.

16 Q. If you were writing that article today, what age
17 range would you apply it to?

18 A. I think I would apply it to the whole adolescent
19 period. At that time, we wrote that article because of
20 interest and debate at that point about the juvenile death
21 penalty. The focus of the article was about people younger
22 than 18. If we were writing it today, I think we would say
23 that the same things are true about people who are younger
24 than 21.

25 Q. Is there any question today among the scientific

1 community that late adolescence as a group possessed the same
2 hallmarks traits of youth that you ascribed to middle
3 adolescence in 2003?

4 A. They possess many of the same traits.

5 Q. I want to turn now. This would be the last section.
6 A few questions about the various features of 18 to
7 20-year-olds.

8 Are there specific characteristics of this group
9 that emerge when they are in unsupervised groups of their
10 peers?

11 MR. PIERPONT: A little bit of feedback. I missed
12 the middle part of that question.

13 A. Your Honor, I'm wearing hearing aids. I wonder if
14 the microphones in those hearing aids are giving some
15 feedback.

16 THE COURT: It is not you. You are fine. It is
17 Attorney Koch keeps getting a buzz.

18 MR. KOCH: I have been hearing that the whole time.
19 I could turn microphone off and yell.

20 THE COURT: No, you will hear it and I will hear it.
21 He might hear it. Nobody behind you would hear it. That's
22 not a good outcome.

23 MR. KOCH: This sounds better to me.

24 THE COURT: I think that's fine. You better put the
25 question again.

1 BY MR. KOCH:

2 Q. Are there specific characteristics of 18 to
3 20-year-olds that emerge when they were in unsupervised
4 groups of their peers?

5 A. Yes.

6 Q. What are they?

7 A. In general, when people that age are with their
8 peers and where there are no adults present, it makes them
9 even more inclined to take risks, and it makes them even more
10 reward-seeking than when they are by themselves. This
11 actually is one of the main focuses of the research that my
12 team at Temple University has been doing for the last 15
13 years.

14 Q. Tell me about what kind of studies have you been
15 doing on that?

16 A. Well, in a series of studies, we invite research
17 participants to come to our lab. We invite them to come with
18 one or two friends, then we randomly assign the people in the
19 study to take a test battery either by themselves or with
20 their friends watching them. In some of the experiments, the
21 friends are in the room with them. In some of the
22 experiments, the friends are in an adjacent room, but they
23 can watch the subject's performance on a monitor.

24 In some of the studies, the person we're testing is
25 inside a brain imaging machine. The friends would be also in

25

1 an adjacent room watching the subject's performance on a
2 monitor. And we administer a series of different kinds of
3 tests, some risk-taking tests, some reward-sensitivity tests,
4 some cognitive-control tests, then we compare how people
5 respond when they're alone versus how they respond when
6 they're in the presence of their peers.

7 We have done this with people of different ages,
8 then we can ask is the effect of being around your peers
9 different, if you are an adolescent than if you are an adult.
10 What we have found, as I said before, is that when people are
11 in the presence of their peers, up until about age 24 or so,
12 we get this peer effect where it increases their risk-taking
13 and reward-sensitivity, and we don't see that effect after
14 age 24 where adults perform the same way when they are by
15 themselves as when they are in a group.

16 Q. Have you ever used the term "the social brain"?

17 A. I have.

18 Q. What does that mean?

19 MR. PIERPONT: Your Honor, may I have one more
20 moment with Attorney Koch?

21 Thank you, Your Honor.

22 Q. What does the social brain mean?

23 A. The social brain is a term that is used to refer to
24 a brain system that is important for how we perceive other
25 people and how we judge their opinions of us as well as

1 their -- as well as their emotions and their facial
2 expressions and so on.

3 Q. Are adolescents particularly -- are late adolescents
4 particularly concerned with their social status?

5 A. Yes.

6 Q. How so?

7 A. Well, the social brain becomes more active during
8 adolescence, then it becomes less active as we mature into
9 adulthood. What that does is it makes adolescents, including
10 late adolescents more sensitive to their standing in a social
11 group, more sensitive to the impressions that they make on
12 other people, more sensitive to the opinions that other
13 people have of them, and therefore, we think that explains
14 why compared to adults, adolescents are more likely to change
15 their behavior when they are with other -- when they are with
16 their peers. Whereas adults are more consistent when they
17 are alone and when they are with their peers.

18 Q. Is an immature, late adolescent different from an
19 immature adult?

20 A. Maybe in the following way. As I said before, we
21 think that the brain has matured by the time people are 22 or
22 23-years-old. What that means is that somebody who is
23 younger than that who is immature still might become more
24 mature over time. Whereas somebody who is immature who is 30
25 let's say is probably never going to be very mature because

1 the parts of the brain that are still -- that regulate these
2 kinds of behaviors are done. They are done developing. So
3 of course, with somebody who is younger, you don't know what
4 the future is going to hold. We do believe that the vast
5 majority of people that show immaturity during adolescence
6 grow up to be mature adults, but we know that there are some
7 immature adults so obviously not all of them do.

8 Q. Do late adolescents know right from wrong?

9 A. Sure.

10 Q. So how is it consistent to know right from wrong yet
11 be less responsible by reason of adolescence?

12 A. Well, by asking about being less responsible, I want
13 to restrict my answer to less responsible psychologically and
14 make sure I'm not talking about less responsible legally so
15 we don't get into areas that are beyond my expertise. By
16 less responsible, I mean less able to control their own
17 behavior.

18 Q. Is it possible, using the MRI studies that you
19 mentioned earlier, to conclude that any given adolescent has
20 attained psychological and neurobiological maturity?

21 A. No.

22 Q. Why not?

23 A. We don't have the precision that would be necessary
24 to do that and we don't -- I'm not even sure we would know
25 exactly what to look for.

1 Most of the MRI studies that are done talk about
2 averages of people of different ages. It is not yet -- we
3 can do a brain scan of somebody and we can say whether he has
4 a tumor or whether he has a lesion in his brain, but we can't
5 look at an individual brain and say is this more like an
6 adolescent brain or more like an adult brain. We're just not
7 there yet.

8 Q. I think you mentioned earlier that adolescents are
9 more sensitive to rewards and less sensitive to penalties,
10 correct?

11 A. Correct.

12 Q. Is the harshness of a penalty likely to impact on
13 the decision-making of a late adolescent who is making
14 decisions in the decision-making of hot cognition?

15 MR. PIERPONT: The Government objects. We're talking
16 about the harshness of penalties. We seem to be getting
17 astray of the scientific underpinnings that Dr. Steinberg is
18 to testify about today.

19 THE COURT: If he can't answer it, he can tell me
20 that. If he can, I think it is not impermissible in the
21 context of his prior testimony because he talked about hot
22 cognition, making decisions, being more reward focused than
23 risk focused and penalty to me is a risk, so if you can
24 answer the question in that context and just in the sense of
25 greater risk meaning greater penalty without a particular

1 penalty.

2 If you want to put a further question as to a
3 particular penalty, you can do that later. If you can get me
4 this far with that answer, sir. If you can't answer it, then
5 maybe the objection is well taken, but I will let you answer.

6 A. I can answer and I understand the distinction that
7 you are drawing. I think that whenever we're making a
8 decision that has some risk involved, we're always weighing
9 the cost and benefits of different courses of action. To the
10 extent that a potential penalty or a punishment for doing
11 something is salient, we're less likely to take the risk
12 because we get worried that we're going to be punished.

13 But under conditions of emotional arousal when hot
14 cognition is operating, adolescents are less likely to pay
15 attention to the downside of a risky decision, and they're
16 more focused on the rewards of it, so it means that the
17 prospect of being punished for something and I mean
18 punishment not in a legal sense, like getting a shock in a
19 psychological experiment, the prospect of being punished for
20 something is less salient to an adolescent than it is to an
21 adult.

22 In psychological research on deterrence, that
23 evidence has been used to argue that this is why kids are
24 less likely to be deterred by the knowledge that something
25 bad can happen to them because they are not paying attention

1 to it the way they would pay attention to it under the
2 condition of cold cognition.

3 Q. You mentioned that the research on this really got
4 going in the nineties. Is there anything indicating that
5 adolescent brains in the 90s or 80s would be any different
6 than adolescent brains today?

7 A. No.

8 Q. Has your research been replicated in other parts of
9 the world?

10 A. Yes.

11 Q. Let me ask more specifically. Are adolescents in
12 other countries and cultures falling into these same research
13 findings that you have had?

14 A. Well, we recently completed a study of 5,000 people
15 mail in 11 countries, countries that were very different from
16 each other. Some in Europe, some in Africa, some in Asia,
17 some in the Middle East and some in North and South
18 America.

19 We looked at the two age patterns that I talked
20 about before, this upside down U for reward-seeking,
21 sensation-seeking and we found the same upside down U in
22 other parts of the world as we have found in American
23 samples.

24 We also looked at this gradual increase in
25 self-control that I described before, and we also found that

1 in other parts of the world as we have in American samples
2 with the improvements in self-control going on until people
3 were in their midtwenties.

4 Q. That upside down U, I believe you had mentioned that
5 in the risk-taking context?

6 A. Yes.

7 Q. Age 17 to 19?

8 A. Yes.

9 MR. KOCH: I have nothing further, Your Honor.

10 THE COURT: Thank you. For the Government please on
11 cross-examination.

12 MR. PIERPONT: Your Honor, it is my intention to go
13 through at least one of the exhibits that Attorney Koch
14 introduced so I brought this laptop. I will also point out I
15 have a couple other documents from which I plan to read. I
16 don't intend to introduce them as exhibits. To the extent it
17 would be helpful to the Court to take a look and Attorney
18 Koch to take a look, maybe we can use the Sanction system and
19 publish them on the screen for the Court and Attorney Koch.

20 THE COURT: That's fine.

21 CROSS-EXAMINATION

22 BY MR. PIERPONT:

23 Q. Professor Steinberg, good afternoon.

24 A. Good afternoon.

25 Q. I would like to talk a little bit maybe just to

1 clarify about the breakdown of age definitions between
2 adolescents and young adults, just to make sure we're on the
3 same page.

4 To be clear, I know there's been a little bit of
5 question about this, when you say adolescence here today, you
6 are defining it as the age from 10 to 20. That's inclusive
7 all the way up to somebody who is about to turn 21. Is that
8 fair so say?

9 A. Yes.

10 Q. As you testified previously, it could be further
11 subdivided young adolescence or early adolescence is 10 to
12 14, is that right?

13 A. I said 10 to 13.

14 Q. 10 to 13 Middle adolescence maybe 13 to 17 area, is
15 that fair to say?

16 A. 14 to 17.

17 Q. Late adolescence being this 18 to 20 range that
18 we're talking about today?

19 A. Right.

20 Q. These boundaries have been fairly consistent for the
21 last five years, is that fair to say?

22 A. Yes, with the caveat that they are just labels and
23 just as, you know, here, you might say 10 to 14 and I might
24 say 10 to 13. There's nothing -- these are labels that
25 scientists use, but if I was speaking to other people who

1 study adolescent development, I think they would use similar
2 labels and similar cut points.

3 Q. Put differently, five years ago people weren't
4 saying middle adolescence was a 13-year-old or 12-year-old?

5 A. Not as far as I know.

6 Q. Those categories generally have been consistent for
7 the last five years?

8 A. Yeah.

9 Q. There's some overlap between what's referred to in
10 the literature as late adolescence and young adult as well,
11 is that fair to say?

12 A. It's a term of logical overlap. Some people might
13 use young adult to refer to people who are, you know, 18 to
14 24 or something like that. Other people might use it only to
15 refer to people who are 21 to 24.

16 Q. And in some of your own work, you have looked at
17 young adulthood and even talked about it in the context of 18
18 to 21 that being the category. Is that fair to say?

19 A. I'm not sure. I have a textbook on adolescence and
20 I use the age ranges that I spoke about earlier in that. I
21 am not sure what you are referring to.

22 Q. Let me bring up Defendant's Exhibit 1 then and this
23 is a full exhibit that was just introduced. This is the
24 "Young Adulthood as a Transitional Legal Category: Science,
25 Social Change and Justice Policy article.

1 THE COURT: That's Petitioner's 2.

2 MR. PIERPONT: I'm sorry. That's right.

3 Q. Doctor, you should be able to see it on the screen
4 in front of you as well.

5 THE COURT: You have to enlarge that.

6 A. I have a copy of that in front of me.

7 THE COURT: I do, too, but he's going to direct you
8 to particular pages, Professor. He's at 645.

9 A. When you enlarge it, I can read it fine.

10 Q. I will take you to page 645, as the Court said. Do
11 you prefer Professor or Doctor?

12 A. Either.

13 Q. If you go to page 645, there's some discussion in
14 this article. This is an article that you co-authored, is
15 that right?

16 A. Yes.

17 Q. I will direct you to one sentence there that's
18 highlighted. It says "Although 18 to 21-year-olds are in
19 some ways similar to individuals in their midtwenties, in
20 other ways, young adults are more like adolescents in their
21 behavior."

22 Fair to say that that sort of suggests that by young
23 adults, at least in this article, you are talking about 18 to
24 21-year-olds?

25 A. Yes. And that's because the two other authors of

1 this article are law professors and this article stemmed from
2 questioning the boundary that the law draws and the law draws
3 the boundary at 18 and so in legal parlance, it would be
4 appropriate to refer to those people as young adults.

5 Q. I don't want to go too far down there, but for the
6 purposes of this article, when you are saying young adults,
7 you mean young adults from the ages of 18 to 21 as opposed to
8 something earlier than that or something later than that age
9 range?

10 A. I believe so, yes.

11 Q. I would like to talk a little about this idea of
12 late maturation in the brain in areas affecting judgment and
13 decision-making. You testified about that on direct not that
14 long ago. Do you remember that?

15 A. Yes, I do.

16 Q. And we heard you testify that part of the brain such
17 as the prefrontal cortex, that's sort of responsible for some
18 of the controlling of the impulses and sort of the CEO, the
19 decision-maker of the brain. You testified along those
20 lines?

21 A. Yes.

22 Q. And that the limbic system is the emotional reaction
23 part of the brain that the cortex helps control and rein in.
24 Is that fair to say?

25 A. Roughly.

1 Q. You were, as you testified, the lead scientific
2 consultant for the American Psychological Association amicus
3 brief in Miller, right?

4 A. Yes.

5 Q. As you I think testified on direct, you consulted on
6 the science that was presented to the Supreme Court in that
7 brief. Is that fair to say?

8 A. Yes.

9 Q. It was your job to make sure the science was
10 accurate, is that right?

11 A. Yes.

12 Q. Were you familiar as well with other scientific
13 briefs submitted to the court in that context?

14 A. In Miller? I don't recall. It was sometime ago.

15 Q. How about a brief by J. Lawrence Aber?

16 A. Aber, yes. I don't remember the contents of it, but
17 I know that he was a co-author of another brief.

18 MR. PIERPONT: Your Honor, I'm going to pull up that
19 brief. That's for the convenience of Attorney Koch and the
20 Court. I don't plan on introducing it as an exhibit.

21 THE COURT: What will it be marked for I.D.?

22 MR. PIERPONT: Government's 1 for identification
23 purposes. I don't know, Your Honor, if you want to take it
24 down from the screen up there or.

25 THE COURT: I'm sorry.

1 MR. PIERPONT: I don't know if you would like to take
2 it down from the screen up there.

3 THE COURT: Why?

4 MR. PIERPONT? As it stands right now, if I were to
5 pull it out, it would be going to the entire courtroom and
6 the witness.

7 THE COURT: It is a public document unless you don't
8 want me to look at it.

9 MR. PIERPONT: No, Your Honor. I'm just pointing it
10 out to you.

11 THE COURT: Yup, go ahead.

12 Q. So in the APA brief on which you were the lead
13 scientific consultant, the brief stated, it is now and I'm
14 quoting. "It is now well established that the brain
15 continues to develop throughout adolescence and young
16 adulthood in precisely the areas and systems that are
17 regarded as most involved in impulse control, planning and
18 self-regulation." You see where it says that, right?

19 A. I do.

20 Q. That is similar to the testimony that you have given
21 here today?

22 A. Yes, it is.

23 Q. As the lead scientific consultant, you believed it
24 was accurate at the time that it was in this brief as well,
25 right?

1 A. Yes.

2 Q. Excuse me for one moment. I'm going to go to the
3 thirteenth page of Government's Exhibit 1. I'm going to
4 direct you to the bottom of the thirteenth page of
5 Government's Exhibit 1 for identification purposes.

6 It reads, "Well into late adolescence, there's an
7 increase in connections not only among cortical areas, but
8 between cortical and subcortical regions that are especially
9 important for emotion regulation." Are we talking there
10 about in part the prefrontal cortex and the limbic system
11 that you had spoken about previously?

12 A. Precisely.

13 Q. It continues to read "As the brain matures, that
14 self-regulation is facilitated by the increase connectivity
15 between regions important in the process of emotional and
16 social information and reducing important in cognitive
17 control processes." Do you see that?

18 A. Yes, I do.

19 Q. That's expanding further upon the idea that as the
20 interconnectivity between the frontal cortex and the limbic
21 system as that develops, an individual gains greater control
22 in order to check their emotional reactions; is that right?

23 A. Yes.

24 Q. It continues to say, "This developmental pattern is
25 consistent with adults' superior ability to make mature

1 judgments about risk and reward and to exercise cognitive
2 control over their emotional impulses especially in
3 circumstances that adolescents would react to as socially
4 charged."

5 So there we're talking a little bit about
6 adolescence maybe in the hot cognitive state and the contrast
7 between somebody who is in their late adolescence as opposed
8 to an adult, right?

9 A. I believe so. I don't know the exact context of
10 this, but that's how I read it.

11 Q. Let me go back one page and just bring you to the
12 --give you the context to bring you to the beginning of the
13 particular paragraph. It says well into late adolescence
14 there, right?

15 A. Yes. But I don't know. This is not a paper that I
16 wrote. I don't know what these authors are using as their
17 definition of well into late adolescence.

18 Q. You were the scientific consultant on this brief,
19 though, right?

20 A. Is this our paper or is this the Aber paper?

21 Q. I'm sorry. This is the American Psychological
22 Association.

23 A. Yes.

24 Q. Late adolescence there you understand that to be
25 talking about the context of 18 and older. Is that fair to

1 say?

2 A. Yes. I believe so. We're talking about a brief
3 that was written -- which brief is this, by the way?

4 Q. This is the American Psychological Association.

5 A. For which case?

6 Q. For Miller.

7 A. So this is a brief that is now seven years old.

8 Q. Maybe five years old.

9 A. Five years old. Miller was decided in 2012 but
10 yup.

11 Q. So somewhere between five and seven years old this
12 brief was?

13 A. Right.

14 Q. To be clear maybe we'll go to the fourteenth page of
15 what's been previously marked as Government's Exhibit 1 and
16 in this brief, middle adolescence is defined as roughly 14 to
17 17, right?

18 A. Yes.

19 Q. Elsewhere where it talks about late adolescence,
20 fair to concluded that we're talking about people who are
21 older than 17. Is that fair?

22 A. Correct.

23 Q. Going back to the fourteenth page of what's been
24 previously marked Government's Exhibit 1, there's a sentence
25 that reads "Studies have shown that the prefrontal cortex is

1 among the last areas in the brain to mature fully." Do you
2 see that, right?

3 A. I do.

4 Q. That's consistent with your testimony here today
5 about the prefrontal cortex developing much later --
6 withdrawn. Let me make sure I get it right.

7 That's consistent with your testimony earlier today
8 that prefrontal cortex development continues into an
9 individual's 20s. Is that fair to say?

10 A. Yes. Yes, if you include the connections between
11 the prefrontal cortex and other brain regions.

12 Q. For instance, including the limbic system, right?

13 A. Yes.

14 Q. So I'm going to also bring up -- Your Honor,
15 let's -- I'm going to bring up another exhibit that we can
16 call Government Exhibit 2 for identification purposes. This
17 is the Aber brief. I will take you to two things there.

18 THE COURT: Aber?

19 MR. PIERPONT: Aber, A-b-e-r.

20 Q. This was a brief submitted to Miller, right?
21 Submitted in Miller.

22 A. That's what it says here.

23 Q. So let's take a look at the eleventh page. And here
24 it reads "Since Graham, studies continue to confirm that the
25 prefrontal cortex is among the last regions of the brain to

1 mature. In fact, the prefrontal cortex is not fully mature
2 until an individual reaches his or her 20s." Do you see that
3 language there?

4 A. I do.

5 Q. And that was consistent with your testimony here
6 earlier today with the caveat that we're talking about
7 interconnectivity between the limbic system and the
8 prefrontal cortex, right?

9 A. Yes.

10 Q. That's consistent with what was in your brief that
11 was presented to Miller as well, right?

12 A. Yes.

13 Q. We focused a little bit on the limbic system. I
14 think I've mentioned it in passing a couple of times, but I
15 want to hone on it a little bit more here. You testified
16 that the limbic system is the emotionally charged part of the
17 brain, that the prefrontal cortex doesn't gain more control
18 over until an individual is in their 20s, right?

19 A. Yes.

20 Q. Do you recall writing in 2008, a paper called A
21 Social Neuroscience Perspective on Adolescent Risk-taking in
22 Developmental Review?

23 A. I do.

24 MR. PIERPONT: Your Honor, I have that. I would
25 like to, for identification purposes, call that Government's

1 Exhibit 3. And Your Honor, I have paper copies if you prefer
2 if it would be easier for the court to have.

3 THE COURT: I can't read it on the screen. Attorney
4 Koch, would you prefer that I have a paper copy?

5 MR. KOCH: I have no preference.

6 THE COURT: Somehow the clerk has to end up with a
7 copy.

8 MR. PIERPONT: Why don't I bring up a couple paper
9 copies for the Court at this point.

10 BY MR. PIERPONT:

11 Q. I would direct you, Professor, to the fourteenth
12 page of what's been previously marked Government's Exhibit 3.
13 I'm going to read what it says here. There's a discussion
14 about the decline in risky activity after adolescence and
15 after going through a little bit before, you write, "A more
16 likely, although not mutually exclusive, cause of the decline
17 of risky activity after adolescence concerns the development
18 of self-regulatory capacities that occur over the course of
19 adolescence and during the 20's." Do you see that?

20 A. I do.

21 Q. This is consistent with your testimony here earlier
22 today that we have been talking about with the prefrontal
23 cortex exerting control over the limbic system?

24 A. I believe so.

25 Q. In fact, if you continue to read later in that

1 paragraph, you write "The maturation of this cognitive
2 control system during adolescence is likely a primary
3 contributor to the decline in risk-taking seen between
4 adolescence and adulthood. This account is consistent with
5 the growing body of work on structural and functional changes
6 in the prefrontal cortex which plays a substantial role in
7 self-regulation and in the maturation of neural connections
8 between the prefrontal cortex and the limbic system which
9 permits the better coordination of emotion and cognition.
10 These changes permit the individual to put the brakes on
11 impulse sensation-seeking behavior and to resist the
12 influence of peers, which, together, should diminish
13 risk-taking. Do you see that there?

14 A. I do.

15 Q. We see a little bit of your analogy there as well in
16 some way where you write about putting the brakes on what
17 would otherwise be an impulsive reaction, right?

18 A. Yes.

19 Q. That's what you're writing back in 2008 in this
20 paper?

21 A. Yes.

22 Q. You had testified a little bit about the
23 consequences of this as well, right, this idea that the lack
24 of impulse control due to the development of the limbic
25 system but underdevelopment of the prefrontal cortex leads

1 young adults or 18 to 20-year-olds to act like juveniles in
2 stressful situations. Do you remember giving testimony along
3 those lines?

4 A. Yes.

5 Q. I would like to go back to the APA brief on which
6 you consulted and check that testimony against what is in the
7 brief, so I will bring up what's been previously marked as
8 Government's Exhibit 1 for identification and I will take us
9 to the seventh page.

10 And the brief says there "During puberty, juveniles
11 evince a rapid increase in reward and sensation-seeking
12 behavior that declines progressively throughout late
13 adolescence and young adulthood." You see that, right?

14 A. I do.

15 Q. That's consistent with what you presented to the
16 Court here today in terms of into young adulthood that
17 sensation-seeking behavior declines progressively into and
18 including that young adulthood period, right?

19 A. Um-hum.

20 Q. To be -- not to put too fine of a point on it, but
21 through late adolescence and young adulthood, that's clearly
22 taking us through the 18 to maybe 21, 22, 23-year-old time
23 period. Is that fair to say?

24 A. Yes, I believe I said before that the peak in this
25 is around 17, 18, 19 or so, so after that it starts to

1 decline.

2 THE COURT: What's the "it" in that answer?

3 THE WITNESS: The sensation-seeking and
4 reward-seeking.

5 BY MR. PIERPONT:

6 Q. I'm going to take us to the eighth page of this
7 Government's Exhibit 1 and again consistent with the brief
8 says "More recent studies confirm" -- well, let's start with
9 "In one example, researchers examined differences in
10 impulsivity between ages 10 and 30 using both self-report
11 performance measures and concluded that impulsivity declined
12 through the relevant period with gains in impulse control
13 occurring throughout adolescence and into young adulthood."

14 And again consistent with your testimony on direct
15 about this idea that you are not as impulsive as your
16 prefrontal cortex begins to gain control over the limbic
17 system, right?

18 A. Correct.

19 Q. In fact, that brief also contains the following
20 language which says "Thus expecting the experience-based
21 ability to resist impulses to be fully formed prior to age 18
22 or 19 would seem on present evidence to be wishful thinking."
23 Do you see that language there?

24 A. I do.

25 Q. So in the brief there, you were saying impulse

1 control. It would be wishful thinking to think that your
2 impulse control would be fully developed by the time that you
3 are 18 or 19; is that right?

4 A. Yes.

5 Q. A little bit more about the impact of peers and
6 environmental pressures. The APA brief contains the
7 following language. Page 10 of what's been marked
8 Government's Exhibit 1.

9 "The ability to resist and control emotional
10 impulses to gauge risks and benefits in an adult matter and
11 to envision the future consequences of one's actions, even in
12 the face of environmental or peer pressures, are critical
13 components of social and emotional maturity necessary in
14 order to make mature, fully considered decisions.

15 Empirical research confirms that even older
16 adolescents have not fully developed these abilities and
17 hence, lack an adult's capacity for mature judgment. It is
18 clear that important progress in the development of social
19 and emotional maturity occurs sometime during late
20 adolescence and these changes have a profound effect on the
21 ability to make consistently mature decisions."

22 Do you see that language?

23 A. I do.

24 Q. We're focusing on the time period of late
25 adolescence which would put us 18, 19, 20 in that area,

1 right?

2 A. Yes.

3 Q. So I would like to turn now to what's been
4 previously marked as Defendant's Exhibit 2 which I have on
5 the screen here and I would like to jump into it and read a
6 little bit about the science that's contained in here. Now
7 to be clear --

8 THE COURT: Is it Government's Exhibit 2?

9 MR. PIERPONT: This is Defendant's Exhibit 2.

10 THE COURT: The defendant is the Government in this
11 case.

12 MR. PIERPONT: I mean Petitioner's Exhibit 2. I
13 apologize.

14 THE COURT: Go ahead.

15 Q. To be clear, you testified on direct examination
16 that this is the present state of knowledge regarding
17 adolescence or so the best statement of knowledge --
18 withdrawn.

19 Let me ask you to characterize it one more time
20 similar to as you did on direct. When you were talking about
21 the science contained in this article, how did you describe
22 it in sum and substance?

23 A. As the present state of our knowledge at the time
24 the article was written.

25 Q. You had testified as well that at least in terms of

1 the science contained in here, there's broad consensus about
2 the science that's in this article, right?

3 A. Yes.

4 Q. Now you are a listed author on this paper, right?

5 A. Yes.

6 Q. As a listed author you read this paper, right?

7 A. Yes.

8 Q. You agreed what was in it largely?

9 A. Yes.

10 THE COURT: I'm a little confused. I'm looking at
11 what I wrote was Petitioner's Exhibit 2. Maybe that's my
12 mistake. It is an article that's written by a professor I
13 know from NYU, Taylor-Thompson.

14 A. I believe that he's speaking about Petitioner's
15 Exhibit 1.

16 THE COURT: You are not an author on 2, right?

17 MR. PIERPONT: Let me double check.

18 THE WITNESS: Mine is marked 1.

19 THE COURT: You were answering as to 1?

20 THE WITNESS: Yes.

21 THE COURT: Thank you.

22 MR. PIERPONT: That's right. I apologize this is
23 Petitioner's Exhibit 1, not Petitioner's Exhibit 2 that we're
24 speaking about.

25 THE COURT: His answer I guess was that it is a

1 present statement of the knowledge in this area.

2 A. At the time the article was written, yes.

3 THE COURT: Which is 2016.

4 BY MR. PIERPONT:

5 Q. Was this published in 2016 or 2017? Do you know,
6 Professor?

7 A. I believe 2016, but I'm not absolutely certain.

8 Q. So I would like to take you then to the seventh page
9 of this exhibit and it reads, "Research on developmental
10 differences between adolescents and adults often has not
11 drawn age distinctions among individuals older than 18 and
12 therefore is of limited value in understanding risk-taking
13 among young adults." Do you see that language?

14 A. Yes.

15 Q. To be clear, young adults as we talked about in this
16 article refers to people from the ages of 18 to 21, right?

17 A. Yes.

18 Q. This was published in 2016 you said, right?

19 A. Yes.

20 Q. Do you agree with this statement there's only
21 limited value in understanding risk-taking among young adults
22 or that is individuals from the ages of 18 to 21?

23 A. What we meant by this sentence is that -- is that
24 there has not been a lot of research that has specifically
25 looked at people who are older than 18 and divided them up

1 into different age groups for purposes of comparison.

2 Q. To be clear, the conclusion that you draw from that
3 is that research on developmental differences is, therefore,
4 of limited value in understanding risk-taking amongst young
5 adults, right?

6 A. Yes, but the next word is "nevertheless."

7 THE COURT: Could I ask you to give me the page of
8 the article, not the seventh page because I went to the
9 seventh piece of paper and I can't find the language.

10 MR. PIERPONT: I understand. Page 646, Your Honor.

11 THE COURT: Thank you. Okay. I got it.

12 BY MR. PIERPONT:

13 Q. You continue "Nevertheless, theoretical models can
14 inform our discussion of risk-taking in young adulthood,"
15 right?

16 A. Yes. I do think it is fair to look at both of those
17 sentences together.

18 Q. So later on page 647 and going into 648, you write,
19 as one of the three authors, "The age patterns in risk-taking
20 would seem to offer support for the conclusion that young
21 adults are also affected by the developmental influence
22 that" -- hang on one second. I will withdraw that.

23 Let's start right here at the beginning of 648. You
24 write, "The study of psychological development in young
25 adulthood is less advanced and the findings of this research

1 are less consistent than the findings of research on
2 adolescents. Do you see that language there?

3 A. I do.

4 Q. Do you agree with that statement?

5 A. Yes.

6 Q. And you go on to give a couple of limitations and I
7 will focus on two of them now today discussing some of the
8 shortcomings with the research on young adults in this paper
9 here.

10 The first one reads "One limitation" and I will zoom
11 in so everyone can read.

12 "One limitation is that studies rarely survey a
13 sample that includes adolescents, young adults and
14 individuals in their late 20s using the same measure for all
15 three groups." Do you see that language there?

16 A. I do.

17 Q. You agree that's a shortcoming with the research
18 amongst 18 or 21-years-old?

19 A. Yes.

20 Q. You continue to write or you and two other authors
21 continue to write, "A second limitation is that studies that
22 span the necessary age range frequently lack the statistical
23 power to compare narrowly defined age groups." Do see that
24 language as well?

25 A. Yes.

1 Q. You would agree with that statement as well?

2 A. Yes, I do.

3 Q. Studies of 18 to 21-year-olds don't always have the
4 statistical oomph that's needed to maybe pass muster at least
5 in the same way as first studies amongst adolescents. Is that
6 fair to say?

7 A. I think what we meant there was that studies that
8 have adults or people from 18, all the way up to further into
9 the 20s, don't necessarily divide them up into age groups
10 where there's enough statistical power to compare them. It
11 is not within the 18 to 21 group as you phrased your
12 question, but it is wider than that.

13 Q. I understand. So let's take a look then at page 649
14 of this exhibit. You write "Conclusions about whether
15 psychological development continues beyond age 18 are highly
16 task dependent. Consider, for example, the question of
17 whether young adults." Again in that context, taking about
18 18 to 21-year-olds, right?

19 A. Yes.

20 Q. "Like juveniles, are more susceptible than older
21 adults to peer influence. The answer is equivocal." Do you
22 see that writing there?

23 A. I do.

24 Q. Do you agree with that statement that the science
25 and the studies suggest -- well, it is ambiguous as to what

1 impact peer pressure has on young adults?

2 A. That's right.

3 Q. You continue to write there "Studies of resistance
4 to peer influence using self-reports do not find age
5 differences after 18." Do you see that language there?

6 A. I do.

7 Q. "But experimental studies comparing individuals'
8 performance on decision-making tasks, when they are alone
9 versus when they are with their peers find peer effects on
10 task" --

11 THE COURT: Could I just ask you to slow down. My
12 brain can't compute what you are saying so I have no idea how
13 she can take it down. My brain can't listen at the speed.

14 MR. PIERPONT: Happy to slow down.

15 THE COURT: Thank you.

16 BY MR. PIERPONT:

17 Q. So you continue to write "Studies of resistance to
18 peer influence using self-reports do not find age differences
19 after 18, but experimental studies comparing individuals
20 performance on decision-making tasks when they were alone
21 versus when they are with their peers find peer effects on
22 task performance after this age at least into the early 20's"
23 Do you see that language there?

24 A. I do.

25 Q. You continue to agree with that language?

1 A. Yes.

2 Q. "For example, exposure to peers increases young
3 adults' preference for immediate rewards, willingness to
4 engage in exploratory behavior and ability to learn from
5 experience."

6 Do you see that.

7 A. Yes.

8 Q. You continue to write "In some studies, exposure to
9 peers has been shown to increase young adults' risk-taking;
10 but in other studies, this has not been found."

11 Do you see that as well, right.

12 A. Yes.

13 Q. So jumping to page 651 of this exhibit. Here you
14 are discussing neurobiological research and brain development
15 in young adulthood. And you write, along with other authors,
16 "As with behavioral research, very few studies have
17 systematically examined age differences in brain development
18 among individuals older than 18. In most studies,
19 adolescents are compared to adults with the latter group
20 composed of people who may be as young as 19 or as old 50.
21 When adult comparison groups average data from such a wide
22 age range, it is impossible to draw specific inferences about
23 potential differences between young adults and their older
24 counterparts."

25 Do you see that language there?

1 A. Yes.

2 Q. Do you agree that where adult comparison groups have
3 average data from such wide age ranges, that it is impossible
4 to draw specific inferences about individuals from the age of
5 18 to 21?

6 A. If you don't have that category separated out, you
7 couldn't.

8 Q. You agree with this that in most studies that is the
9 case, that adolescents are compared to adults with people
10 from the ages of 18 to 50 in that group, right?

11 A. Yes.

12 Q. On the next page, this is on page 652. You write as
13 follows about this research on brain systems and that is,
14 "The research indicates that brain systems governing thinking
15 about social relationships undergo significant change in
16 adolescence in ways that heighten concerns about the opinions
17 of others. Compared to adults, adolescents seem especially
18 sensitive to both praise and rejection, making young people
19 potentially more easily influenced by their peers."

20 You continue to write.

21 "But very little research has asked whether and how
22 these brain systems continue to change beyond the teen years.
23 One study that examined the impact of peers on neural
24 responses to reward in a sample of adolescents, ages 14 to
25 18, young adults, 19 to 22, and adults, 24 to 29, found that

1 the presence of peers increased activation in this brain
2 region among adolescents but had no impact in the other two
3 age groups."

4 You see that language there, right?

5 A. I do.

6 Q. The other two age groups in this case would include
7 young adults albeit as defined from 19 to 22, right?

8 A. Yes.

9 Q. I will take us to one more page here and I will read
10 two separate highlighted parts. And this, Your Honor, is on
11 page 653 of Petitioner's Exhibit 1.

12 You write "It is clear that the psychological and
13 neurobiological development that characterizes adolescence
14 continues into the midtwenties, but the research has not yet
15 produced a robust understanding of maturation in young adults
16 age 18 to 21.

17 You see that, right?

18 A. I do.

19 Q. And you agree that there is not yet a robust
20 understanding of maturation in young adults aged 18 to 21?

21 A. I do.

22 Q. You continue later, "The research on age patterns in
23 risk-taking and on emotional maturation, particularly on
24 impulse control in negative arousal states and peer influence
25 in social contexts, provide the most powerful evidence that

1 young adult offending likely represents a continuation of
2 adult (sic) risk-taking, driven by developmental forces; but
3 many uncertainties remain."

4 Do you see that language as well?

5 A. I am but in your reading of it I think you misquoted
6 it. It likely represents a continuation of adolescent
7 risk-taking. I believe you said adult risk-taking. It says
8 adolescent risk-taking in the article.

9 Q. Yes. Adolescent risk-taking, but you do agree that
10 uncertainties remain in that regard?

11 A. I'm sorry.

12 Q. You do agree that uncertainties remain in that
13 regard, right?

14 A. Yes.

15 MR. PIERPONT: Excuse me for one moment.

16 I have nothing further, Your Honor. Thank you.

17 THE COURT: I have a few questions. I will ask them
18 before redirect. I will give the Government a chance to
19 follow-up if they have questions on my questions. Give me a
20 minute to organize my thoughts.

21 Well, let's start with some kind of visual basics.

22 In my mind, when you told me to think about risk-taking, you
23 told me to think of an upside down U where the horizontal
24 axis would be age, the risk-taking would go vertically and I
25 will see it go up and then down. Is that fair?

1 THE WITNESS: Yes.

2 THE COURT: So there's in effect a trough in the U
3 even though it is upside down. If I righted the U, there
4 would be a trough at the bottom so in this case, it is at the
5 top?

6 THE WITNESS: Yes.

7 THE COURT: Did I understand your testimony to be
8 that the peak of that upside down U is 17, 18 and 19?

9 THE WITNESS: Yes. Although, Your Honor, I believe
10 I said, if I didn't, I will now. A lot of it depends on the
11 specific type of risk-taking that you are talking about and
12 the specific measure that's being used but generally
13 speaking, that's where the peak is.

14 THE COURT: Okay. Then you also said, and I might
15 have got this wrong, but I believe you also said that impulse
16 control was fully developed by 18 to 19, did I take that down
17 incorrectly?

18 THE WITNESS: No, I didn't say that.

19 THE COURT: That's when he was going fast. I was
20 trying to catch up.

21 THE WITNESS: What I believe I said was that impulse
22 control continues to develop into the midtwenties.

23 THE COURT: Okay. So that diagram is an axis of age
24 horizontal, vertical is impulse control. It is a straight
25 line up until about the midtwenties?

1 THE WITNESS: Then it plateaus, exactly.

2 THE COURT: Thank you. That's that. When an expert
3 testifies in court, Professor, they are required to be able
4 to at least state to a reasonable degree of, in your case,
5 psychological study certainty that something is more likely
6 true than not true?

7 THE WITNESS: Yes.

8 THE COURT: So I don't know if this is proper.
9 Anybody wants to object, please object. I will not be
10 offended, but I would like to ask you some questions that are
11 going to be sort of focused on confidence levels.

12 In other words, I assume nothing you've said today
13 do you question is at least more likely true than not in
14 terms of your opinions that you gave about impulse control,
15 risk-taking, age changing, et cetera. But I'm interested in
16 confidence sort of levels. In other words, how much above 50
17 percent are you certain or believe to be is the case true.

18 In other words, I will start with -- I will start
19 with something. It sounds like you define late adult
20 adolescence as 18, 19, 20 and adulthood or young adulthood at
21 over 20?

22 THE WITNESS: Yes.

23 THE COURT: And what is the confidence level you
24 have that is where the line should be drawn in a
25 psychological sense?

1 THE WITNESS: Um.

2 MR. PIERPONT: When you say line in that context?

3 THE COURT: His categorizations. I'm calling them
4 lines. But I can change line to categories, but the line --
5 20 falls into one category, 21 falls into another category in
6 my mind, that's a line between 20 and 21. I'm asking -- this
7 is kind of a really pure psychology question. It could be
8 related to the case. In terms of these categories that seem
9 to be drawn early, mid, late adolescence, young adulthood,
10 you know.

11 I guess I could get up on the stand and say well,
12 early adolescence, in my opinion, starts at six. You would
13 laugh because you know as a psychologist, that's not a fair
14 characterization of the category known as early adolescence.

15 So I'm trying to get at the witness's view of his
16 confidence that 20 is indeed the proper end of late
17 adolescence.

18 Why wouldn't it be 21? I guess I can put it that
19 way.

20 THE WITNESS: It could be, Your Honor. These are
21 labels. These are shorthands that we use for purposes of
22 communication. A lot of development, in fact, most of
23 development is gradual and where we choose to draw lines for
24 purposes of creating these labels or for purposes of the law,
25 it is not arbitrary but reasonable people might disagree as

1 to whether it should be 21 or 22.

2 If I may, to the extent that a different way to
3 answer the question is, Am I confident that development is
4 still going on? Yes. Absolutely confident.

5 THE COURT: Based upon your education, training,
6 your research involvement, is it your opinion that
7 20-year-olds, generally speaking, obviously we're all made up
8 of humans who are entirely different, but as a class, someone
9 age 20 is more like an 18 or 19-year-old or more like a
10 21-year-old in categorization of psychologically? That
11 didn't make any sense.

12 THE WITNESS: No. It made perfect sense.

13 MR. PIERPONT: Your Honor, I'm again when you say
14 psychological. In what sense?

15 THE COURT: The characteristics we have been talking
16 about. Development of the frontal lobe, risk-taking, impulse
17 control. I guess I would hope he wouldn't put a 65-year-old
18 in the same category as an 18-year-old in describing them
19 psychologically as far as development and all of these other
20 aspects that he's spoken about in describing 13-year-olds
21 versus 15-years-old versus 18-years-old.

22 I'm trying to have a sense of -- and I understand
23 the last answer is a perfectly sound one at least to my
24 ignorant hearing -- I'm ignorant I mean -- of the idea that
25 reasonable people can differ. Reasonable researchers might

1 create a different class to study. They might look at 19 to
2 23-year-olds, but in his view that he categorized these folks
3 there, I'm trying to understand, I assume it is based on his
4 view, his belief, his judgment as an expert that those years
5 share common characteristics while they may be developing and
6 evolving over time, but they still belong together in a
7 psychological sense. I guess that's what I'm trying to say.

8 THE WITNESS: Yes. If I can elaborate a bit.

9 THE COURT: Please do.

10 THE WITNESS: It is not just an opinion in the study
11 that I mentioned before of the 5,000 people from eleven
12 different countries, we actually statistically said well,
13 when does self-control hit a plateau. We quantitatively
14 asked when that was. It was at 22 was the earliest we could
15 see it, so in the sense that people who are still developing
16 share that as a similarity, then people who are 20 are more
17 like people who are younger because they are also still
18 developing.

19 THE COURT: So to me that implies that there are
20 greater cross category differences than within category
21 differences?

22 THE WITNESS: Yes.

23 THE COURT: So in your opinion, an 18-year-old -- Is
24 an 18-year-old more similar to a 20-year-old or to a
25 17-year-old? Again we're speaking in general broad

1 statistical census. I'm not talking about be an individual
2 person.

3 THE WITNESS: It depends on what your -- to me I
4 think of them as comparable. That is I wouldn't say one or
5 the other. I think it would depend on the measure of
6 similarity that you were going to use.

7 THE COURT: Well, certainly an 18-year-old is closer
8 to a 17-year-old than a 20-year-old in numerical sense.

9 THE WITNESS: Yes. I think if you looked at
10 measures of things like self-control, you would find closer
11 scores between 18-year-olds and 17-year-olds because they are
12 closer together on that horizontal axis than you would
13 between 18-year-olds and 20-year-olds because the development
14 of those things is linear and gradual, so the further apart
15 on the axis you are, then the further apart you will be on
16 their scores.

17 THE COURT: That's on the impulse control chart?

18 THE WITNESS: Yes.

19 THE COURT: On the risk one, we have already
20 established that it is an upside down curve so 18 and 20
21 might be roughly the same place or roughly equal to 19?

22 THE WITNESS: Pretty close, yeah.

23 THE COURT: There were a number of places that
24 Government's counsel pointed you to in Petitioner's Exhibit
25 1, the article that you co-authored, and I will not go back

1 over the exact language, but I just happen to write down I
2 think at page 649, the phrase, After 18 years is used and
3 651, quote, older than 18. When you wrote those words or
4 co-wrote those words, was that literally accurate? In other
5 words, you were writing and expressing a view with respect to
6 people who are 19 and 20 or does over 18 or older than 18 in
7 those contexts mean 18 years and one day? If you need to go
8 back to the article.

9 THE WITNESS: No. I know what you are referring to,
10 Your Honor, yes. My answer to that has to put the article in
11 context. As I mentioned before, the first and second authors
12 are law professors and this article was written specifically
13 because we were asked for a conference held at Fordham to
14 look at the current legal boundary in the United States for
15 purposes of criminal prosecution.

16 THE COURT: Is under 18?

17 THE WITNESS: Exactly. To say basically is 18 the
18 place where we should be drawing this line. Had we been
19 asked to address a different question. That is the question
20 before the court today, should the line be drawn at 21 or at
21 whatever age, we would have written the sentence that way.
22 So in other words, the construction of the sentence came out
23 of the legal question of this article.

24 THE COURT: Miller is under 18?

25 THE WITNESS: Exactly.

1 THE COURT: That's helpful. Thank you. I think
2 that's all that I had. The only thing I would ask before we
3 go to redirect or the Government's cross on that is I don't
4 usually let a CV be marked into evidence, but I was thinking
5 although I took some notes about the brief questions you
6 asked him, if you had a CV for the professor, would there be
7 objection to marking it? I think it might be helpful to have
8 it in the record.

9 MR. PIERPONT: No objection.

10 MR. KOCH: I have one.

11 THE COURT: That will be Petitioner's Exhibit 3. I
12 think probably I should let the Government cross on my
13 questions and then the redirect would cover both the
14 Government's cross and my questions. Is that all right?

15 MR. PIERPONT: Your Honor, the Government is not
16 going to have cross-examination on those questions.

17 THE COURT: You are welcome to.

18 MR. PIERPONT: I appreciate that. Thank you.

19 THE COURT: Attorney Koch.

20 MR. KOCH: Thank you, Your Honor. On the CV, I
21 can --

22 THE COURT: If you don't have a copy, I would as you
23 show it to the Government unless they have seen it. Send it
24 to Diahann and we'll mark it. The hearing is going to go
25 past today. It is not a harm.

1 MR. KOCH: They have seen it. They got it from me.
2 Now they are giving me my copy.

3 THE COURT: So that will be Petitioner's 3. Give it
4 to Diahann. She'll mark it later. Thank you. I don't need
5 to see it right now, Diahann. I think it should be in the
6 record. Go ahead, Attorney Koch please.

7 MR. KOCH: Thank you, Your Honor.

8 REDIRECT EXAMINATION

9 BY MR. KOCH:

10 Q. All right. Professor Steinberg, stepping back a
11 minute or two. I guess relating to the last questions of Her
12 Honor. Are psychologists as interested in drawing these
13 categorical lines as lawyers are?

14 A. No.

15 Q. What's your main interest driving all of this
16 research?

17 A. My main interest is to better understand how
18 decision-making abilities change between the ages of 10 and
19 30.

20 Q. So you were to take your research outside of any
21 context of line drawing or legal or policy considerations,
22 where would you just float the age of full maturity of the
23 brain?

24 A. As I said before, around age 22 or 23, based on
25 current information.

1 Q. The Government pointed to different kinds of
2 reservations and qualifications in the article that you
3 wrote. Do those reservations and qualifications undermine
4 your confidence in your conclusions here today?

5 A. Well, as I responded when the Government was asking
6 its questions, I still stand by what we wrote which is that
7 we know less about young adults, late adolescents, if you
8 will, than we do about people who are under 18. That's a
9 statement of fact because as I explained when you were
10 questioning me, that has been a much later focus of research
11 so not as large a body of evidence has accumulated.

12 So as a scientist, the more studies there of
13 something and the more consistent the findings are, the more
14 confident we are.

15 The reason that Scott and Bonnie and I wrote this
16 paper that we were just talking about is because people were
17 raising legal questions about where we ought to draw the
18 line. We looked at the science and said, you know, there's
19 enough here to open up the discussion. It is not -- it is
20 not as fully developed as the literature is on adolescence,
21 but there's enough studies in my view and my co-authors' view
22 to say I think we should revisit this.

23 Q. Does your research ever conclude that any bright
24 line should be drawn?

25 A. No. And as a scientist -- that's a legal question.

1 That's not for me to answer. What I see my role today and in
2 other cases in which I have testified, is to do my best job
3 of explaining the science to the legal decision-makers. It
4 is their decision to decide how to use that science to draw
5 legal boundaries. That's not a scientific question.

6 Q. Does any of your research support that there's a
7 clear clinical psychological difference between your average
8 17-year-old and your average 18-year-old?

9 A. I would say probably not. If you were asking me as
10 a scientist, if I thought that we would find a statistically
11 significant difference between 17-year-olds and 18-year-olds
12 on the kind of things that we study or to use Her Honor's way
13 of putting it which was correct that we would find greater
14 between category differences than within category
15 differences, no, I can't think of a study where one would
16 find such a bright-line boundary.

17 Q. At some point, you were asked about something that
18 the Government had pointed to about similarities that exist
19 between -- strike that question.

20 Let me ask you it differently. 18, 19, and
21 20-year-olds, you have testified they have some similarities
22 with adults, right?

23 A. Sure.

24 Q. How does hot cognition play into that?

25 A. I would say that the similarities that you would

1 find are more in the realm of cold cognition. In hot
2 cognition is where you would find the differences between
3 people that age and adults.

4 Q. Would it be fair to say under hot cognition, that's
5 where late adolescence are more similar to mid adolescence
6 than they are to adults?

7 A. Absolutely. That's exactly how I would put it.

8 MR. KOCH: Nothing further. Thank you.

9 THE COURT: Just based on something that you said a
10 moment ago or it was imbedded in a very long answer of
11 something you said a moment ago, I want to have the record be
12 clear. Is it your opinion to a reasonable degree of
13 psychological science certainty that the findings which
14 underpinned your conclusions as to the petitioner's in, for
15 example, Graham, under 18, actually they were 14 but the
16 opinion says under 18, you have the same opinion as to 18?

17 THE WITNESS: Yes. And had that been the question
18 that was asked in Graham, I would have said the same things.
19 I would have changed the age in the brief.

20 THE COURT: The number would have changed?

21 THE WITNESS: Exactly.

22 THE COURT: If someone said could you change it to
23 21, would you have been able to do that based upon your
24 expertise as a psychologist?

25 THE WITNESS: I don't think I would be confident

1 enough. I think I would be confident enough about 20, but
2 not 21, but we're really, you know, in terms of reasonable
3 scientific certainty, I am more certain about 20 than I am
4 about 21.

5 THE COURT: As to 18?

6 THE WITNESS: Absolutely certain.

7 THE COURT: All right. I don't have if you have
8 questions on that.

9 MR. KOCH: I have one follow-up question. When you
10 said 20, up to 20 or through 20?

11 THE COURT: I was asking and if you didn't
12 understand me, when I was using 18, 20, 22, I was referring
13 to a person who nominally has that age. In other words, not
14 under, but is at the moment a 20-year-old, i.e., a person who
15 could be 20 years and a day or 20 years and 11 months and 29
16 days.

17 THE WITNESS: That's how I understood your
18 question.

19 MR. KOCH: Thank you, Professor.

20 THE COURT: Professor, I think we'll get you back to
21 Philadelphia. I apologize for the delay this morning.

22 THE WITNESS: It happens.

23 THE COURT: It shouldn't. I'm thinking of sending
24 some other agency of the government your bill, but we'll deal
25 with that later. Thank you very much.

1 The other thing I wanted to put on the record and I
2 apologize I kind of assumed things and I shouldn't assume
3 things. You mentioned the presence of the family members of
4 the victim Mr. White. I assume they are here because you
5 fulfilled your obligation under the Victim's Right act by
6 notifying them. There was a second victim whose name I
7 believe was Diaz. Any family?

8 MS. COLLINS: We have made efforts and the agents
9 have been helping us make efforts. We have not be able to
10 locate a member of the Diaz family. The White family was
11 helping us with that as well. We're not able to reach the
12 person. We're continuing that. We're hoping to do that
13 before the 29.

14 THE COURT: In the category of not assuming
15 anything, I understood your remarks. I don't want to assume
16 it, Attorney Pierpont. While the members are present of the
17 White family which I appreciate that no one wished to
18 participate I guess in this proceeding, the hearing. I don't
19 know that they could. They have right to be present and to
20 be heard I think, but I don't know heard at an evidentiary
21 hearing, I'm not sure.

22 MR. PIERPONT: I think the read here that we have we
23 informed them, we talked to them about this hearing and what
24 was going to happen at the hearing. I don't believe it would
25 be the Government's position that in this context, they would

1 have the right to be heard. If that comes up, we'll continue
2 to apprise them of those rights.

3 THE COURT: Okay. They have a right to be heard at
4 any public proceeding involving release, plea, sentencing,
5 parole. This is in the nature of evidentiary hearing. They
6 have a right to be informed of all proceedings. I think you
7 were right to do that.

8 Attorney Koch, I believe you indicated on your
9 witness list that you intended to call Mr. Cruz to testify.

10 MR. KOCH: Yes, Your Honor.

11 THE COURT: Can we do that now?

12 MR. KOCH: I had an agreement with the Government
13 that we would do that on another day which is why I believe
14 we scheduled September 29.

15 THE COURT: I did, but I did it based on the
16 representation that the professor would take all day.
17 Therefore, we would need more time. I set aside the whole
18 day. Somebody else is responsible for ruining my morning.
19 But I don't know. Why did you ask me to set aside a whole
20 day? I don't mind doing it in two days. Why did I schedule
21 a whole day?

22 MR. KOCH: Could I have a moment with the Government
23 please?

24 THE COURT: Sure.

25 MR. KOCH: Thank you.

1 I know that Your Honor would like to go forward. I
2 thought that there was an off-chance that this might be the
3 case. However, Mr. Cruz I didn't get to see him before we
4 were in court today, and I was kind of relying on the
5 September 29 date and I apologize that we have taken --

6 THE COURT: My concern if I weren't looking out at a
7 room full of the public who will have to return I assume
8 given their level of interest. I can go back and do work on
9 something else right now. But, you know, would I rather have
10 the 29 open and not occupied with this, yes. Would I rather
11 not inconvenience people, yes.

12 MS. COLLINS: Prior to today -- may I? Prior to
13 today's proceedings in informing the family, we gave them the
14 date of 29 once the Court issued that date on the calendar.
15 They are well aware that's going to occur on the 29th. They
16 have been told that ahead of today and I think that --

17 THE COURT: You have no objection to it continuing?

18 MS. COLLINS: We have to objection to the 29.

19 THE COURT: You are a lucky man, Attorney Koch.
20 That's all I can say.

21 MR. KOCH: Thank you, Your Honor.

22 THE COURT: Please understand the next time I
23 schedule an all-day hearing, when one finishes in five
24 minutes, I don't expect to recess to take the second witness
25 on the second day. I intend to go to the second witness.

1 That's at trials, hearings, anything in front of Judge Hall.
2 Write it down in your book. Is there anything else? We'll
3 stand adjourned.

4 (Whereupon, the above hearing adjourned at 3:18
5 p.m.)
6
7
8
9

10 COURT REPORTER'S TRANSCRIPT CERTIFICATE

11 I hereby certify that the within and foregoing is a true and
12 correct transcript taken from the proceedings in the
13 above-entitled matter.
14

15 /s/ Terri Fidanza

16 Terri Fidanza, RPR
17 Official Court Reporter
18
19
20
21
22
23
24
25

1 INDEX

2 EXAMINATION

| 3 Witness Name | Page |
|-------------------------------|------|
| 4 LAURENCE STEINBERG | |
| 5 Direct By Mr. Koch | 3 |
| 6 Cross By Mr. Pierpont..... | 31 |
| 7 Questions By The Court..... | 58 |
| 8 Re-Direct By Mr. Koch..... | 67 |

9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

EXHIBIT B
SUMMARY OF ADOLESCENT DEVELOPMENTAL SCIENCE
IN RE JUVENILE LIFE WITHOUT PAROLE

AUTHOR: Daniel P. Keating, Ph.D.

Summary of Adolescent Developmental Science in re Juvenile Life Without Parole

Daniel P. Keating, Ph.D.
University of Michigan

In a series of US Supreme Court decisions, evidence from the developmental science of adolescence, including developmental neuroscience, has been cited in support of decisions eliminating capital punishment for juveniles and restricting the use of mandatory sentencing to life without parole for juveniles. This summary is intended to provide a brief descriptive overview of the developmental science cited in those decisions, and of the continuing scientific progress in the relevant fields of research.¹ The overview covers six topics: immaturity of the prefrontal cortex and executive functions; the elevation of socioemotional and incentive systems; the developmental maturity mismatch between those two brain systems; the implications of current research for the prospects of rehabilitation among juvenile offenders; the issue of age cutoffs; and a note on scientific methodology.

- **Immaturity of Prefrontal Cortex (PFC) and Executive Function (EF)**

- *Executive Function, judgment, and decision making.* The prefrontal cortex of the brain (the PFC) has long been understood to have the principal function of carrying out what are known as the “executive functions” (EF). These included basic functions such as working memory and planning, as well as the direction of cognitive resources (known as “effortful control”) and, especially relevant here, impulse control (also known as the “inhibition of prepotent responses”) and

¹ A recent summary of the developmental science used in *Thompson v. Oklahoma* (1988), *Roper v. Simmons* (2005), *Graham v. Florida* (2010), and *Miller v. Alabama* (2012) can be found in L. D. Steinberg, (2013): *The influence of neuroscience on US Supreme Court decisions about adolescents' criminal culpability*, *Nature/Neuroscience*, 14, pp. 513-518. This summary draws on that and its citations, along with other publications, including: Keating, D. P. (2012). *Cognitive and brain development*, *Enfance*, 3, 267-279; Keating, D. P. (2014). Adolescent thinking in action: Minds in the making. In J. Brooks-Gunn, R. M. Lerner, A. C. Petersen, & R. K. Silbereisen (Eds.), *The developmental science of adolescence: History through autobiography*. NY: Psychology Press. (Pp. 257-266).

decision-making in complex situations. The PFC is known to begin developing in early childhood and to continue that development through the childhood, adolescent, and early adult years, showing full adult maturity in the early to mid-20s.² It is the functioning, and especially its immaturity, that is referenced in discussions of suboptimal adolescent judgment, especially in complex decision-making contexts that include competing demands. Another key aspect of the PFC is that it has limited capacity. When fully engaged in one task involving effortful control, it has limited or no capacity to undertake additional tasks that require judgment. This has two implications: (1) having embarked on a plan to undertake a risky behavior, the execution of that plan may use up available PFC resources, compromising the individual's ability to adjust behavior when circumstances warrant; (2) engagement with other activities that demand PFC resources, such as maintaining status among peers, may make the limited PFC resource unavailable.

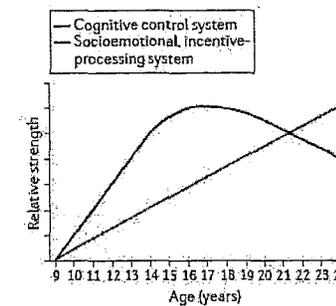
- *Governance of other brain systems.* In addition to the EF developments just described, the PFC shows development in a related function, the governance of other brain systems. This is also a gradual series of developments, as peripheral systems are brought more fully under the direction of the PFC. (This is the basis of the colloquial designation of the PFC and its projections to other brain regions as the “top brain.”) It is not until the early to mid-20s that the ability to delegate tasks efficiently to other brain systems, relieving the PFC of its role to maintain effortful control and freeing up PFC space for other demands.
- **Elevation of Socioemotional and Incentive Systems**
 - *Incentive systems:* Beginning in early to mid-adolescence, there is a sharp increase in what are termed “incentive systems” that entail complex neural circuitry, including emotional arousal (associated most strongly with the amygdala), sensation seeking (mediated by activity in the ventral striatum), and the heightened experience of rewards (mediated by a sharp increase in dopamine

² This is found in research on the structure of neural circuitry, in neuroimaging in active performance situations, and in cognitive and behavioral evidence. The last section of this overview provides a brief description of the scientific methods used in the research described here and throughout the summary.

receptors) – a coordinated limbic system often referred to colloquially as the “bottom brain”. These developments also coincides with (and may be partially explained by) significant changes in the hormonal balance associated with pubertal shifts, principally as an activation of the HPG-axis (hypothalamic-pituitary-gonadal) whose endpoint is the production of the steroids testosterone and estrogen (among others). These developments are observed behaviorally and cognitively as a significant increase in exploratory and sensation seeking behaviors during this same period of development when the governing capabilities of the PFC are limited (a mismatch described further below).

- o *Benefits over risks.* There is substantial evidence that the factors above lead adolescents to focus more heavily on the benefits of risky behavior than on the possible negative consequences of their actions. This is not because adolescents are incapable of understanding or evaluating possible consequences of risky behavior, which under conditions of “cold cognition” (where nothing arousing or incentivizing is activated) is roughly the same as adults. Rather, they value the potential benefits of the behavior more highly than adults, altering the risk/benefit ratio in favor of undertaking unwise risks.
- o *Peer susceptibility.* Among the most incentivizing and arousing contexts for adolescent risk behavior is the susceptibility to peers, sometimes in response to pressure (to maintain social status) but also because of the rewards (both behavioral and brain-activated) associated with peer influence. Under experimental conditions of peer presence, different neural circuits are activated than when performing a judgment task on one’s own. In combination with the limited PFC capabilities noted above, the impact of peers is substantially higher for adolescents than for adults.
- **Developmental Maturity Mismatch (DMM) (dual process models)**
 - o *Divergent developmental pathways:* The developmental pathways of the “top” and “bottom” brain diverge, with the limbic system advancing rapidly from early adolescence while the prefrontal system continues to grow, but at a slower pace, not reaching adult levels until the mid-20s. The term used to describe this is a “developmental maturity mismatch” (DMM), with significant consequences for

the levels of all kinds of risk behaviors during the adolescent period. A schematic figure illustrates this³



The behavioral and cognitive evidence converges with the developmental neuroscience evidence here, with highly similar age-risk behavior profiles for a number of areas, including crime (the age-crime curve), accidental injuries, serious driving mishaps, and so on. All show peaks by mid-adolescence, with gradual drop-offs until an asymptote in the mid-20s or so.

- o *Dual process models:* The DMM is one version of a more general finding, known as dual process models. The research here is that when performing a complex decision making task, there are two systems functioning. One is a rational, judgment based system that takes considerable cognitive effort. The second is a more automatic, “intuitive”, non-analyzed system that is accessed more often (because it requires less time and energy). This occurs for automated tasks (especially in domains where expertise is high) but also for “hot” cognition where there are competing demands – for example, from arousal and incentive systems.
- **Rehabilitative Prospects**

In addition to mitigation of sanctions owing to diminished culpability by reason of developmental immaturity, another implication of the developmental neuroscience evidence is that there are increased prospects for change among juveniles. This is supported by the evidence above that major changes continue during this period. In

³ This version is from Steinberg (2013, see fn 1), although it has appeared in several publications.

addition, there is very substantial evidence for neural plasticity by way of “synaptic pruning.” Simply put, neural circuitry is shaped by the individual’s experiences, such that the resulting mature circuitry is not settled until the mid-20s. (Some plasticity continues throughout life, but never again as strongly as in adolescence.) This potential for positive change was noted as a significant factor in recent Supreme Court decisions.

- **Age Cutoffs**

The evidence above, and additional developmental science evidence, point to the difficulty of identifying strict age cutoffs for various levels of maturity or for resolution of the DMM. The evidence does support the view that full maturity on average is likely to occur by the mid-20s. Clearly, the bright line of 18-years of age is a necessary legal definition, as it jibes more readily with common sense views of maturity and resulting culpability. But it does not suggest a line of argument that 17 is nearly 18, so the evidence does not really apply.

- **Note on Scientific Methodology**

The evidence above is an integration of several kinds of research methodologies, and it is useful to understand the sources of evidence.

- *Structural neuroscience*: This refers to evidence on the changing structure of the “static” brain, that is, when it is not performing a task. There are several methods for this, but the most prominent currently is diffusion tensor imaging (DTI), collected during a session of magnetic resonance imaging (MRI). This allows the characterization of the size of various parts of the brain, how they differ with age, and how they are connected with each other.
- *Functional neuroscience*: This assesses how the brain is working while it is engaged in a task, most prominently in functional MRI (fMRI) and various forms of electrical encephalography (EEG), such as evoked response potential (ERP). These use different physical methods (blood flow in fMRI, electrical signals in ERP), but they have the same goal, to elucidate the time and location of brain activity.
- *Cognitive and behavioral evidence*: In addition to the brain imaging evidence above, there are large amounts of behavioral and cognitive evidence that are relevant to the DMM, including self-reports of sensation seeking, impulsivity,

and risk judgments, among others, as well as performance on cognitive tasks that assess EF, risk-reward trade-offs, and others.

- *Convergence of findings*: With respect to the confidence that is warranted with respect to the findings described above, one of the most important criteria (used in this summary) is to focus on findings where there is a convergence of methods across methods and content. Specifically, where the same developmental pattern emerges from structural brain imaging, functional brain imaging, cognitive and behavioral evidence, and the epidemiology of risk behavior, we can have strong confidence in the major findings.

EXHIBIT C
PRESENTENCE FORENSIC CENTER REPORT

STATE OF MICHIGAN



JAMES J. BLANCHARD
Governor

DEPARTMENT OF MENTAL HEALTH
Thomas D. Watkins, Jr., Director

CENTER FOR FORENSIC PSYCHIATRY

P. O. Box 2060, Ann Arbor, Michigan 48106
Telephone: TDD and Administrative Staff (313) 429-2531
Clinical Staff (313) 429-0862

January 31, 1989

Michael J. Stern
Prosecuting Attorney
Courthouse Tower
Pontiac, Michigan 48053

and

Ronald M. Solomon
Defense Attorney
1301 West Long Lake Road
Suite 135
Troy, Michigan 48098

Re: BAZZETTA, Joseph C.
CFP #: 70977
Docket #: CR 88 86393 FC
Subject: Criminal Responsibility/
Diminished Capacity

Dear Counselor:

This is the first referral to the Center for Forensic Psychiatry of this 24-year-old, married, white male who was born on October 9, 1964, in Detroit, Michigan. Charged with one count of Open Murder under docket number CR 88 86393 FC in the Circuit Court for the County of Oakland, the defendant was referred to the Center on an order for diagnostic commitment dated September 30, 1988, by the Honorable Gene Schnelz, regarding criminal responsibility and diminished capacity.

Pursuant to MCL 330.1750, the defendant was informed of the purpose of the evaluation, of the manner in which it would be reported, and of the possibility that the examiner might be subpoenaed to testify in court. The defendant indicated that he understood and agreed to proceed with the evaluation by signing the Informed Consent form.

According to the Oakland County Sheriff Department Police records which were reviewed as a part of the evaluation, Joseph Bazzetta was arrested on June 15, 1988, with a charge of Open Murder concerning the death of Helen Marie Bazzetta. Numerous records were reviewed from the Warren Police Department as a part of the evaluation. These records indicate

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 3
Re: BAZZETTA, Joseph C.

He stated to police that he had returned to the residence at approximately 1:30 p.m. He had observed several Kroger shopping bags in the kitchen, folded them, and put them away. He left the residence at approximately 3:00 p.m. He indicated when he returned home, the residence was locked. Following his departure, he met his girlfriend, Michelle, and stated he had not returned on that date. Further, the defendant asserted he spent the evening with his girlfriend at the Sterling Hotel on Van Dyke. He returned to the residence later in the evening on August 2, 1983. There were relatives at the residence at that time, who were concerned regarding his stepmother's disappearance. Mr. Bazzetta acknowledged there had been a confrontation between he and his stepmother at the end of May regarding his girlfriend when his stepmother had observed them in the basement area of the residence. According to the defendant, the stepmother had instructed Michelle to leave the residence or she would phone the police. Reportedly, the victim was concerned about Michelle due to her background of having been employed as a topless dancer. Although the relationship had continued between the defendant and his girlfriend, the defendant indicated to police that he had not brought his girlfriend to the residence when his parents were at the home.

The victim's vehicle was located at Oakland Mall and after examining the vehicle, there were no visible indicators of forced entry. However, one object in the automobile was a shopping bag and a receipt from a Gells store in Warren, Michigan. No one at that store could identify the victim, although the receipt revealed purchases of shoes and golf balls.

On August 6, 1983, the son of the victim, Thomas Copeland, had information regarding his stepbrother (the defendant), suggesting his intention to kill the victim. The son of the victim further related that Mrs. Bazzetta had intended to have the locks at the residence changed due to her fear of the defendant.

On August 9, 1983, Officer Dabrowski spoke with Sgt. Lanfear of the Michigan State Police in regard to polygraph testing concerning the defendant and the disappearance of his stepmother. The results were inconclusive due to what was described as a deliberate distortion of the test. These results were discussed with the defendant. Additionally, a second search of the residence was conducted on August 10, 1983, although nothing was revealed of significance.

Mr. Joseph Bazzetta was interviewed on another occasion by the Warren Police Department on August 11, 1983, with his attorney. The defendant related that on August 1, 1983, he visited a friend, Mike Margiotta, and then proceeded to Macomb Community College. After spending approximately

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 4
Re: BAZZETTA, Joseph C.

thirty minutes at the community college, the defendant returned to his friend's home and was there until approximately 2:00 p.m. The defendant returned to his residence between 2:00 and 2:30 p.m., changed his clothes in order to prepare to go to Forest City. At approximately 2:30 p.m., the defendant indicated his father called, although he informed him, his stepmother had not yet returned to the residence. Shortly thereafter, the defendant left the residence and obtained an employment application at Forest City. Mr. Bazzetta then went to visit his girlfriend, Michelle. The two of them ate dinner together, later purchased a bottle of wine and then eventually spent the evening at the Sterling Motel. Mr. Bazzetta indicated that he checked out at approximately noon the following day, had an interview with his probation officer, made a car payment and returned his girlfriend to her residence. The defendant stated he returned to his residence at approximately 3:00 p.m., and wrote a note to his stepmother regarding alterations of a pair of slacks. He then left the residence for work at approximately 4:00 p.m. Following the defendant's having worked, he returned to the residence where he met with the victim's sister and her husband, who were there expressing concern regarding the victim's disappearance. Mr. Bazzetta was also questioned by police regarding any comments he might have regarding the polygraph test. The defendant indicated that he was having guilty feelings due to an argument that had occurred related to his biological mother's death. Additionally, the defendant reported an argument with his stepmother concerning his relationship with his girlfriend.. Although the defendant reported feeling enraged toward his stepmother to the point of physically assaulting her, he asserted that he had not physically acted out against her. Further, he indicated that he and his stepmother had been able to discuss their relationship and had assumed that the conflicts had been resolved. The defendant also said that he had made arrangements to discuss his life goals as well as the victim's disappearance with a psychologist. At this point in time, the defendant indicated his unwillingness to cooperate with a second polygraph examination. When the defendant was asked regarding alleged statements which the defendant had made threatening the victim, he denied ever having said "kill Helen, kill Helen."

An interview also occurred with Michelle Grandis, the girlfriend of the defendant. During this interview, Michelle related that she and the defendant had dinner on August 1, 1983, and during their conversation they had discussed the stepmother as well as Mr. John Bazzetta's return to the residence. Michelle also acknowledged the argument between the defendant and his stepmother regarding his relationship with her. Further, she acknowledged the stepmother's feelings concerning her disapproval of visits to their residence.

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 5
Re: BAZZETTA, Joseph C.

In an interview with Mark Skop and the Warren Police Department, Mr. Skop indicated that on an evening when he had allowed Michelle Grandis to spend the night at his residence, he overheard a conversation. Mr. Skop concluded that the defendant and his girlfriend may have been at home when the victim returned. Although Michelle Grandis did not spend the evening on July 31, 1983, with Mr. Skop, she informed him of her intention to use his residence as her alibi when she was to be interviewed by police detectives.

On April 14, 1988, the Oakland County Sheriff Department received a report from Laurie Ellsworth, regarding her husband's location of a shallow grave with a body in that location. Ms. Ellsworth reported to police that her husband had located the grave in a field located near Hickory Ridge Road. Mr. Ellsworth, the individual who had located the body, stated to police that the grave was located behind the Hickory Ridge Mobile Home Park. When police located the grave, they observed black plastic material rolled into the shape of what was described as a human body. The plastic at one end was tied with twine and a tan colored belt was also observed. Mr. Ellsworth indicated that he had first observed this sight approximately three years previous, although he had believed that someone had buried their pet at the site. Mr. Ellsworth also indicated that he had first began to dig at the site on April 9 and had located what he believed to be a leg bone at that time.

The Oakland County Sheriff Department interviewed Michelle Grandis Bazzetta on July 19, 1988, concerning the death of Helen Bazzetta. During this interview, Michelle indicated she had stayed at the Bazzettas' residence on July 31, 1983. At the time, Michelle indicated that both she and her husband (the defendant) were intoxicated. She stated that on August 1, 1983, her husband left the residence, while she remained in bed and later she could hear what was described as yelling in the upstairs of the residence. When Michelle went up the stairs, she observed the defendant strangling the victim with a belt from his robe. Further, Michelle indicated that she observed the victim on the floor in the kitchen and her husband later informed her that he had struck the victim with a bat. Michelle asserted to police that she did not assist her husband with his assault upon his stepmother. Further, she indicated that the defendant slapped her on two occasions, instructing her to quiet herself, informing her that they might both place themselves in some type of trouble. Michelle then said that her husband placed a plastic bag over the victim's head, wrapped her in a quilt and dragged her across the room. Michelle then indicated that her husband wrapped the victim in visqueen and carried the body of his stepmother in the back of his Honda Civic. Further, Michelle stated that her husband instructed her to drive his stepmother's automobile to the Oakland Mall. Michelle then related that on their way to Highland,

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 6
Re: BAZZETTA, Joseph C.

Michigan, they both stopped at Frank's Nursery and bought two plants with the intention of placing this foliage over the site where the body would be placed to camouflage the grave. Michelle then indicated that both she and her husband began to dig in a field near an area where she had previously lived. Following the hole being dug, Michelle indicated that her husband took Helen's body from the car and placed the body into the hole. Michelle and the defendant covered the body and placed plants on the top of the site in order to camouflage it. She then indicated that the two went to a motel that evening in Sterling Heights (August 1, 1983). Michelle also related that there was blood on the walls of the residence, which she assisted her husband in cleaning. Further, she recalled straightening a shelf and pieces of glass from a cup that had been broken. Additionally, Michelle related that the argument which had occurred between her husband and his stepmother was described as short, loud and quick. When Michelle was asked if she had knowledge regarding the defendant's intention to kill his stepmother, she indicated that her husband had frequently discussed his feelings regarding his hate toward her. However, she related to police that she could not recall his plan to kill his stepmother. The defendant's wife indicated that her husband was especially angry regarding his stepmother's comment that he may have caused the cancer which ultimately resulted in his biological mother's death. Although Michelle encouraged her husband to work toward the goal of being compatible with his stepmother, he reportedly found this goal to be unacceptable to him. Michelle indicated to police that on the third occasion of her meeting with the victim, she was in her husband's bedroom and the victim became enraged and ordered her from the residence, threatening to call the police. Police further directed questions to Michelle regarding possessions of the victim. She indicated to police that her purse was thrown in a dumpster in Detroit, following the defendant's taking money from the purse. Additionally, Michelle was asked if she had ever observed her husband chanting, "Kill Helen, kill Helen." However, Michelle indicated while he may have stated this, she herself had not overheard those statements. Police officers also questioned Michelle regarding a ring that had been taken from the victim's body and she acknowledged that the defendant had taken the ring previous to the body being wrapped in order for him to obtain money. In fact, several weeks later, the couple took the ring to Charles Kent Reaver and later sold the ring to a jewelry store in Ferndale for between \$100 to \$200. Additionally, Michelle stated that her husband had placed handcuffs that belonged to him on the victim in order to control her arms. The cord which the defendant allegedly used to strangle the victim was left on the victim's body. Michelle further indicated that she disposed of her clothing that she had worn on the day where they had buried the body in the same dumpster where the purse was discarded. Michelle asserted that she had not planned or assisted her husband in the death of the victim.

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 8
Re: BAZZETTA, Joseph C.

with me until Saturday a.m. Saturday night, I think I had to work. Helen's sister came over before I had to leave for work. I came home from work and picked up Michelle, she was usually staying at Bob's house in River Rouge. That night, we picked up good wine and mushrooms (one ounce) and went to see a Star Wars movie. I came home so late, I think it must have been Sunday morning. I snuck Michelle in anyways, she would have spent the night with me. Helen never comes into my room. I slept in the basement. Sunday was the 31st, Monday was the crucial day, Michelle was into me for being in the black arts, sometimes she would get upset with it. I had an altar in my room, drawing of the baphomet placed on certain side of the altar, black candle on right and left. She was kind of nervous when I did light that. We had that mass and it didn't work, magic didn't work. It was almost like a pushing factor because my ego had been shot. I had horrible dreams, I see red."

"Helen went golfing. I went to Mike's house to pick up coke. I did go to Macomb County Community College to see a counselor, I got forms and stuff like that. I had taken one class and was thinking about fall of 1983. Came back and Helen wasn't home, but Michelle had slept with me that night, Sunday night. I remember her coming in, 1:00 p.m., paying homage, asking for the God of darkness to give me strength if actually was going to go through with killing her (the defendant's stepmother). Looked through mirror on the west side. Face looked like changing, almost like a cave man, this was before Helen came back. I can see red. I don't know if I had had acid to see these things. Used coke for sure, all the mushrooms were gone. Got in trouble for quaaludes that week. Had sunshine acid, don't know what type of drugs I was doing."

"Then I remember standing in the basement. I remember Michelle crying. I remember being in a frenzy. I was pacing and I grabbed the baseball bat. I had a rope to my bathrobe. Before I went to check to see if in the kitchen (his stepmother). Then I might have gone back downstairs. What I initially did, was ran up the steps. Michelle was behind me. Then I hit her over the head. She was in the kitchen by the refrigerator. It almost felt like an adrenalin rush, that strength that I encompassed. She was dazed from the blow from the bat. Somehow, the bathrobe rope around her neck and I strangled her. She died. Michelle, I remembered her some animal, I don't know, just like bomb, no thoughts. I just see this picture of death, red, not that she was bleeding. Helen about three months earlier found out about satanic, she said I killed my mother by satanic practices. I don't know how she came across it."

"It was almost like a relief. I couldn't have gone the way I was going. I had this black spot. I had confessed it to God and I guess I had to

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 9
Re: BAZZETTA, Joseph C.

confess it to man."

"I wrapped her, I put plastic around her head, wrapped her in a blanket, wrapped her in black plastic. She (Michelle) knew it had happened, so we had to have her buried. I took my car and Michelle took Helen's car and we drove off and met at the Oakland Mall and dropped Helen's car off there. Eventually, found her car and tried to cover up what had been done. Then we drove out to where she was buried. We went to Frank's Nursery first. I got some foliage plants, greens that like to mix in with a forest. Then we buried her and went to a motel."

"The handcuffs, put on right after she was dead, must have kept her contained. I didn't wear them, mine."

"When I hit her with the bat, she (Michelle) was downstairs, when she eventually died, she was behind me. It was so fast. I was pretty pompous, this strength thing. LSD, that's what triggers in my mind. I don't remember if taking LSD or mushrooms. I was doing coke. I was looking down and seeing blood, red that whole day."

Mr. Bazzetta was then asked if he could further describe his description of red/blood and his alleged visual perception of this experience. He indicated: "I had so many dreams, cold sweat fearing for my life, that tunnel feeling. Like going down and feeling trapped. I triggered that effect through LSD. But I've had that even when not on LSD. It is a dream I still have. I see her face while strangling her, like a dark feeling, gives me chills, not natural."

"I had quaaludes after it happened, on the expressway. Everything was habit."

Mr. Bazzetta was also asked if he could describe his adjustment and what he had specifically felt following the alleged incident and he indicated initially that the experience was similar to his feeling when he was under the influence of acid, "Everybody out after me, closed feeling, other times la-de-da, darkest experiences were after the crime. Frame of mind, The Brothers of IOU, thought I was in the midst of it. There, but somewhere else. Rendition of fire on the beach of Santa Monica. Had to get away from occult. October of 1986, threw away satanic bible in California. Came back with psychedelic band, LSD. Broke up with band, stopped doing LSD. Trouble discerning whether spiritual or physical. Went to California to get away from Art Brooks."

Mr. Bazzetta was also asked during the course of the evaluation about

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 10
Re: BAZZETTA, Joseph C.

his relationship with his stepmother around the period of time of the alleged offense. He initially indicated that he had been involved in an argument with his stepmother during the months of "May or June, about mother. Remember bringing out a book, "Satan Will Curse You." Agreement between her and I, could live with each. She left (for Germany, July 2). Thought about black mass, laid naked on mushrooms, two weeks after Germany, went to St. Louis." The defendant went on to describe that the "black mass ritual involving fire, altar, naked woman (Michelle), face of Satan, inverted cross, knife for priest to worship four corners of the Earth. Call up dead ceremony, invoke energy to do this. We wanted her to die on the way to St. Louis. Done with book of satanic rituals and bibles. Thought it would work. Almost an embarrassment with Michelle. I convinced myself something more to me than met the eye. When she came into the house for the right thing to do in this situation (dark forces). Feeling of LSD, almost an invincible (feeling)."

The defendant indicated that following the alleged incident he began to appreciate the significance of his behavior when: ". . .first time was when going out to bury her, realization. More realization, 'What did I do, how am I going to cover this up?' After search parties, Kathy Barton, stayed high most of the time to cover up my feelings. Every day, more than too much." In regard to his consumption of drugs following the alleged incident, the defendant indicated as an example that he would typically consume, "one gram, six hour shift. During the time St. Louis, Germany, ounce between five to six people." Further, the defendant indicated that he was consuming "quaaludes bring down; acid for headaches."

Additionally, Mr. Bazzetta indicated that following the alleged incident he was: "Doing lines, pacing. (Thinking about) the bat in my hand, bathrobe, upstairs, then on the floor. Did it from behind. Upstairs once, then upstairs again. She said hello. All of a sudden, I had a bat in my hand and I was striking her. Rope at same time. I had this rope. I think I hit her with the left hand. Rope in right hand, two hands pulling on each side of rope. She wasn't moving after hitting with bat. Everything was so fast and violent."

Mr. Bazzetta was also asked if he could specifically recall what his consumption of drugs or alcohol was at the time of the alleged incident. He indicated: "I was probably doing lines. Always had a little chunk on the tray. Remembering doing it, doing the little rituals. All the time, was getting high, if I could do it, I'd do it. Twenty minutes before, (saw) face in mirror, stare at yourself in dimly lit room, changes in face." Mr. Bazzetta also stated that he had been thinking about Abbadon, the destroyer. Further, he stated that in the mirror, just previous to the alleged incident,

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 11
Re: BAZZETTA, Joseph C.

that he could view himself with a "raised forehead and more hair in mirror, horrifying almost."

Mr. Bazzetta was again asked if he could specifically recall his consumption of drugs or alcohol on the day of the alleged incident and he stated: "High, yes. Couldn't tell you a day there wasn't some drug. Usually smoked between seven to ten joints per day. Quaaludes. My mentality then was, it was Satan, drugs, wanted to believe. Told my sister, scaring her on way to grandparents, Mom died and I've been getting into this and maybe it's the right way. Nothing of value. No drug use now, coke use preferred. Acid or mushrooms, California, smoking heroin, try. Most drug use in Michigan."

Mr. Bazzetta went on to describe his relationship with his stepmother and father following the death of his biological mother. He indicated that his father: "Was drinking heavy again and smoking. Her friends smoked pot. I guess I hurt for my mom. Stepmother was a dirty woman, looked at my crotch, private secretary, quit when Dad married her." In further reflecting on the defendant's adjustment following the death of his biological mother, he indicated: "I went down the wrong path, if I kept Suzie. Once I started getting into coke and the devil practices, she was a christian. People said, I hated her with a passion. On the surface, I was a gentleman."

Mr. Bazzetta also pointed out during the course of the evaluation the significance of his relationship with his biological mother as well as his childhood. He indicated that he is the "youngest of four. Beautiful (relationship) with all." Further, Mr. Bazzetta described his childhood as: "Very positive, warm family. Mother got sick in 1978, breast and brain (cancer). Died at St. John's, fourteen years at the time. Mother, attached to her, characteristics similar to her, always her favorite. Great relationship."

Later in the interview, the defendant was asked if he believed there was anything else he could have done in order to prevent the alleged offense from having occurred. Mr. Bazzetta said in response, "Now I can tell you a hundred things." Further, in regard to his thoughts just previous to the alleged incident and his thinking in planning the alleged assault, Mr. Bazzetta indicated that he recalled that he had "picked up the bat (which he used to initially assault the victim) on way back upstairs." Further, he said that the bat was what he described as a trophy bat. Additionally, he referred to his thoughts concerning his having a bathrobe with a rope-type belt and using the material in a fashion which would be similar to having "tied in a regular tourniquet" fashion. Additionally,

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 12
Re: BAZZETTA, Joseph C.

Mr. Bazzetta indicated that in regard to his having struck his stepmother on the head: "Initially, after the final blow, surge of energy. Inside, I see like an evil me. Believed I was pompous enough that I thought I was Satan, done not of my will. Cursed her before with the name of the devil." In the years following the alleged incident, Mr. Bazzetta indicated that occasionally he would discuss the alleged assault upon his stepmother to his girlfriend, who was later his wife. At various times, both the defendant and his wife considered reporting their behavior to the Warren Police Department. In particular, he noted these thoughts occurred during the "most stressful times in life." Following the alleged incident, the defendant said that he experienced nightmares at the motel where the defendant and his girlfriend stayed, although he "took coke that time." Further, the defendant related that "It was bothering me, that some days on top of the world."

When Mr. Bazzetta was asked if he had ever received any outpatient or inpatient psychotherapy, he indicated that he had received outpatient psychotherapy from a therapist who he identified as Kathy Frank-Barton, MSW, CSW. Mrs. Frank-Barton was employed at the Midwest Mental Health Center at the time that Mr. Bazzetta sought treatment. He related that he had what he described as several sessions with this social worker regarding the difficult time he was experiencing following the alleged incident. Phone consultation with the previous therapist occurred on January 18, 1989. Initially, Mrs. Frank-Barton said that, to her knowledge, no records regarding her treatment of the defendant are available. The apparent reason for the lack of treatment records, according to the social worker, related to the Midwest Mental Health Clinic closing around the same period of time that the defendant had sought counseling services. Therefore, Mrs. Frank-Barton provided information to this evaluator on the basis of her memory of her contacts with him. The social worker stated that the defendant had been referred to her by someone from the court system, although she believed that the defendant's father initiated contact with the clinic for services. Further, Mrs. Frank-Barton stated her contact with Mr. Bazzetta followed his having taken the lie detector test. She described the defendant as having knowledge and background with cult practices. Further, she stated that Mr. Bazzetta had placed a curse on his stepmother as a part of his occult practices and at the time of the curse, did not underestimate the power of the occult in regard to his curse. Mr. Bazzetta reportedly was coping with his sense of guilt for his stepmother's disappearance and according to Mrs. Frank-Barton, was experiencing guilt due to his curse. The social worker indicated that throughout her contact with the defendant, he asserted that he had no involvement regarding his stepmother's death or disappearance. An additional area of concern at the time, was the defendant's relationship with his girlfriend. Mrs. Frank-Barton indicated

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 13
Re: BAZZETTA, Joseph C.

that Mr. Bazzetta seemed to be frightened when he talked about his bizarre experiences associated with the occult practices. However, she also described his using various spells for self-motivated interests. For example, she recalled that the defendant would invoke the alleged powers of a spell in order to pass a test at school, toward the goal of avoiding studying and additionally would use these same alleged powers to accomplish the goal of getting ". . .out of trouble or consequences." Mrs. Frank-Barton was asked if she ever identified or observed any symptoms which would suggest psychotic thinking or evidence of mental illness. The social worker indicated that she "didn't think he was crazy, had never thought." Further, she also believed the defendant to be what she described as harmless. In regard to his relationship with his girlfriend at the time, the therapist indicated that it was a ". . .fairly new and positive in terms of negative things" for the defendant. The therapist indicated that to the best of her recall, she saw the defendant either three or four times in outpatient psychotherapy. She summarized his involvement as not being "terrifically motivated" for treatment.

Mrs. Frank-Barton stated that Mr. Bazzetta described to her various dreams and visions which she assessed as astro perjection experiences versus an actual physical experience, according to the therapist. In this social worker's opinion, the experiences that the defendant described were what she assessed as being similar to dreaming and visual perceptual experiences. Further, it was the therapist's opinion that the defendant never presented information that suggested that he acted out his aggressive thoughts or feelings, but rather placed hexes and spells on others. Mrs. Frank-Barton did recall that the defendant placed a curse on his stepmother. She described their relationship as exhibiting a great deal of conflict and he resented her, which resulted in a great deal of verbal arguments. In regard to the curse on his stepmother, the social worker indicated that it was her belief that the defendant placed the curse on her ". . .in a moment of rage, that's how he acted out his anger toward her."

Mrs. Frank-Barton described her assessment of the defendant as: "Pretty typical adolescent, arrogant, trying to be cool, want everyone to love me. Not atypical from an upper class family. Not different than adolescents dealing with frustration and anger." In regard to the defendant's involvement with the occult, the social worker did indicate that her client had involved himself ". . .much deeper than most kids." During their sessions, it was the social worker's opinion that the defendant "needed to free (himself) from occult things. Going about positive alternatives and more constructive. How to make those choices, needed direction. Spirituality was the focal point (of the sessions)." However, the therapist noted that the defendant quickly lost his motivation and began to exhibit what she described as

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 14
Re: BAZZETTA, Joseph C.

denial on the part of the defendant in dealing with these conflicts.

Again, Mrs. Frank-Barton was asked if she ever observed indicators or heard the defendant describe any psychotic behaviors and she stated during the course of the phone consultation, "Not at all." Further, she indicated that the defendant was "no more characterological than any other teenager." Further, as previously indicated, the therapist related that the defendant "never described that I can recall, physical aggression." In many ways, the therapist viewed the defendant at that time in his life as a "brat, didn't want to study, didn't want to work." In regard to the defendant's relationship with his stepmother at the time of her disappearance, the therapist indicated that while the defendant had experienced a great deal of conflict between he and his stepmother, they were "getting along fine when she disappeared." Further, the social worker stated that the defendant's "behavior was consistent from appointment to appointment. His mood improved." However, she did note that the defendant felt "blown away" in reaction to his stepmother's disappearance. Despite his reported emotional reaction to her disappearance, the therapist related that there was nothing erratic presented in terms of his behavior, and in summary, "If (the defendant was) on the con, he did a wonderful job."

Joseph Bazzetta was interviewed at the Center for Forensic Psychiatry on October 18, 1988, for approximately five hours in addition to psychological testing. At the time, the defendant indicated that he was in the custody of the Oakland County Sheriff's Department. He presented as a tall, medium-built, white male who was dressed in a white tee shirt with standard-issued jail clothing and looked to be his stated age of 24 years. Throughout the interview, Mr. Bazzetta was talkative toward the examiner and related in an open fashion. He reported his pattern of sleep and appetite as adequate and stable. Further, he indicated adequate adjustment since being incarcerated on June 15, 1988, and further related that he occupies his time by reading and exercise. He denied current suicidal or assaultive ideation. Mr. Bazzetta was well oriented in all spheres and displayed no deficits in attention or in concentration. He did not report crying spells or other symptoms suggestive of significant depression. Mr. Bazzetta reported that he is not currently taking any medications. He reported no current medical concerns, with the exception of hemorrhoids. The defendant appeared to be functioning in the above average range of general intellectual functioning. He displayed an above average fund of general information with good abstract reasoning abilities and social judgment skills. His speech was coherent, goal directed, and relevant and free of such signs of an underlying thought disorder as loosening of associations or gross illogic. Mr. Bazzetta denied any grandiose ideas, although did indicate some paranoid fears regarding the prosecutor who is handling his case.

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 15
Re: BAZZETTA, Joseph C.

Further, the defendant denied any delusions or bizarre beliefs. He denied that he was experiencing hallucinations, and there were no indicators of such experiences suggested by his behavior. There was an absence of significant clinical depression, elation or euphoria, irritability or rapid shifts of emotional state. The defendant did report having experienced in the past demonic control as well as perceptual experiences, primarily visual related to his occult practices. However, he indicated that he has not experienced these perceptions or beliefs since approximately October of 1986 when he made the decision to throw his satanic bible away in California. Additionally, Mr. Bazzetta described visual perceptual experiences which related to his heavy abuse of drugs and alcohol beginning at the age of approximately 16 years. In summary, the defendant appeared to be mildly anxious in reaction to his current legal situation, although in excellent contact with reality.

It is this examiner's opinion that the defendant's discussion regarding his visual perceptual experiences as well as having been under demonic control are characteristic of his attempt to explain his behavior. In particular, it is interesting to note that the defendant's only reference to having believed he was experiencing demonic control was at the time just previous to the alleged incident. It is this examiner's opinion that the defendant's explanation is toward the goal of avoiding responsibility. This pattern would be consistent with the report given by his outpatient psychotherapist just following the disappearance of his stepmother. Additionally, even according to the defendant's own self-report, he had become angry and disappointed that his previous curse upon his stepmother had not been successful. As previously indicated, the defendant related, "Thought it would work. Almost an embarrassment with Michelle." It was the defendant's hope that his stepmother would be involved in a plane crash on her return from St. Louis, Missouri. Upon initial presentation, although it may appear that the defendant's attempt to explain his behavior in regard to demonic control and various visual perceptual experiences are indicators of psychotic thinking, there are no indications based upon Mr. Bazzetta's presentation which would suggest that he has ever experienced delusional beliefs or hallucinations. Further, according to the defendant's outpatient psychotherapist, she never observed any indications of psychotic thinking and, in fact, viewed the defendant as "no more characterological than any other teenager." Additionally, the Minnesota Multiphasic Personality Inventory (MMPI) was also administered to the defendant as a part of the evaluation. The profile of Mr. Bazzetta indicates a valid profile with no evidence of psychosis or symptoms of mental illness. In summary, there were no indicators which would suggest any active thought disorder either during the interview or in the psychological testing that was completed as a part of the evaluation. As previously indicated, the defendant did

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 16
Re: BAZZETTA, Joseph C.

not refer to the influence of Satan during the course of the interview except in reference to the alleged offense. It is this examiner's opinion that the defendant's version in regard to the influence of his demonic control at the time of the alleged incident is self-protective as well as a means toward explaining his behavior. Mr. Bazzetta presented as an individual who was in excellent contact with reality at the time of the evaluation, and, according to his previous therapist, who saw the defendant shortly after the alleged incident, he was described as a typical adolescent who attempted to use his spells and hexes toward the goal of avoiding responsibility as well as avoiding the consequences to his behavior. Additionally, according to the defendant's own self-report, he further presented as an individual with a pattern of drug and alcohol abuse.

While the defendant was able to acknowledge his sadness regarding the death of his biological mother, he also referred to the impact of his relationship with his stepmother in regard to his biological mother's death. Specifically, the defendant referred to his stepmother, during the course of an argument in either May or June of 1983, having accused him of causing the death of his biological mother. This argument occurred several months previous to the alleged incident, and the defendant recalled his "bringing out a book, Satan will curse you," in reaction to her accusation. While on the surface, the defendant reportedly came to an "agreement between her and I, could live with each other," the defendant continued to experience anger and resentment regarding his stepmother's accusation. It was at this point during the evaluation that the defendant became tearful, both in regard to the accusation as well as his continued feelings related to the loss of his biological mother through death. According to the defendant's self-report, he placed a curse upon his stepmother for her accusation against him. While on the surface, this practice might appear unusual, it was not atypical, according to his outpatient psychotherapist at the time, who noted his pattern of placing curses and hexes upon people apparently in hopes of avoiding responsibility for or consequences of his behavior. Additionally, according to the social worker's report, the defendant also used his occult practices as a means toward acting out his aggression, especially toward his stepmother.

Other materials were also reviewed as a part of the evaluation and included drawings that the defendant produced around the period of time of the alleged incident as well as music which he wrote titled, "Maulkeeps," and parts of two books titled, "The Satanic Bible" and "Magick." While these materials were of interest in consideration of the defendant's interests around that period of time, they do not, in this examiner's opinion, suggest evidence of mental illness. Rather, they provide insight into the practices of those individuals who espouse interest in the occult.

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 17
Re: BAZZETTA, Joseph C.

Concerning the matter of criminal responsibility, MCL 768.21a indicates that a person is legally insane if, as the result of mental illness or mental retardation, as defined in MCL 330.1400a, "That person lacks substantial capacity to either appreciate the wrongfulness of his conduct or to conform his conduct to the requirements of the law." The definition of mental illness so indicated is the existence of "A substantial disorder of thought or mood which significantly impairs judgment, behavior, capacity to recognize reality or ability to cope with the ordinary demands of life." This section also indicates that "A person who is under the influence of voluntarily consumed or injected alcohol or controlled substances at the time of his alleged offense shall not thereby be deemed to have been legally insane." While the defendant reported certain visual perceptual experiences previous to the alleged incident, these experiences would not, in this evaluator's opinion, suggest symptoms of mental illness. After a thorough review of all the available information, the defendant's presentation at the time of the evaluation, his report of his behavior around the time of the alleged offense, and consultation with his former psychotherapist who treated Mr. Bazzetta at around the period of time of the alleged offense, it is this examiner's opinion that Mr. Bazzetta was not mentally ill at the time of the alleged offense. Further, a review of the defendant's history prior to the alleged offense does not reveal an indication of a history of such a substantial disorder of thought or mood. In fact, there was no indication that the defendant has ever presented with a history of mental illness as defined by statute. The defendant did not describe impairment in reality testing during the time period preceding the alleged offense or during the alleged offense. He did present as an individual who, at the time of the alleged offense, exhibited patterns of dependency on drugs and alcohol and an interest in occult practices. However, as previously indicated, these patterns do not indicate mental illness as defined in the statute. It was also the opinion of this examiner that the defendant did not lack substantial capacity to either appreciate the wrongfulness of his conduct or to conform his conduct to the requirements of the law as a result of mental illness at that time. For example, in regard to Mr. Bazzetta's appreciation of the wrongfulness of his behavior, his self-report of purchasing foliage at Frank's Nursery while enroute to the eventual burying site of his stepmother, would certainly reveal his attempt toward covering up his behavior. Additionally, according to the defendant's self-report, he had previously checked in the kitchen to discover whether his stepmother was there in order to plan for his assault and eventual death of her. Additionally, Mr. Bazzetta referred to ". . . asking for the God of darkness to give me strength, if actually was going to go through with killing her." As previously indicated, Mr. Bazzetta's use of practices involving spells and hexes was a pattern directed toward the goal of avoiding responsibility and consequences to his behavior.

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 18
Re: BAZZETTA, Joseph C.

For example, as previously indicated, Mr. Bazzetta would use his alleged power from occult practices to avoid studying for exams. According to the defendant's own self-report, there are numerous indicators of the defendant's awareness of the criminal nature of his behavior. For example, the defendant's use of handcuffs in order to control his stepmother's movement following the alleged assault, his wrapping her body in a quilt as well as visqueen, his transporting the victim to a remote area, and as previously indicated, his purchase of green foliage to match the greenery in the area of the grave are all indicative of Mr. Bazzetta's appreciation of the criminal nature of his behavior. The defendant reported a loss of volitional control in regard to his initial assault upon his stepmother. This report is not consistent with the organized and goal-directed quality of his behaviors and activities at the time of the alleged offense. It should be noted that according to the defendant's own self-report, he had consumed controlled substances previous to the alleged offense which the defendant described as "doing lines," which referred to his use of cocaine. Specifically, immediately preceding the alleged incident, as previously indicated, the defendant recalled "doing lines, pacing, the bat in my hand, bathrobe upstairs. . . remembering doing it during the little rituals. All the time, I was getting high, if I could do it, I'd do it." As indicated in the statute, Mr. Bazzetta would not be exculpable for his behavior based on his consumption of controlled substances. In summary, and for the above stated reasons, it is the opinion of this examiner that Mr. Bazzetta does not meet the Michigan statutory criteria for being considered legally insane at that time; he rather appears to have been criminally responsible.

With respect to the issue of diminished capacity, it is this examiner's understanding that the question of diminished capacity refers to the defendant's capacity to form specific intent. Possible factors of diminished capacity considered during the evaluation included intoxication, mental illness, brain damage, mental retardation and psychological and/or environmental sources of stress not amounting either to mental illness or mental retardation. As previously indicated, there was no evidence during the evaluation to indicate that the defendant is mentally ill or mentally retarded as defined in the statute. Further, there were no indicators to suggest a diagnosis of brain damage at the time of the evaluation or at any time based on the defendant's reported history. As previously indicated by the defendant's own self-report, Mr. Bazzetta's past difficulties include patterns of drug and alcohol abuse. These patterns based on Mr. Bazzetta's self-report are not indicators of mental illness. With regard to stresses that the defendant had been experiencing around the time of the alleged offense, according to the defendant's own self-report, he had been angry with his stepmother, and in part this had related to an argument during the months

Michael J. Stern
Ronald M. Solomon
January 31, 1989
Page 19
Re: BAZZETTA, Joseph C.

of May or June previous to the alleged offense. However, Mr. Bazzetta's feelings in regard to the argument are understandable and again, do not indicate signs of mental illness. With respect to Mr. Bazzetta's level of intoxication or use of controlled substances at the time of the alleged offense, as previously indicated according to the defendant's own self-report, he had voluntarily consumed cocaine to the best of his memory just previous to the alleged incident. He also indicated that this was not an unusually large amount of drugs for him to ingest around that period of time, but rather a fairly typical amount. The question of diminished capacity is not whether a defendant's capacity was simply diminished or limited for whatever reason, but whether his capacity was so diminished as to actually prevent him from forming the requisite intent. While the fact of intent is a question for the trier of fact, other aspects of the defendant's self-report as well as other available information regarding the defendant's behavior suggest that he was able to perform complex, sustained, purposeful, and goal directed activities at the time of the alleged incident. He stated he took the trophy bat to strike the victim from behind and his bathrobe belt to strangle her. He wrapped her body several times with various material and contained her hands by handcuffing her. He bought foliage to match the greenery in the area and buried her in a remote location away from his home. While the defendant referred to performing a ritual through the occult practices, it is this examiner's opinion that the ritual for the defendant provided a later explanation of his behavior and an attempt toward avoiding consequences to his behavior. In light of these considerations, there is no basis for an opinion by this examiner that Mr. Bazzetta would have been incapable of forming the intent elements at the time of the alleged offense. If the trier of fact should find that he was engaged in criminal behavior on the occasion in question, it is the opinion of this examiner that the elements of diminished capacity do not apply to the current alleged offense for this defendant.

Respectfully submitted,


Patricia L. Watson, Ph.D.
Certified Forensic Examiner
Licensed Clinical Psychologist
Assistant Director, Evaluation Unit

PLW/ckw

EXHIBIT D
EXTENDING SENTENCING MITIGATION FOR DESERVING YOUNG ADULTS
AUTHOR: Kelsey B. Shust

Lexis Advance®

Document: COMMENT: EXTENDING SENTENCING MITIGATION FOR DESERV...

COMMENT: EXTENDING SENTENCING MITIGATION FOR DESERVING YOUNG ADULTS, 104 J. Crim. L. & Criminology 667

Copy Citation

Summer, 2014

Reporter

104 J. Crim. L. & Criminology 667 *

Length: 16921 words

Author: Kelsey B. Shust*

* J.D., Northwestern University School of Law, 2014; B.A., University of Iowa, 2010. Sincere thanks to the talented Journal of Criminal Law and Criminology editors, especially James Crowley, Daniel Falchney, Timothy Fry, and Jonathan Jacobson. For my parents and Brian.

Text

[*668]

Introduction

Age, rather than death, has come to define the Supreme Court's Eighth Amendment jurisprudence. [1.4] In three decisions over the last nine years, the Court has significantly altered the criminal sentencing landscape by doling out constitutional, categorical discounts on capital and noncapital punishment for those who had not yet celebrated their eighteenth birthdays at the time of their crimes. [2.4] The Court rejected capital punishment for those under eighteen, [3.4] then life without parole in nonhomicide cases, [4.4] and most recently, the Court held that the Eighth Amendment prohibits mandatory life without parole sentences. [5.4] Each decision has turned on attributes, or factors, inherent in youth that the Court has found make those under eighteen less culpable for their crimes under the Eighth Amendment. [6.4] They [*669] include offenders' (1) lack of maturity and underdeveloped sense of responsibility, (2) vulnerability to negative influences and limited control over their environment, and (3) lack of characters that can be rehabilitated. [7.4]

These factors have not been surmised simply from precedent or common sense. Rather, the Court has relied on scientific and sociological studies to support its finding that these three characteristics are inherent among those under eighteen, [8.4] reduce that group's culpability, and accordingly reduce the punishments that society can justly impose. [9.4] But the Court's reliance on such evidence overextends its usefulness. Neuroscientific and psychological data on which the Court has relied does not identify a bright-line age at which these three factors no longer lessen culpability. [10.4] Their resulting impact on penological justifications supporting legitimate punishment, which have also been central to the Court's holdings, similarly does not hinge on an offender having a particular number of candles on his birthday cake. The Court itself has previously recognized the shallow truth of age, holding youth to be "more than a chronological fact" and instead "a time and condition of life when a person may be most susceptible to influence and to psychological damage." [11.4] Still, since *Roper v. Simmons*, the Court has resolved to categorically and increasingly mitigate punishment based on youthfulness via the Eighth Amendment only when offenders are under eighteen. While [*670] the Court in *Roper* acknowledged and discounted the limitations of its bright-line rule, [12.4] the Miller Court did not address the issue.

This Comment aims to seize on the Miller Court's silence and demonstrate the inequity in drawing a bright line at eighteen for considering youthfulness in mitigating punishment under the Court's logic. Given both the scientific impossibility of identifying a precise age at which characteristics of youthfulness cease, and the Court's repeated recognition that these very factors impact culpability and preclude just punishment, [13.4] the current approach cannot stand. Instead, this Comment argues that if the way to address the increasingly punitive orientation of criminal justice remains one of protecting youthful defendants

through the Eighth Amendment, then the same consideration of youthfulness that has been deemed constitutionally relevant for those under eighteen must also be available for equally youthful [14.4] defendants over eighteen to assert when they face equally harsh and irrevocable sentences.

While considerable literature discusses sentencing policy for young offenders, this Comment focuses on the Supreme Court's trio of categorical decisions to examine the justifications for a bright-line rule and, ultimately, to lend support for defendants' abilities to seek out the mitigating force of youthfulness up to age twenty-five. By continuing to categorically exclude those over eighteen in homage to society's traditional demarcation point of adulthood, the Court loses sight of the exceptionality of criminal punishment compared to other rights-allocating areas of the law, such as voting. Furthermore, setting a bright line at eighteen unjustly disregards offenders over eighteen who, in many instances, would likewise be deemed less responsible under the scheme of justifications the Court has set forth.

Following this Introduction, Part I of this Comment provides background regarding the relationship between youthfulness and culpability. First, it sketches its historical foundations, describing both the [*671] early common law infancy defense and the rise and fall of the rehabilitative juvenile justice model. Second, it describes the biological underpinnings of youthfulness that have been documented through psychological and neuroscientific study. Third, it shows how the Supreme Court has given this evidence Eighth Amendment significance.

Part II then raises three key issues with the Court's bright line at eighteen. It highlights the lack of scientific support for a categorical line, describes the Court's improper comparison to other rights-allocating areas of the law, and demonstrates how penological justifications for punishment can be similarly undermined for youthful defendants over eighteen.

Finally, Part III argues that the Court should make the mitigating effect of youthfulness available to youthful offenders between the ages of eighteen and twenty-five by recasting its categorical line as a presumption. Under such a scheme, defendants up to eighteen years old would be irrebuttably presumed youthful, while defendants between the ages of eighteen and twenty-five could seek to show that they meet the Court's "youthful" criterion and likewise deserve protection from irrevocable sentences.

I. Background

CENTURIES OF RECOGNIZING THE IMPACT OF YOUTHFULNESS ON CULPABILITY

The correlative relationship between youthfulness and culpability has long been recognized through the concept of infancy. [15.4] By the seventeenth century, English common law held that children under the age of seven could not be punished for any crime. [16.4] Those aged seven and under were irrebuttably presumed to lack the mental capacity to form the criminal intent necessary for justly imposing punishment. [17.4] While individuals [*672] between ages seven and thirteen were additionally presumed incapable of forming that intent, [18.4] proof that the child knew his act was wrong could rebut the presumption. [19.4] After the U.S. Bill of Rights was adopted, the common law rebuttable presumption of incapacity to commit felonies for youth between ages seven and thirteen remained in force, but "adult" punishments, such as execution, could theoretically be imposed on anyone over the age of seven. [20.4]

These gradations based on age reflected the importance of a guilty conscience for criminal punishment. To constitute a complete crime, "cognizable by human laws," Blackstone wrote, "there must be, first, a vicious will; and secondly, an unlawful act consequent upon such vicious will." [21.4] If a jury confronted a defendant incapable of committing a felony, Sir Matthew Hale advised that it could find that he committed the act but was not of sound mind, or that he could not discern between good and evil. [22.4] Determining culpability in this way reflected the understanding that developmental differences prevented very young offenders from forming criminal intent. [23.4] When offenders then passed the minimum threshold of competence, their diminished responsibility could still render them less culpable. [24.4] Defendants aged seven to fourteen were presumed to possess a natural incapacity to be guilty of crimes, which the state could rebut upon [*673] individualized determinations of capacity. [25.4] For this group of defendants, therefore, "the capacity of doing ill, or contracting guilt," as Blackstone put it, was "not so much measured by years and days, as by the strength of the delinquent's understanding and judgment." [26.4]

Around the turn of the nineteenth century, recognition of youth developmental differences took on a new character. Progressive reformers, [27.4] animated by worsening household conditions and scholarly reconceptualization of childhood, [28.4] sought to establish separate courts to adjudicate young offenders [29.4] - sometimes as old as twenty-one. [30.4] The new courts' aim was to treat young offenders rather than punish them. [31.4] As such, a concern for youth welfare took precedence over concerns with their offenses. [32.4] The courts exercised states' *parens patriae* authority [33.4] to [*674] emphasize treatment, supervision, and control in place of traditional, punitive criminal procedures. [34.4] Because punishment and blameworthiness largely had no place in this rehabilitative model of justice, issues regarding youthfulness and culpability received little attention for much of the twentieth century. [35.4]

That changed by the late 1980s with skyrocketing juvenile crime rates. Between 1980 and 1994, the number of juvenile arrests for violent offenses climbed 64% and juvenile arrests for murder specifically jumped 99%. [36.4] Media coverage of crime also exploded, [37.4] and state legislatures responded in near universality. [38.4] Over a period of just three years from 1992 to 1995, forty states enacted laws making it easier to prosecute juveniles in adult [*675] criminal court, [39.4] and forty-seven states and the District of Columbia made changes in their laws concerning juvenile crime. [40.4] Although many observers mark the beginning of the end of the traditional juvenile court decades earlier when the Supreme Court decided *In re Gault*, spiking juvenile crime rates further upended support for rehabilitative ideals [41.4] and amassed calls of "adult time" for "adult crime" [42.4] - especially as fear swirled regarding an entirely different breed of so-called super-predators. [43.4] Taken together, the new legislative schemes represented a "fundamental shift" in juvenile justice away from rehabilitating offenders and toward punishing [*676] them. [44.4] Over the coming several years, however, many began to question whether the "get-tough" laws and increasingly "adult" punishments were actually making the public safer. [45.4]

B. FINDING YOUTHFULNESS IN PSYCHOLOGY AND NEUROSCIENCE

As public debate surrounding youth prosecutions swelled, some researchers looked toward youth development with renewed interest. [46.3] In the decades laying bare the promise of the rehabilitative juvenile justice model, both developmental psychologists and neuroscientists exploring the practice of brain imaging honed in on changes in brain composition and behavior occurring between adolescence and adulthood.

Psychologists identified a number of important distinctive qualities attributable to youth. For example, psychologists found early adolescence to be accompanied by increased susceptibility to peer pressure. [47.3] Adolescents were also found to attach more weight to short-term consequences, [48.3] and they did not extend projections for consequences as far [49.3] into the future as did older youth. [49.3] Psychologists additionally discovered evidence suggesting that adolescents may be driven more by rewards than by risks than "adults" are. [50.3] Moreover, psychologists found empirical support for the theory on adolescence first articulated by Erik Erikson, [51.3] which suggested that moving into adulthood involved changes in the way young people formed their identities. [52.3]

In the field of neuroscience, research began to depict adolescence as a period of continued brain growth and change. A pair of neuroimaging studies in 1999, for instance, showed continued development through adolescence of the brain's frontal lobe [53.3] - essential for such functions as anticipating consequences, planning, and controlling impulses. [54.3] Gray matter in the frontal lobe was shown to spike just prior to adolescence [55.3] and [67.8] then decrease between adolescence and early adulthood [56.3] in a process known as pruning. Like sculpting a tree, pruning mirrors "cutting back branches [to] stimulate[] health and growth." [57.3] The gray matter reduction is accompanied by a white matter increase. [58.3] Through the cellular maturation process known as myelination, white matter development is said to improve cognitive functioning. [59.3] Because the samples for these studies were limited in age, however, they could not support conclusions about the endpoint of brain maturation. [60.3] When a team of neuroscientists finally mapped the trajectory of brain maturation using a sample of individuals ranging in age from seven to eighty-seven, they observed gray matter density changes continuing beyond adolescence into adulthood. [61.3]

Psychology professors Laurence Steinberg and Elizabeth Scott adopted the thrust of these and other emerging neuroscientific studies showing brain maturation to continue into early adulthood as part of their influential 2003 article, *Less Guilty by Reason of Adolescence*. [62.3] Combined with psychological research, discoveries regarding the brain systems implicated in judgment and impulse control provided the basis for Professors Steinberg and Scott's argument that youth should not be held to the adult standard of criminal responsibility. [63.3] The authors, renowned in [67.9] their fields, asserted that youth culpability should be mitigated for those under eighteen due to adolescents' diminished decisionmaking capacities, their relatively lower ability to resist coercive influences, and the fact that their characters still undergo change. [64.3] Although the professors acknowledged that "we are a long way from comprehensive scientific understanding in this area, and research findings are unlikely to ever be sufficiently precise to draw a chronological age boundary between those who have adult decision-making capacity and those who do not," [65.3] they concluded that sufficient evidence mandated a change in juvenile punishment. [66.3]

C. ATTAINING EIGHTH AMENDMENT SIGNIFICANCE

1. Roper v. Simmons

In 2005, psychological and neuroscientific evidence-based explanations for youthfulness found their way into Supreme Court jurisprudence. The Court for the first time endorsed scientific findings relating to human development in support of reducing youth culpability in *Roper v. Simmons*, the case of a teenager sentenced to capital punishment for murder. [67.3] Christopher Simmons sought postconviction relief after the Supreme Court decided *Atkins v. Virginia*, [68.3] holding executing a mentally retarded person to be unconstitutional cruel and unusual punishment. Despite the grisly details of his crime, [69.3] Simmons argued that the same reasoning in *Atkins* prohibited the execution of a juvenile who committed his crime when he was younger than eighteen. [70.3] The Supreme Court [68.0] reconsidered precedent and agreed. [71.3] In an opinion written by Justice Anthony Kennedy, the Court held that the objective indicia of consensus then provided sufficient evidence that society views juveniles as "categorically less culpable than the average criminal." [72.3] Juveniles up to the age of eighteen, according to the Court, comprise a certain class of offenders for which the death penalty may not be imposed. [73.3] Because Roper extended to sixteen- and seventeen-year-olds the same protection that *Thompson v. Oklahoma* provided for those under sixteen, the greatest significance of the Court's opinion might have come not from what the Court said, but how it said it.

Specifically, in describing the class of offenders to whom capital punishment can no longer be imposed, the Court relied on three differences between "juveniles under 18" and "adults" - lacking maturity, being vulnerable to negative influences and outside pressures, and not having as well-formed characters. [74.3] These findings, according to the Court, reflected both what "any parent knows" and what scientific and sociological studies tend to confirm. [75.3] As a result of these characteristics, young offenders were held to be less blameworthy than adults who commit similar crimes, less likely to be deterred by the prospect of death sentences, and less likely to be irretrievably depraved. [76.3]

While the Roper Court differentiated "juveniles under 18" from "adults," it acknowledged the limitation of such a categorization. Justice Kennedy wrote, "the qualities that distinguish juveniles from adults do not [68.1] disappear when an individual turns 18." [77.3] Still, the Court insisted upon drawing a bright line for ruling out the death penalty as disproportionate punishment, looking beyond criminal punishment to suggest a national consensus fitting within the Eighth Amendment rubric. Since eighteen is "where society draws the line for many purposes between childhood and adulthood," the Court concluded, so too it is where "the line for death eligibility ought to rest." [78.3] The Court thus rejected an individualized standard of culpability based on youthfulness in favor of a categorical rule to protect all offenders below the age of eighteen.

2. Graham v. Florida

The Court cemented its bright line for mitigating unduly harsh punishment in *Graham*. There the Court considered a challenge to a mandatory life sentence for a seventeen-year-old who committed a pair of nonhomicide felonies. [79.3] In another opinion written by Justice Kennedy, the Court found that Terrance Jamar Graham's life-without-parole punishment constituted cruel and unusual punishment based on three related concerns: (1) the offender's limited culpability, (2) the particular severity of life imprisonment without parole, and (3) the failure of penological theories of retribution, deterrence, incapacitation, and rehabilitation to justify such punishment. [80.3]

For the first consideration, the *Graham* Court relied on *Roper*'s holding that juveniles are less culpable and therefore less deserving of the most severe punishments because they lack maturity, are more vulnerable to negative influences and outside pressures, and their characters are not as well-formed. [81.3] The Court also noted that no "recent data" provided a [68.2] reason for the Court to reconsider *Roper*'s sociological and scientific observations. [82.3] Instead, further developments in psychology and brain science continued to show "fundamental differences between juvenile and adult minds," [83.3] including that "parts of the brain involved in behavior control continue to mature through late adolescence." [84.3]

For the second consideration regarding the severity of life without parole, the Court acknowledged the reality of passing time. Life-without-parole sentences already constitute "the second most severe penalty permitted by law." [85.3] Furthermore, under sentences of life without parole, younger offenders generally serve more years and greater percentages of their lives behind bars than adults. [86.3] Consequently, the Court noted that imposing such punishments on younger offenders was especially harsh. [87.3]

Finally, the *Graham* Court considered penological justifications for juvenile sentences of life without parole for nonhomicide offenses. Weaving many of *Roper*'s developmental findings into its analysis, the Court found that none of the goals of punishment provided adequate justification for sentencing juvenile nonhomicide offenders to life without parole. [88.3] The Court ruled out retribution (because of offenders' reduced moral culpability), [89.3] deterrence (because of their impetuosity), [90.3] incapacitation (because of offenders' capacity for change), [91.3] and rehabilitation (because life without parole forewears any potential rehabilitation). [92.3] Finding no legitimate justification for *Graham*'s sentence, the Court found that it was by its nature disproportionate and failed to pass Eighth Amendment muster. [93.3]

3. Miller v. Alabama

The Court extended its reliance on youth developmental differences even further in *Miller*, which concerned two cases of fourteen-year-olds [68.3] mandatorily sentenced to life in prison without parole for their involvement in murders. [94.3] The Court held that the Eighth Amendment forbids mandatory sentencing schemes that do not allow judges or juries to consider the mitigating characteristics of youth, as precedent established that "children are constitutionally different from adults for purposes of sentencing." [95.3]

Here again, the Court relied upon the distinct developmental qualities of youth that render young offenders less culpable and impair penological justifications for their punishment. [96.3] But this time, the Court did not rely on national consensus against the punishment or find reason to limit its holding to specific types of crimes. [97.3] Rather, the Court melded *Roper* and *Graham*'s focus on prohibiting severe punishments based on certain offenders' reduced culpability with other precedent that requires sentencing authorities to consider defendants' characteristics in doing out the most severe punishments. [98.3] In so doing, the Court noted that the "distinctive (and transitory) mental traits and environmental vulnerabilities" of youth were hardly crime-specific. [99.3] In addition, it noted that life-without-parole sentences should be treated as akin to capital punishment when the offenders are young. [100.3] Because youth matters in determining whether an irrevocable sentence is appropriate, the Court held that "a judge or jury must have the opportunity to consider mitigating circumstances before imposing the harshest possible penalty for juveniles." [101.3]

[68.4] Despite its lofty phrasing about the importance of youth in sentencing, *Miller* firmly cabined its holding to those under the age of eighteen. [102.3] Lower courts following *Miller* unsurprisingly do the same. Rather than embracing *Miller*'s appeal for individualized sentencing before the harshest possible penalties can be imposed, they cling to the headline dichotomy between "juvenile" and "adult" offenders. For example, a Florida court of appeals tersely rejected the petition of a defendant who was nineteen when he committed his crime. [103.3] To the extent that the petitioner asked the Florida court to expand *Graham* and *Miller* to other "youthful offenders" under the age of 21, the court noted it was "bound by the pronouncements of the Supreme Court of the United States." [104.3] Several other courts following the earlier decisions in *Roper* and *Graham* similarly invoked the Supreme Court's bright line to reject young adults' Eighth Amendment claims. [105.3] The following Part illustrates why the reasoning underpinning *Roper*, *Graham*, and *Miller* requires courts to allow defendants up to age twenty-five to present evidence in mitigation about their youth at the time of their crimes.

II. Discussion

While the Court for decades has considered youth to be less culpable and recently invoked science to support a new era in that tradition, it refuses to recognize that young people just over the chronological age of eighteen might similarly be less culpable. Yet, the Court recognizes that that age is an imperfect proxy for diminished culpability. The *Roper* majority stated [68.5] that "the qualities that distinguish juveniles from adults do not disappear when an individual turns 18." [106.3]

This Part presents three reasons why clinging to the bright line at eighteen for mitigating punishment is inadequate. Holding the mitigating factors of youth to be relevant only until age eighteen is inconsistent with, and overextends, the very scientific and sociological data the Supreme Court touts. Further, relying on the age of eighteen simply because eighteen "is the point where society draws the line for many purposes between childhood and adulthood" [107.3] inappropriately equates the right not to be punished more severely than one deserves with affirmative rights to engage in certain adult conduct. Finally, drawing a bright line at eighteen and disregarding the characteristics of older youthful defendants fails to serve any of the penological justifications that the Supreme Court has ruled imperative for harsh and irrevocable sentences.

A. OVEREXTENDING THE DATA

The Court has eagerly espoused scientific and sociological data to bolster its conclusions regarding what makes "juveniles" developmentally and constitutionally different from "adults." But the Court has been less than eager to address the research's inability to identify a precise point when developmental maturity can be convincingly presumed for the entire class of youth - even in the very data it cites. As one team of researchers has lamented: "Unfortunately, judges, politicians, advocates, and journalists are biased toward drawing a single line between adolescence and adulthood for different purposes under the law that is at odds with developmental cognitive neuroscience." [108.3]

Examples from Miller and Roper demonstrate this point. Miller and Roper both point to Professors Steinberg and Scott's Less Guilty by Reason of Adolescence as authority for the developmental differences between [686] those under and those over eighteen. [109.3] Yet, Professors Steinberg and Scott explicitly note that research findings are "unlikely to ever be sufficiently precise to draw a chronological age boundary" for acquiring adult decisionmaking capacities. [110.3] Further, some of the studies on which they rely actually show development continuing beyond age eighteen. [111.3] Miller also relies on two briefs to suggest that the science supporting Roper's and Graham's conclusions has "become even stronger." [112.3] While it is true that those briefs point to additional research, that research hardly supports the Court's bright line. Quite the opposite: the brief from a group of psychology professors notes how a youth's brain "is not fully mature until an individual reaches his or her twenties." [113.3] Compellingly, it points to research from National Institute of Mental Health neuroscientist Jay Giedd, who concluded that the parts of the brain linked to decisionmaking and impulse inhibition do not fully develop until that time. [114.3] The American Psychological Association amici brief similarly notes how juveniles' development continues throughout late adolescence and into young adulthood. [115.3] In describing such findings, the American Psychological [687] Association skirts the binary "juvenile" and "adult" labels it originally set out to apply. [116.3]

Recent psychological and sociological research further calls the Court's strict classifications of "juveniles" and "adults" into question. Similar to how psychologist G. Stanley Hall identified a new life stage of "adolescence" at the turn of the twentieth century, [117.3] researchers today are redefining young adulthood. [118.3] Alluding to milestones that traditionally defined the transition to adulthood, [119.3] sociologists are charting the course of a "changing timetable" for development. [120.3] Leading that charge is Jeffrey Arnett, the same psychologist and research professor cited in Roper who has since marshaled support for a new stage of life lasting from the late [688] teens through the mid-to late twenties - "emerging adulthood." [121.3] Among the trends on which Professor Arnett and others rely, young people are putting off marriage. [122.3] In fact, the timing of marriage has unprecedentedly shifted into older ages in recent years. [123.3] Young people are also living with their parents longer and with greater frequency. [124.3] When they do not live with their parents, they are still unlikely to have families of their own. [125.3] As a result, by choice or circumstance, [126.3] young people are forestalling the beginning of traditionally "adult" life. To impose Roper, Graham, and Miller language, they appear to lack the degree of maturity that previous generations of adults commanded, they still seem vulnerable to outside pressures, and their characters remain not very "well-formed." [127.3]

Some of the stimuli behind the delay in adulthood are unsurprising: Americans' views toward young people's sexual relationships have [689] changed. [128.3] More people are pursuing higher education. [129.3] And a sluggish job market and burdensome student loan debt have otherwise stalled buying homes and starting families. [130.3] The legal implications of such a delay, however, are less than clear. For this reason, the Court's continued reliance on a categorical line at age eighteen to divide the supposedly scientifically and sociologically mature from the immature for mitigating punishment is troubling. The research on which the Court relies does not support such a line, and additional research suggests that the relevant youthful qualities continue to materialize in individuals into their twenties.

Even though the Court invoked science and sociological data to support its Roper, Graham, and Miller holdings, it makes sense, then, that the Court turned to more a conventional analysis in its rare attempt to justify the line. [131.3] In this way, the Court suggests that its developmental analysis for punishment applies only within the bounds of previously existing legal conceptions of childhood and adulthood. [132.3] The following Part demonstrates the asymmetry in such an approach.

[690]

B. CRIMINAL PUNISHMENT NOT COMPARABLE TO AFFIRMATIVE RIGHTS TO ENGAGE IN "ADULT" CONDUCT

A categorical rule mitigating punishment based on youthfulness only for those under eighteen is additionally inadequate because it fails to recognize the exceptionality of criminal punishment compared to other contexts of the law where bright-line classifications pervade. States undoubtedly draw bright-line rules to regulate the age at which young people can vote, [133.3] serve on juries, [134.3] marry, [135.3] drive, [136.3] gamble, [137.3] and drink. [138.3] Young people similarly have age-based rights to enter into contracts [139.3] and choose how doctors may treat them. [140.3] These categorical rules granting individuals affirmative rights over their conduct amount to "crude determinations" that young people of certain ages are mature enough to act in society, in some respects, as adults. [141.3] Young people can test out certain adult privileges, in spite of the special risks of the learning periods involved. [142.3]

The Court since Roper, however, has conflated this area of granting affirmative rights to young people to try out adult activity with criminal punishment. Unlike other laws that regulate behavior, criminal punishment involves finding people morally blameworthy. Andrew von Hirsch has explained that punishment is different from other government-generated [691] benefits because its defining characteristic includes state censure. [143.3] When the state finds people blameworthy, "the requirement of equal treatment becomes much stronger" because unequal treatment implies that they are unequally blameworthy. [144.3] Drawing a bright line between those who are under and over eighteen for mitigating punishment thus implies they are unequally blameworthy, even though they might possess the same developmental traits that render them less culpable. The Roper, Graham, and Miller decisions applied to those over eighteen therefore overlook 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. [145.3]

In the capital punishment context, the need for an individualized inquiry to measure a person's blameworthiness is hardly a new concept. Lockett v. Ohio recognized that individualized decisions are essential in capital cases, fearing that the death penalty might be imposed "in spite of factors which may call for a less severe penalty." [146.3] Eddings v. Oklahoma then highlighted the obligation of sentencing judges and juries to consider youthful defendants' mental and emotional development as part of their calcoli. [147.3] As the Eddings Court stated, "youth is more than a chronological fact. It is a time and condition of life when a person may be most susceptible to influence and to psychological damage." [148.3] After Roper, however, these decisions have had little meaning for offenders just over eighteen. Those whose mental and emotional development is slowed likely face greater burdens in proving youthfulness as a mitigating circumstance. [692] Because they are beyond the Court's zone of Eighth Amendment protection, lower courts are unwilling to entertain arguments for lessened culpability based on developmental differences. [149.3]

In the noncapital punishment context, the Court has only recently recognized that young people's blameworthiness must be measured with individualized inquiries. Miller held that the especially harsh penalty of life without parole now requires individualized culpability inquiries for those under eighteen. [150.3] The reasons that make life without parole especially harsh for those under eighteen, however, also apply to marginally older offenders. Just as life without parole deprives a seventeen-year-old offender of "the most basic liberties without giving hope of restoration," [151.3] so too does it deprive an eighteen-year-old of that meaningful hope. If it is true that "most fundamentally, Graham insists that youth matters in determining the appropriateness of a lifetime of incarceration without the possibility of parole," [152.3] then the youthfulness of a marginally older offender for whom the sentence would be equally harsh must also be considered.

C. UNDERMINING PENOLOGICAL JUSTIFICATIONS

Finally, the Court's current scheme disregards the same proportional punishment fundamentals that it touts. Each of the Court's line-drawing decisions has highlighted how diminished culpability impairs penological justifications for punishment. [153.3] While acknowledging that the Eighth Amendment does not mandate adoption of any one particular penological theory, the Court has noted that a sentence must be supported by some justification. [154.3] Yet, for youthful defendants' irrevocable sentences, the Court has ruled out retribution, deterrence, incapacitation, and rehabilitation. This Section addresses these justifications and describes [693] why each could similarly be inapplicable to a defendant between the ages of eighteen and twenty-five.

1. Retribution

In Graham and Roper, the Court considered whether retribution was a legitimate reason to severely punish offenders under eighteen. Retribution, described as "the interest in seeing that the offender gets his 'just deserts,'" [155.3] is intimately concerned with the offender's personal culpability. [156.3] Whether retribution is viewed as a means to express community moral outrage or to right a victim's wrong, the Roper Court noted that the case for retribution is weakened when the defendant is young. [157.3] According to the Court, "retribution 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." [158.3] In Graham, the Court extended the same logic to young people sentenced to life without parole for nonhomicide offenses. [159.3] Retribution, the Court stated, "does not justify imposing the second most severe penalty on the less culpable juvenile nonhomicide offender." [160.3]

None of these considerations is unique to those under eighteen. Young people aged eighteen to twenty-five can similarly have lessened moral culpability and blameworthiness as a result of their youth and immaturity. The developmental characteristics attendant to youth continue beyond the age of eighteen, and the normative concern for establishing an age at which society may reasonably demand people to be "adult" is not sacrificed by recognizing that some individuals have not yet attained full developmental maturity by that point. Furthermore, terms of life imprisonment remain comparatively harsh for those just over eighteen who grow old behind bars, spending the prime of their lives incarcerated.

2. Deterrence

The Court in Roper and Graham similarly rejected deterrence as a justification. Deterrence can be described as the general interest in preventing prospective offenders' similar crimes. [161.3] Outside the capital [694] punishment context, deterrence can also reflect the specific interest in preventing the particular offender from reoffending. [162.3] For both sorts, "deterrence must operate (if at all) through the potential offenders' minds, so it is essential that they know about the severity of the probable sentence [and] take this into account when deciding whether to offend" [163.3] In Roper, the Court suggested that the same characteristics that make young offenders less culpable than adults also make them less susceptible to deterrence. [164.3] In Graham, the Court further teased out this reasoning, stating that young people's immaturity and impetuosity make them less likely to consider possible punishment when they make decisions, especially when that punishment is rarely imposed. [165.3] It additionally ruled out any limited deterrent effect that life that without parole has on nonhomicide offenders, noting how such effect is outweighed by how disproportionate the punishment is. [166.3]

Again, this logic is hardly limited to offenders under eighteen. The same characteristics that make those under eighteen less likely to consider possible punishment when they act can also be present in those aged eighteen to twenty-five. If an offender cannot understand and appreciate the severity of an irrevocable sentence when he decides to offend, his sentence loses deterrent value. While such sentences may still have some general deterrent value for other prospective offenders, it remains that they must not be grossly disproportionate to the offender against whom they are imposed. Thus, depending on their crimes, some young people aged eighteen to twenty-five might have such diminished moral responsibility that any limited deterrent effect on prospective offenders that would be gained from the young people's irrevocable sentences would not justify imposing those sentences.

3. Incapacitation

The Court in Graham also added and rejected the justification of incapacitation. Incapacitation is said to protect the public and make offenders incapable of reoffending. [167.3] The Graham Court recognized that incapacitation can satisfy concerns regarding public safety, but it determined that relating such a justification to young offenders required the assumption that

they could be ongoing dangers. ^[168.3] Because the non-fixed ^[*695] nature of young people's characters makes such an assumption questionable, the Court ruled out that possibility. ^[169.3] Relying on Roper, it noted that even "expert psychologists" have trouble differentiating between young offenders who succumb to "unfortunate yet transient immaturity" and those "whose crime reflects irreparable corruption." ^[170.3]

The same reasoning can make the incapacitation justification inapplicable to young adults. Just as incorrigibility is inconsistent with youth under eighteen, ^[171.3] so too might it be inconsistent with some youth over eighteen. Personality disorders can generally be diagnosed in young people over eighteen, ^[172.3] but "using a chronological age to demarcate the stage [in which such diagnoses are appropriate] can present difficulties as young people of the same chronological age may differ greatly in their levels of developmental maturity." ^[173.3] Research likewise shows that young people's identities continue to form substantially beyond eighteen. ^[174.3]

4. Rehabilitation

Finally, the Court has concluded that a fourth goal, rehabilitation, could not justify irrevocable punishments for young offenders. Although "the concept of rehabilitation is imprecise" and remains the subject of substantial dialogue, ^[175.3] the rehabilitative approach generally concerns itself with the perceived needs of the offender rather than with the gravity of the crime. ^[176.3] As a result, the aim is to treat the offender and provide the ^[*696] education or skills necessary to reduce his risk of reoffending. ^[177.3] In Graham, the Court held that life imprisonment without parole could not be justified by rehabilitation because "the penalty forswears altogether the rehabilitative ideal." ^[178.3] Denying young offenders reentry to the community, according to the Court, requires making permanent judgments about their value and place in society - inappropriate in light of young offenders' "capacity for change and limited moral culpability." ^[179.3]

This justification can be also rejected on a similar basis for some young adults. Those young people who have the same capacity for change and the same limited moral culpability as seventeen-year-olds should not be forsworn from potential rehabilitation simply because they are older than eighteen.

Because Roper, Graham, and Miller recognized that penological goals cannot justify irrevocable sentences when offenders possess certain characteristics of youthfulness, it follows that the penological goals also cannot be met when other young people exhibit the same characteristics. Sentences prescribing death, life in prison without parole for nonhomicide offenses, or mandatory life in prison without parole also would be disproportionate for youthful offenders who are merely of a slightly higher age. Punishment for both groups of offenders should be prohibited by the Eighth Amendment.

III. A Proposed Solution

To this point, this Comment has focused on illustrating the inadequacy of drawing a bright line at eighteen for mitigating society's harshest punishments. This Part offers a potential remedy: extending sentencing mitigation to those young adults under twenty-five who would otherwise similarly be deemed less responsible under the scheme of justifications the Court has set forth, absent the Court's firm grip on chronological age.

A. PRESUMPTION OF YOUTHFULNESS

A presumption scheme would better serve criminal sentencing purposes, appreciating age yet refusing to be wholly bound by years and days. Roper, Graham, and Miller's bright line should be transformed into a scheme in which defendants under the age of eighteen are irrebuttably presumed to possess the youthful characteristics that mandate reduced punishment under the Eighth Amendment, while defendants up to the age ^[*697] of twenty-five can seek, but are not guaranteed, the same protection. Gradating based on age in this way imports into the modern era the early common law focus on punishing offenders based on the strength of their understanding and judgment. ^[180.3]

1. Mandatory and Irrebuttable for Defendants Under Eighteen

Under such a remedy, sentencing for defendants who were under eighteen at the time of their crimes would not change. A mandatory, irrebuttable presumption would still be afforded to those under eighteen so that they would not face society's most severe punishments of death, life imprisonment for nonhomicide offenses, or mandatory life without parole.

The costs of discontinuing this protection, as the Roper Court understood, ^[181.3] are great. The sentencing judge or jury, prejudiced by the particular crime details, could succumb to arguments contrary to developmental fact and find youth to be aggravating. Even offering up the youthfulness factors and asking the sentencing judge or jury to apply them for those under eighteen on a case-by-case basis would be insufficient for this group, given the level of discretion incumbent in such an analysis. Prosecutors could appeal to the undercurrent in public consciousness that youthful offenders are uniquely threatening. ^[182.3] They have made these arguments in the past, suggesting that crimes committed during youth are predictive of future dangerousness, ^[183.3] and jurors have believed them. ^[184.3]

Although some acts committed by those under eighteen are heinous and are "not just the acts of happy-go-lucky teenagers," as Justice Scalia [▼] contended in Roper, ^[185.3] the fact remains that the people who committed ^[*698] those acts are still teenagers. Given what researchers now know about young people, the potential split-focus between the crime's depravity and the defendant's unique sensibilities should be permanently resolved in a manner that concentrates on the young defendant. Psychologists and scientists have found enough evidence to decisively establish that young people, as a class, are generally different. ^[186.3] The cruelty in subjecting that entire class to society's harshest punishments simply to castigate the rare, extraordinarily mature defendant does not warrant abrogating protection for those under eighteen. ^[187.3] Whereas common law held that offenders younger than seven deserved categorical special protection, ^[188.3] that age should now be eighteen.

2. Permissive and Rebuttable for Defendants Up to Age Twenty-Five

Still, like candle flickers that outlast a birthday blow, youthfulness does not always disappear when an offender turns eighteen. Youthful defendants up to the age of twenty-five ^[189.3] should therefore have the opportunity to seek mitigation. Defendants

could argue that their youthfulness excludes society's harshest penalties as cruel and unjust. ^[190.3] They would have to reasonably show - like the younger defendants protected by Roper, Graham, and Miller - that they (1) lacked maturity and had an underdeveloped sense of responsibility, (2) were vulnerable to negative influences and had limited control over their environment, and (3) lacked characters that could be rehabilitated. This showing would unravel the irrevocable punishments' penological goals and preclude courts from imposing them under the Eighth Amendment. Unlike mitigation for younger defendants, however, the burden would then shift to the prosecution, which could show by a preponderance of the evidence that the defendants were sufficiently mature to be punished according to the legislature's design. The prosecution could undermine the defendants' evidence or introduce new evidence showcasing the offenders' culpability, not the crimes' grievousness.

A preponderance of the evidence standard, and not beyond a reasonable doubt, would be the appropriate burden for prosecutors to meet in disclaiming an eighteen-to twenty-four-year-old defendant's assertion of ^[*699] youthfulness. ^[191.3] It would harmonize the interests in respecting legislative determinations of appropriate punishment while avoiding punishing legitimately youthful offenders unjustifiably. It would further retain some of the value in criminal law, not just as a reflector of actual human behavior, but also as a system of rules that suggests its ideal, aspirational expression. Criminal law, after all, not only censures: in so doing, it bestows positive, societal norms. If prosecutors could prove that a defendant, more likely than not, actually did not possess the characteristics that warrant mitigation, then the full spectrum of legislatively prescribed sentences would be available. But if prosecutors failed to contradict a youthfulness showing, more likely than not, then they could not subject the defendant to the harshest penalties. The court would determine both whether the defendant reasonably demonstrated his youthfulness and whether the prosecution rebutted the defendant's showing by a preponderance of the evidence.

Such a permissive, rebuttable youthfulness presumption would certainly alter schemes presuming criminal defendants to have the requisite responsibility to be held culpable. It might likewise raise uncertainties about the legal dichotomy between juvenile and criminal courts for older offenders. But, without requiring legislators to overhaul penal codes, this proposal would effectuate the meaning of Roper, Graham, and Miller.

B. ADDRESSING CONCERNS

With the contours of this remedy established, a number of questions emerge. For example, why should the presumption be limited to those under the age of twenty-five? Would imposing the presumption unnecessarily burden courts? Additionally, would allowing this level of judicial discretion invite uncertainty and unwarranted inconsistency? The following Sections address these issues.

1. Simply a Delayed Bright Line?

The first and most obvious critique of this remedy is the way it advocates a solution it seemingly opposes: drawing a somewhat arbitrary, albeit delayed, bright line. Drawing a line at twenty-five, however, is more ^[*700] appropriate than eighteen for several reasons. To be sure, a line at twenty-five comes closer to the science the Court touts. Recall that neuroscientific evidence previously before the Court proved that a youth's brain is not fully mature until an individual's twenties. ^[192.3] More recent sociological and psychological evidence continues to support such a finding. ^[193.3] For example, as a result of mounting evidence, child psychologists in Britain issued new guidelines in September 2013 "directing clinicians to reconsider how they view patients in younger adulthood" and treat those up to age twenty-five. ^[194.3] A line at twenty-five would also better heed the Court's concerns regarding the impact of youthfulness on retribution, deterrence, incapacitation, and rehabilitation. ^[195.3] As previously demonstrated, courts risk imposing unjust, unequal punishment when marginally older defendants can be censured more harshly than their younger counterparts, even though both groups possess the same culpability-reducing traits.

Drawing a line at twenty-five, and not some later age, additionally retains the Court's focus on the particular disproportionality of life imprisonment without parole for younger defendants. As the Graham Court recognized, "life without parole is an especially harsh punishment for a juvenile. Under this sentence a juvenile offender will on average serve more years and a greater percentage of his life in prison than an adult." ^[196.3] This sentiment rings true for those defendants marginally older than eighteen. If a defendant is older than twenty-five, however, the validity of youth-based rebuttals to life imprisonment diminish. Indeed, if defendants are not fully developed by age twenty-five, their available recourse should perhaps not be a youthfulness presumption. It could be a developmental disability defense. ^[197.3]

^[*701]

2. Sacrificing Judicial Efficiency?

A second critique of the presumption remedy is the burden it would impose on courts, requiring them to evaluate a new class of defendants' youthfulness, case-by-case. Evaluating a defendant's youthfulness, however, is already mandated for society's harshest penalties under the Eighth Amendment. Eddings required courts to consider youthfulness before they could impose capital punishment. ^[198.3] Miller required courts to similarly consider youthfulness when defendants under eighteen face life imprisonment without parole. ^[199.3] Where Eddings additionally stated that "youth is more than a chronological fact," ^[200.3] this Comment's presumption scheme would ensure that youth amounts to more than a chronological fact in those situations where life imprisonment amounts to capital punishment. ^[201.3] In this way, the presumption scheme closes the Eighth Amendment loop fashioned from conjunctive readings of Eddings, Roper, Graham, and Miller.

Even if Eighth Amendment case law does not require this youthfulness inquiry, the interest in fair, proportional sentences demands it and offsets any added judicial burden. Outside the sentencing context, such individualized determinations often would be irrational. For example, requiring courts to decide whether every seventeen-year-old is mature enough to vote would "greatly outweigh whatever injustice might be produced by the use of a bright line minimum voting age." ^[202.3] When unjustified punishment is the countervailing injustice, however, the interest in judicial efficiency hardly compares. ^[203.3] Indeed, the injustice that stems from sentencing equally youthful defendants to significantly harsher punishments must require individualized youthfulness determinations - in spite of efficiency interests. ^[204.3] The Supreme Court has held that ^[*702] youthfulness diminishes culpability. Imposing fair, proportional punishment requires the same youthfulness consideration for defendants who are merely days or years older.

3. Inviting Uncertainty and Unwarranted Sentencing Inconsistency?

Finally, this remedy can be criticized for inviting uncertainty and unwarranted sentencing inconsistencies for defendants aged eighteen to twenty-five. Thankfully, however, the Court has provided lower courts with a sufficient framework that can permit individualized sentencing and avoid unfair disparities. [205.3] In *Roper*, *Graham*, and *Miller*, the Court offered and strengthened three factors that make youth less culpable under the Eighth Amendment. [206.3] In so doing, the Court provided a guide for lower courts evaluating whether defendants between the ages of eighteen and twenty-five warrant youthfulness presumptions. The youthfulness cases encourage lower courts to consider evidence of an offender's (1) lack of maturity and underdeveloped sense of responsibility, (2) vulnerability to negative influences and limited control over their environment, and (3) lack of characters that can be rehabilitated.

Sentencing judges or juries in both state and federal courts could rely on these factors similarly to how federal district courts use Federal Sentencing Guidelines. The advisory Guidelines create a baseline for sentencing without sacrificing judicial fact-finding. [207.3] The youthfulness factors could likewise provide a consistent baseline for addressing eighteen-to twenty-five-year-olds' youthfulness claims. When courts address offender characteristics "in a reasonably consistent manner," according to [*703] the Guidelines, they "help secure nationwide consistency, avoid unwarranted sentencing disparities, provide certainty and fairness, and promote respect for the law." [208.3]

Moreover, the case law understanding of youthfulness actually constrains federal judicial discretion to a greater degree than the Sentencing Commission envisioned. The Guidelines' section on age provides that "age (including youth) may be relevant in determining whether a departure is warranted, if considerations based on age, individually or in combination with other offender characteristics, are present to an unusual degree and distinguish the case from the typical cases covered by the guidelines." [209.3] If judges track Eighth Amendment case law to define "youth," they would have even more characteristics to study.

Across courts, this expanded inquiry regarding youthfulness could curtail discretion and inconsistency, and the Guidelines' nondescript "youth" could be given new meaning for defendants under twenty-five facing capital punishment or life imprisonment for nonhomicide crimes. Although this Comment does not define the factors' exact application, the Court has not otherwise required detailed remedies. For example, the Court has left for states to determine the appropriate ways to enforce constitutional restrictions against executing both mentally retarded and insane individuals. [210.3] This presumption remedy simply gives courts new lenses through which to view evidence that many already are required to gather.

Conclusion

This Comment has demonstrated three reasons why the current approach of recognizing the mitigating effect of youthfulness only when defendants are under eighteen years old cannot stand. If the solution to address the increasingly punitive orientation of criminal justice remains one of protecting youthful defendants through the Eighth Amendment, then courts must also consider defendants' youthfulness when eighteen-to twenty-five-year-olds face irrevocable sentences. Because the Court continues to insist that developmental differences lessen culpability and negate all penological justifications for imposing society's harshest [*704] sanctions, marginally older and equally blameless offenders must be able to seek the same protection from them. A permissive, rebuttable presumption of youthfulness would accomplish this goal. Indeed, as the Court has suggested, "making youth (and all that accompanies it) irrelevant" to the imposition of the harshest and irrevocable sentences "poses too great a risk of disproportionate punishment." [211.3]

Journal of Criminal Law & Criminology
 Copyright (c) 2014 Northwestern University, School of Law
 Journal of Criminal Law & Criminology

Footnotes

[1.3] See *Miller v. Alabama*, 132 S. Ct. 2455, 2470 (2012) ("So if ... death is different, children are different too ... It is no surprise that the law relating to society's harshest punishments recognizes such a distinction." (internal quotation marks omitted)); see also Mary Berkeheiser, *Death Is Not So Different After All: Graham v. Florida and the Court's "Kids Are Different" Eighth Amendment Jurisprudence*, 36 *Vt. L. Rev.* 1, 1 (2011) (describing how the Court's approach in *Graham v. Florida* "unceremoniously demolished the Hadrian's Wall that has separated its "death is different" jurisprudence from non-capital sentencing review since 1972" and, in its place, "fortified an expansive "kids are different" jurisprudence"); Carol S. Steiker & Jordan M. Steiker, *Graham Lets the Sun Shine in: The Supreme Court Opens a Window Between Two Formerly Walled-Off Approaches to Eighth Amendment Proportionality Challenges*, 23 *Fed. Sent'g Rep.* 79, 81 (2010) ("Justice Kennedy [in *Graham*] thus managed to transform what had looked like a capital versus noncapital line, the application of which rendered noncapital challenges essentially hopeless, into a categorical rule versus individual sentence line ...").

[2.3]

See *Miller*, 132 S. Ct. at 2455; *Graham v. Florida*, 130 S. Ct. 2011 (2010); *Roper v. Simmons*, 543 U.S. 551 (2005). Each of these decisions followed *Atkins v. Virginia*, which held executing mentally retarded criminals to be cruel and unusual punishment due to the offenders' reduced capacity and the executions' failure to serve social justifications recognized for the death penalty. See 536 U.S. 304, 318-21 (2002).

[3.3] See *Roper*, 543 U.S. at 578.

[4.3] See *Graham*, 130 S. Ct. at 2034.

[5.3] See *Miller*, 132 S. Ct. at 2469. The Court considered *Miller* along with *Jackson v. Hobbs*, 132 S. Ct. 2455 (2012) (No. 10-9647), which also presented the question of whether a juvenile's sentence of life without parole violated the Eighth Amendment prohibition against cruel and unusual punishment. See *Miller*, 132 S. Ct. at 2460-62.

[6.3] See *Miller*, 132 S. Ct. at 2464 (citing *Graham*, 130 S. Ct. at 2026; *Roper*, 543 U.S. at 569-70).

[7.3] *Id.* The Court *Bellotti v. Baird* had posited a similar but distinguishable list of reasons for treating children differently from adults, including: (1) "the peculiar vulnerability of children," (2) "their inability to make critical decisions in an informed, mature manner," and (3) "the importance of the parental role in child rearing." See 443 U.S. 622, 634 (1979) (concerning a law restricting the right of a minor to obtain an abortion).

[8.3] See *Roper*, 543 U.S. at 569.

[9.3] See *Miller*, 132 S. Ct. at 2464-65; *Graham*, 130 S. Ct. at 2026, 2034; *Roper*, 543 U.S. at 569, 570, 578.

[10.3] A brief offering up scientific evidence for the Court, for example, recognized its own limitations. See *Brief for American Psychological Ass'n et al. as Amici Curiae Supporting Petitioners* at 6 n.3, *Graham v. Florida*, 130 S. Ct. 2011 (2010) (Nos. 08-7412, 08-7621) ("Science cannot, of course, draw bright lines precisely demarcating the boundaries between childhood, adolescence, and adulthood."); see also Sara B. Johnson et al., *Adolescent Maturity and the Brain: The Promise and Pitfalls of Neuroscience Research in Adolescent Health Policy*, 45 *J. Adolescent Health* 216, 218 (2009) ("Neuroimaging studies do not allow a chronologic cut-point for behavioral or cognitive maturity at either the individual or population level."). For further discussion, see *infra* Part II.A.

[11.3] See *Eddings v. Oklahoma*, 455 U.S. 104, 115 (1982). For this reason, the Court required lower courts to also consider "the background and mental and emotional development of a youthful defendant." *Id.* at 116.

[12.3] In *Roper*, the Court reasoned that "the qualities that distinguish juveniles from adults do not disappear when an individual turns 18," but "the age of 18 is the point where society draws the line for many purposes between childhood and adulthood." 543 U.S. at 574.

13

In Miller, the Court articulated its most recent affirmation that the factors are of central import for sentencing judges and juries to consider in arriving at appropriate, proportional punishment. See 132 S. Ct. at 2468.

14

This Comment uses the term "youthful" to describe those who possess the characteristics that the Court has relied on in Roper, Graham, and Miller to mitigate punishment. In addition, whereas other writers have opted to distinguish between "children" and "adults," using the age of eighteen as a boundary, this Comment adopts the terms "youth" and "young people" to describe those individuals who are no longer children and not yet fully functioning adults. Kenneth Keniston referred to the period between adolescence and adulthood as "youth" in 1970. Kenneth Keniston, Youth: A "New" Stage of Life, 39 Am. Scholar 631, 635 (1970). Scholars today continue to redefine this transitional period. See *infra* Part II.A.

15

For an informative discussion of the origins of the infancy defense, see Francis Bowes Sayre, *Mens Rea*, 45 Harv. L. Rev. 974, 1007-10 (1932).

16

4 William Blackstone, *Commentaries* 22-23; 1 Sir Matthew Hale, *The History of the Pleas of the Crown* 27 (Solomon Emlyn ed., 1800) (1736). English law regarding age and criminal responsibility borrowed from Roman civil law, which divided "minors" - generally those under age twenty-one or twenty-five - into general stages, such as *infantia* (birth until age seven), *pueritia proxima* (seven to fourteen), and *pubertas* (above age fourteen). See 1 Hale, *supra*, at 16-19. Ecclesiastical courts and Roman civil courts had previously established seven as "the age of reason," finding it to be the age at which a child could lose innocence, be guilty of sin, and be criminally liable for his behavior. See Michael A. Corriero, *Judging Children as Children* 36-37 (2006).

17

See 4 Blackstone, *supra* note 16, at 23; 1 Hale, *supra* note 16, at 27-28; see also Edward Coke, *The Third Part of the Institutes of the Laws of England* 4 (5th ed. 1671) (noting that the principal end of punishment, deterrence, is not served when infants are below the "age of discretion").

18

4 Blackstone, *supra* note 16, at 23; 1 Hale, *supra* note 16, at 26-27 (noting an even greater presumption for those under twelve).

19

See 4 Blackstone, *supra* note 16, at 23; Corriero, *supra* note 16, at 37. While the rebuttable presumption recognized that some children matured more quickly than others, it also served the policy interest of punishing children who committed particularly atrocious acts, regardless of their immaturity. See Corriero, *supra* note 16, at 37.

20

See *In re Gault*, 387 U.S. 1, 16 (1967); see also Julian W. Mack, *The Chancery Procedure in the Juvenile Court*, in *The Child, The Clinic and the Court* 310, 310 (Jane Addams ed., 1925); Craig S. Lerner, *Juvenile Criminal Responsibility: Can Malice Supply the Want of Years*, 86 Tul. L. Rev. 309, 316 (2011); Victor L. Streib, *Death Penalty for Children: The American Experience with Capital Punishment for Crimes Committed While Under Age Eighteen*, 36 Okla. L. Rev. 613, 616 (1983) ("Seven children were executed prior to 1800 and 95 prior to 1900, the youngest aged ten years.").

21

4 Blackstone, *supra* note 16, at 21 ("An unwarrantable act without a vicious will is no crime at all."); see also 1 Hale, *supra* note 16, at 38 ("It is the will and intention, that regularly is required, as well as the act and event, to make [an] offense capital.").

22

See 1 Hale, *supra* note 16, at 27.

23

See Barry C. Feld, *Abolish the Juvenile Court: Youthfulness, Criminal Responsibility, and Sentencing Policy*, 88 J. Crim. L. & Criminology 68, 100 (1997).

24

See Franklin E. Zimring, *American Juvenile Justice* 55-56, 57 (2005) ("Even after a youth passes the minimum threshold of competence that leads to a finding of capacity to commit crimes, the barely competent youth is not as culpable and therefore not as deserving of a full measure of punishment as a fully qualified adult offender."); Lerner, *supra* note 20, at 317.

25

See 4 Blackstone, *supra* note 16, at 23; see also Lerner, *supra* note 20, at 317.

26

4 Blackstone, *supra* note 16, at 23.

27

Reformers in this period are commonly called "child savers." See, e.g., Michael B. Katz, *In the Shadow of the Poorhouse: A Social History of Welfare in America 118-20* (1986); Anthony M. Platt, *The Child Savers: The Invention of Delinquency* 3 (2d ed. 1977).

28

See Barry C. Feld, *The Transformation of the Juvenile Court*, 75 Minn. L. Rev. 691, 693-94 (1991) [hereinafter Feld, *Transformation*]; see also Michael Grossberg, *Changing Conceptions of Child Welfare in the United States, 1820-1935*, in *A Century of Juvenile Justice* 3, 22-25 (Margaret K. Rosenheim et al. eds., 2002) (attributing family problems, such as rising divorce and escalating juvenile delinquency, to economic structural changes and noting that new understandings of child development produced concerns about child vulnerability). Works emphasizing the naturalness of children - such as that written by Jean Jacques Rousseau and Johann Pestalozzi, along with the works of G. Stanley Hall and Friedrich Froebel - influenced reformers. See Elizabeth J. Clapp, *Mothers of All Children: Women Reformers and the Rise of Juvenile Courts in Progressive Era America* 11, 80 (1998).

29

In 1899, the Illinois General Assembly enacted the world's first juvenile court law, the Illinois Juvenile Court Act, 1899 Ill. Laws 131 (current version at 705 Ill. Comp. Stat. Ann. 405 (West 2010)). See Barry Krisberg & James F. Austin, *Reinventing Juvenile Justice* 30 (1993). Other states followed. See *id.* Within the decade after Illinois passed its law, ten states established children's courts, and by 1925, all but two states had established specialized courts. See *id.*

30

Martin R. Gardner, *The Right of Juvenile Offenders to Be Punished: Some Implications of Treating Kids as Persons*, 68 Neb. L. Rev. 182, 191 (1989) ("The juvenile court movement assumed that young people under an articulated statutory age (sometimes as high as 21 years of age) are incapable of rational decisionmaking and thus lack the capacity for moral accountability assumed by the punitive model.").

31

See David S. Tanenhaus, *The Evolution of Juvenile Courts in the Early Twentieth Century: Beyond the Myth of Immaculate Construction*, in *A Century of Juvenile Justice*, supra note 28, at 42, 42; see also Karen Clanton, *At the Helm: The Presiding Judges of the Juvenile Court*, in *A Noble Social Experiment? The First 100 Years of the Cook County Juvenile Court 1899-1999*, at 74, 74 (Gwen Hoerr McNamee ed., 1999).

32

See Julian W. Mack, *The Juvenile Court*, 23 *Harv. L. Rev.* 104, 119-20 (1909) ("The problem for determination by the judge is not, Has this boy or girl committed a specific wrong, but What is he, how has he become what he is, and what had best be done in his interest and in the interest of the state to save him from a downward career.")

33

First asserted in the United States in a juvenile proceeding in *Ex parte Crouse*, 4 *Whart.* 9, 11 (Pa. 1839), the *parens patriae* authority justifies governmental intervention in the lives of individuals who are unable to care for themselves. See Donna M. Bishop & Hillary B. Farber, *Joining the Legal Significance of Adolescent Developmental Capacities with the Legal Rights Provided by In re Gault*, 60 *Rutgers L. Rev.* 125, 127 n.7 (2007).

34

See Mack, supra note 32, at 120 (arguing that "ordinary trappings" of criminal court are out of place in juvenile hearings, and the judge should sit "with the child at his side, where he can on occasion put his arm around his shoulder and draw the lad to him"); see also Feld, *Transformation*, supra note 28, at 695.

35

See Elizabeth S. Scott, *The Legal Construction of Adolescence*, 29 *Hofstra L. Rev.* 547, 591 (2000).

36

Jeffrey Butts & Jeremy Travis, *The Rise and Fall of American Youth Violence: 1980 to 2000*, at 2 (2002), available at <http://goo.gl/N1uGQy>. From just 1984 to 1993, the juvenile arrest rate for murder increased 167% from a rate of 5 arrests per 100,000 juveniles to 14 per 100,000. *Id.*; see also Office of Juvenile Justice & Delinquency Prevention, U.S. Dep't of Justice, *Juvenile Offenders and Victims: 1996 Update on Violence 14-15* (1996) (discussing the arrest rate trend beginning in the late 1980s and noting that "if trends continue ... juvenile arrests for violent crime will more than double by the year 2010").

37

See *Network News in the Nineties: The Top Topics and Trends of the Decade*, *Media Monitor* (Ctr. for Media & Pub. Affairs, Washington, D.C.), July/Aug. 1997, at 1-3. Between 1990 and 1997, one out of every ten stories on network evening news dealt with crime, climbing from 830 stories during 1992 to 2,574 during 1995. See *Id.* at 2. At the same time, fear of crime increased dramatically, particularly in urban areas. See Daniel Romer et al., *Television News and the Cultivation of Fear of Crime*, 53 *J. Comm.* 88, 95 (2003).

38

See Franklin E. Zimring, *American Youth Violence 11-13* (1998). This universal urge to legislate, according to Professor Zimring, suggests a "disturbing" model of legal reform. Absent a showing of deficiency in the current legal institutions' abilities to deal with violence, "legislative changes that are based solely on concern about high offense rates are vulnerable to error in a special way." *Id.* at 12.

39

Patricia Torbert et al., *Office of Juvenile Justice & Delinquency Prevention, U.S. Dep't of Justice, State Responses to Serious and Violent Juvenile Crime 3* (1996), available at <http://goo.gl/2b5ZK2>.

40

See *id.* at 59. Professor Feld situates this "get tough" era of juvenile justice in a broader context dating back to the 1960s when rehabilitation was replaced by a paradigm of just deserts, penal proportionality, and determinate sentences. Barry C. Feld, *A Century of Juvenile Justice: A Work In Progress or a Revolution that Failed?*, 34 *N. Ky. L. Rev.* 189, 207-13 (2007).

41

See Elizabeth S. Scott & Laurence Steinberg, *Rethinking Juvenile Justice 8-9* (2008); Elizabeth S. Scott & Thomas Grisso, *The Evolution of Adolescence: A Developmental Perspective on Juvenile Justice Reform*, 88 *J. Crim. L. & Criminology* 137, 137 (1998). The Supreme Court in *In re Gault* extended to juveniles in delinquency proceedings some of the same constitutional rights to which defendants in criminal proceedings are entitled, including the right to counsel and the privilege against self-incrimination. See 387 U.S. 1, 41, 55 (1967). Critics of the decision, including Justice Potter Stewart, argued it "served to convert a juvenile proceeding into a criminal prosecution" and thereby "invited a long step backwards into the nineteenth century." *Id.* at 79 (Stewart, J., dissenting).

42

See Elizabeth S. Scott, *Keynote Address: Adolescence and the Regulation of Youth Crime*, 79 *Temp. L. Rev.* 337, 351 n.54 (2006). While the slogan appealed to retributive instincts, it also suggested that serious violence is not a characteristic of childhood but "is somehow adult." See Zimring, supra note 38, at 9.

43

Some politicians, scholars, and media in the mid-1990s used the term "super-predators" to describe an impending generation of violent young offenders. See, e.g., *Hearings on the Juvenile Justice and Delinquency Prevention Act Before the Subcomm. on Early Childhood, Youth and Families of the H. Economic and Educational Opportunities Comm.*, 104th Cong. 90 (1996) (statement of Rep. William McCollum, Chairman, Subcomm. on Crime, H. Comm. on the Judiciary); John J. Dilulio, Jr., *The Coming of the Super-Predators*, *Wkly. Standard*, Nov. 27, 1995, at 23; Bob Dole, *Weekly Republican Radio Address* (July 6, 1996), available at <http://goo.gl/396Swt> ("Unless something is done soon, some of today's newborns will become tomorrow's 'super predators' - merciless criminals capable of committing the most vicious of acts for the most trivial reasons ..."). For others, the fact that the phenomenon never materialized, Gary Marx, *Young Killers Remain Well-Publicized Rarity*, *Chi. Trib.*, Feb. 11, 1998, § 1, at A1, was unsurprising, see Franklin E. Zimring, *Crying Wolf Over Teen Demons*, *L.A. Times*, Aug. 19, 1996, at B5. But see Steve Drizin, *Trayvon and the Myth of the "Juvenile Superpredator"*, *Huffington Post* (Sept. 17, 2013, 3:30 PM), <http://goo.gl/qnhzy6> (suggesting that even though "the superpredators never arrived," still, "urban legends die hard").

44

See Torbert et al., supra note 39, at xi.

45

See, e.g., Maya Bell, *A Child, A Crime - An Adult Punishment*, *Orlando Sentinel*, Oct. 21, 1999, at A-1 ("Research is thin, but every study on the subject, including the most thorough one conducted at the University of Florida, has shown that young offenders sent to adult prison commit more serious crimes quicker and more often after their releases than similar offenders who remain in the juvenile system."); Barbara White Stack, *Law Giving Juveniles Adult Time Under Fire*, *Pittsburgh Post-Gazette*, Aug. 5, 2001, at B-1 ("Two state senators ... say it's time to investigate whether the 5-year-old 'adult time for adult crime' law in Pennsylvania has lived up to its promise ..."); Tina Susman, *Doubting the System*, *Newsday*, Aug. 21, 2002, at A6.

46

See Emily Buss, *What the Law Should (And Should Not) Learn from Child Development Research*, 38 *Hofstra L. Rev.* 13, 33 (2009). The MacArthur Foundation, for example, convened a group to study adolescent development and funded extensive research about effective juvenile crime policy. See *id.*

47

See Thomas J. Berndt, *Developmental Changes in Conformity to Peers and Parents*, 15 *Dev. Psychol.* 608, 608, 615 (1979) (studying youth in third, sixth, ninth, eleventh, and twelfth grades and finding conformity to peers to increase between third and ninth grade, and then decline); Laurence Steinberg & Susan B. Silverberg, *The Vicissitudes of Autonomy in Early Adolescence*, 57 *Child Dev.* 841, 843, 848 (1986) (studying children in fifth, sixth, eighth, and ninth grades and noting that by ninth grade, the proportion of peer-oriented children leveled off); see also Scott & Grisso, *supra* note 41, at 162.

48 See William Gardner, *A Life-Span Rational-Choice Theory of Risk Taking*, in *Adolescent Risk Taking* 66, 66 (Nancy J. Bell & Robert W. Bell eds., 1993); see also Jeffrey Arnett, *Reckless Behavior in Adolescence: A Developmental Perspective*, 12 *Dev. Rev.* 339, 366-67 (1992) (concluding that high levels of reckless behavior during adolescence implicate developmental roots in sensation seeking and adolescent egocentrism, declining after adolescence - perhaps due to biology, increased maturity, and young people assuming greater responsibilities); Scott & Grisso, *supra* note 41, at 164.

49 See A.L. Greene, *Future-Time Perspective in Adolescence: The Present of Things Future Revisited*, 15 *J. Youth & Adolescence* 99, 102, 108-09 (1986) (studying ninth graders, twelfth graders, and college sophomores).

50 See Leon Mann et al., *Adolescent Decision-Making: The Development of Competence*, 12 *J. Adolescence* 265, 275 (1989) ("Our analysis of the modest evidence leads us to conclude that by age 15 years many adolescents have achieved a reasonable level of competence However, like all humans, adolescents do not consistently behave as competent decision makers ..."). But see Lita Furby & Ruth Beyth-Marom, *Risk Taking in Adolescence: A Decision-Making Perspective*, 12 *Dev. Rev.* 1, 38 (1992) ("Our review of the empirical evidence on risk taking and of the literature on cognitive development and decision-making skills has found mixed results regarding the degree to which adolescents may be taking more risks than other age levels.").

51 See Alan S. Waterman, *Identity Development from Adolescence to Adulthood: An Extension of Theory and a Review of Research*, 18 *Dev. Psychol.* 341, 346, 355 (1982) ("It is during the college years that the greatest gains in identity formation appear to occur.").

52 For an articulation of Professor Erikson's theory, see generally Erik H. Erikson, *Identity and the Life Cycle* (W.W. Norton & Co. 1980) (1959); Erik H. Erikson, *Identity: Youth and Crisis* (1968). Professor Erikson artfully described adolescence as "a vital regenerator in the process of social evolution." Erikson, *Identity: Youth and Crisis*, *supra*, at 134.

53 Jay N. Giedd et al., *Brain Development During Childhood and Adolescence: A Longitudinal MRI Study*, 2 *Nature Neuroscience* 861, 861 (1999); Elizabeth R. Sowell et al., *In Vivo Evidence for Post-adolescent Brain Maturation in Frontal and Striatal Regions*, 2 *Nature Neuroscience* 859, 860 (1999). These studies used 3D image mapping techniques, whereas early quantitative structural brain-imaging studies in the late 1980s and early 1990s could not assess density. See Arthur W. Toga et al., *Mapping Brain Maturation*, 29 *Trends Neurosciences* 148, 149 (2006).

54 See Adam Ortiz, *Adolescence, Brain Development and Legal Culpability*, A.B.A. *Juv. Just. Ctr.*, Jan. 2004, at 1, available at <http://goo.gl/b98tT2>; see also *Inside the Teenage Brain: Interview: Jay Giedd*, PBS *Frontline* (2002), <http://goo.gl/1eSz3u> ("The frontal lobe is often called the CEO, or the executive of the brain... It's a part of the brain that most separates man from beast, if you will.").

55 See Giedd et al., *supra* note 53, at 861 (finding gray matter to increase to maximum sizes around the ages of twelve and eleven for males and females respectively).

56 See *id.* at 861-62; Sowell et al., *supra* note 53, at 860.

57 Ortiz, *supra* note 54, at 2.

58 See *id.*

59 See Sowell et al., *supra* note 53, at 860. For additional general descriptions of brain development, see, for example, Patricia Soung, *Social and Biological Constructions of Youth: Implications for Juvenile Justice and Racial Equity*, 6 *Nw. J. L. & Soc. Pol'y* 428, 433 (2011); Claudia Wallis, *What Makes Teens Tick*, *Time*, May 10, 2004, at 56.

60 See Toga et al., *supra* note 54, at 150-51; see also Giedd et al., *supra* note 53, at 861 (finding gray matter to decrease following adolescence through age twenty-two, the oldest age of those studied); Sowell et al., *supra* note 53, at 860 (finding loss of gray matter to continue up to age thirty, the oldest age of those studied).

61 See Elizabeth R. Sowell et al., *Mapping Cortical Change Across the Human Life Span*, 6 *Nature Neuroscience* 309, 309-10 (2003). Other researchers have reached similar conclusions. See Catherine Lebel & Christian Beaulieu, *Longitudinal Development of Human Brain Wiring Continues from Childhood into Adulthood*, 31 *J. Neuroscience* 10937, 10938, 10943 ("We show within-subject brain development during young adulthood in association tracts, particularly frontal connections needed for complex cognitive tasks such as inhibition, executive functioning, and attention.") (studying subjects aged 5.6 to 29.3 years old); see also Melinda Beck, *Delayed Development: 20-Somethings Blame the Brain*, *Wall St. J.*, Aug. 21, 2012, at D1; Tony Cox, *Brain Maturity Extends Well Beyond Teen Years* (NPR radio broadcast Oct. 10, 2011), available at <http://goo.gl/LWW77k>.

62 See generally Laurence Steinberg & Elizabeth S. Scott, *Less Guilty by Reason of Adolescence: Developmental Immaturity, Diminished Responsibility, and the Juvenile Death Penalty*, 58 *Am. Psychol.* 1009 (2003).

63 See *id.* at 1011-13.

64 See *id.* at 1009.

65 *Id.* at 1016.

[66](#) [id.](#) at 1017.

[67](#) 543 U.S. 551 (2005). The importance of the Court injecting science into its reasoning was not lost on commentators. See Bishop & Farber, *supra* note 33, at 125 ("Although Roper will always be best known as the case that abolished the juvenile death penalty in America, the decision is at least equally noteworthy for its endorsement and application of scientific findings relating to adolescent developmental immaturity."); Jeffrey Rosen, *The Brain on the Stand: How Neuroscience Is Transforming the Legal System*, N.Y. Times Mag. 48, 51 (Mar. 11, 2007) ("[Justice Kennedy's] indirect reference to the scientific studies in the briefs led some supporters and critics to view the decision as the *Brown v. Board of Education* of neurolaw.").

[68](#) *Atkins v. Virginia*, 536 U.S. 304 (2002).

[69](#) Simmons - and a friend, who was fifteen at the time - broke into a woman's home, bound her eyes and mouth, then drove to a state park, reinforced her bindings, and threw her from a bridge, drowning her. See Roper, 543 U.S. at 556-57. Disturbingly, Simmons assured his friends they could "get away with it" because they were minors. See *id.* at 556.

[70](#) *Id.* at 559.

[71](#) See *id.* at 559-60. In *Stanford v. Kentucky*, the Court rejected an opportunity to rule out capital punishment for defendants over fifteen but under the age of eighteen. 492 U.S. 361, 377-78 (1989). Justice Antonin Scalia ◊, questioning petitioner's evidence-based argument, wrote: "petitioners and their supporting amici marshal an array of socioscientific evidence concerning the psychological and emotional development of 16- and 17-year-olds. If such evidence could conclusively establish the entire lack of deterrent effect and moral responsibility, resort to the Cruel and Unusual Punishments Clause would be unnecessary" *Id.* While Justice Scalia ◊ announced the judgment of the 5-4 Court, Justice Sandra Day O'Connor ◊ did not join this part. See *id.* at 380-82.

[72](#) Roper, 543 U.S. at 567-68 (quoting *Atkins*, 536 U.S. at 316) (internal quotation marks omitted) (relying on evidence that a majority of states rejected the juvenile death penalty, it was used infrequently, and a trend toward abolishment existed).

[73](#) See *id.* at 568. Roper extended the protection to sixteen- and seventeen-year-olds that *Thompson v. Oklahoma* provided for those under sixteen. See 487 U.S. 815, 838 (1988).

[74](#) See Roper, 543 U.S. at 569-70.

[75](#) *Id.* at 569. The Court cited Arnett, *supra* note 48, at 339, for the first finding; Steinberg & Scott, *supra* note 62, at 1014, for the second finding; and Erikson, *Identity: Youth and Crisis*, *supra* note 52, for the third finding.

[76](#) See Roper, 543 U.S. at 570-71. These arguments regarding retribution and blameworthiness mirror those the Court rejected in *Stanford v. Kentucky*. See 492 U.S. 361, 377-78 (1989).

[77](#) Roper, 543 U.S. at 574.

[78](#) *Id.* The majority noted that its rule might be overinclusive. Some members of the protected class likely had "attained a level of maturity some adults will never reach." *Id.* Underinclusivity, however, was not a concern.

[79](#) See *Graham v. Florida*, 130 S. Ct. 2011, 2020 (2010). Police learned that Terrance Jamar Graham robbed several homes while he was on probation for armed burglary and attempted armed robbery. See *id.* at 2018-20. The trial court revoked Graham's probation and sentenced him to life in prison. See *id.* at 2020.

[80](#) See *id.* at 2026-30.

[81](#) *Id.* at 2026 (citing Roper, 543 U.S. at 569-70). The Graham Court continued:

These salient characteristics mean that 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. Accordingly, juvenile offenders cannot with reliability be classified among the worst offenders. A juvenile is not absolved of responsibility for his actions, but his transgression is not as morally reprehensible as that of an adult.

Id. (internal quotation marks and citations omitted).

[82](#) See *id.*

[83](#) *Id.*

[84](#) *Id.* (citation omitted).

[85](#) *Id.* at 2027 (quoting *Harmelin v. Michigan*, 501 U.S. 957, 1001 (1991) (Kennedy, J., concurring in part and concurring in the judgment)).

[86](#) *Id.* at 2028 ("A 16-year-old and a 75-year-old each sentenced to life without parole receive the same punishment in name only. This reality cannot be ignored." (internal citations omitted)).

[87](#)

See *id.*

[88](#) See *id.* at 2028-31.

[89](#) *Id.* at 2028.

[90](#) *Id.* at 2028-29.

[91](#) *Id.* at 2029.

[92](#) *Id.* at 2029-30.

[93](#) See *id.* at 2030.

[94](#) *Miller v. Alabama*, 132 S. Ct. 2455, 2460 (2012). Kuntrell Jackson was fourteen when he robbed a video store with two friends, one of whom shot the clerk when she threatened to call police. *Id.* at 2461. Evan Miller was fourteen when he and a friend smoked marijuana and drank with a neighbor. *Id.* at 2462. When the neighbor passed out, Miller tried to steal his wallet, but the neighbor awoke and grabbed Miller by the throat. See *id.* Miller and his friend beat him with a baseball bat then set his trailer on fire, killing him. See *id.* An Arkansas statute mandated life in prison without parole for Jackson, who was convicted of capital murder, and Alabama law prescribed the punishment for Miller's conviction for murder in the course of arson. See *id.* at 2461, 2462-63.

[95](#) *Id.* at 2464. The Court's holding turned on finding that mandatory sentencing schemes pose "too great a risk of disproportionate punishment" because they make "youth (and all that accompanies it) irrelevant" to the imposition of the harshest prison sentence and can weaken rationales for punishment. *Id.* at 2469.

[96](#) See *id.* at 2464-65.

[97](#) See *id.* at 2465, 2470-71. Although the majority opinion provides some argument regarding "objective indicia," *id.* at 2471-73, the crux of its holding relied on individualized sentencing precedent, *id.* at 2471, 2472 n.11.

[98](#) See *id.* at 2463.

[99](#)

Id. at 2465.

[100](#) *Id.* at 2466.

[101](#) *Id.* at 2475.

[102](#) *Id.* at 2460.

[103](#) *Janvier v. State*, No. 4D13-1695, slip op. at 1-2 (Fla. Dist. Ct. App. Oct. 2, 2013); see also *Wilcox v. Rozum*, No. 13-3761, 2013 WL 6731906, at 1-2 (E.D. Pa. Dec. 23, 2013); *People v. Riley*, No. 4-12-0225, 2013 WL 936435, at 11 (Ill. App. Ct. Mar. 8, 2013); *Commonwealth v. Clintora*, 69 A.3d 759, 764 (Pa. Super. Ct. 2013). In *Clintora*, the State described the inapplicability of *Miller* by giving the defendant's age down to the day. See Brief for Appellee, *Clintora*, 69 A.3d 759 (No. 3272 EDA 2012), 2013 WL 3858919, at 10 ("The principles set forth in *Miller* only apply to defendants less than 18 years of age... Defendant was 19 years, 13 days [] old; when he committed the crimes for which he was convicted.").

[104](#) *Janvier*, slip op. at 1-2.

[105](#) See, e.g., *Tercero v. Stephens*, No. 13-70010, slip op. at 12 (5th Cir. Dec. 18, 2013) (eighteen-year-old); *In re Garner*, 612 F. 3d 533, 534 (6th Cir. 2010) (nineteen-year-old); *Hosch v. Alabama*, No. CR-10-0188, 2013 WL 5966906, at 64 (Ala. Crim. App. Nov. 8, 2013) (twenty-year-old); *Thompson v. State*, No. CR-05-0073, 2012 WL 520873, at 77-79 (Ala. Crim. App. Feb. 17, 2012) (eighteen-year-old); *Hill v. State*, 921 So. 2d 579, 584 (Fla. 2006) (twenty-three-year-old); *Jean-Michel v. State*, 96 So. 3d 1043, 1044-45 (Fla. Dist. Ct. App. 2012) (nineteen-year-old); *State v. Campbell*, 983 So. 2d 810, 830 (La. 2008) (eighteen-year-old); *State v. Garcell*, 678 S.E.2d 618, 645, 647 n.10 (N.C. 2009) (eighteen-year-old).

[106](#) *Roper v. Simmons*, 543 U.S. 551, 574 (2005). In her *Roper* dissent, Justice O'Connor took issue with the rule's overinclusiveness and underinclusiveness. See *id.* at 601-02 (O'Connor, J., dissenting) ("The age-based line... quite likely will protect a number of offenders who are mature enough to deserve the death penalty and may well leave vulnerable many who are not."); see also Joseph L. Hoffmann, *On the Perils of Line-Drawing: Juveniles and the Death Penalty*, 40 *Hastings L.J.* 229, 259 (1989) ("If age corresponded perfectly to the combination of relevant factors, then its use as a 'bright line' would not be problematic. Because age is not a 'perfect' proxy, however, its use as a 'bright line' necessarily produces ordinal disproportionality, or comparative injustice.").

[107](#) *Roper*, 543 U.S. at 574.

[108](#) B.J. Casey et al., *The Adolescent Brain*, 1124 *Annals N.Y. Acad. Scis.* 111, 122 (2008) (citation omitted). It was their hope to present research "to make strides in moving this single line to multiple lines that consider developmental changes across both context (emotionally charged or not) and time (in the moment or in the future)." *Id.*

1109

See *Miller v. Alabama*, 132 S. Ct. 2455, 2464 (2012) (citing Steinberg & Scott, supra note 62); Roper, 543 U.S. at 569, 570, 573 (same). In total, the majority in Roper cites Professors Steinberg and Scott four times.

1110

Steinberg & Scott, supra note 62, at 1016. Even though they acknowledged the scientific imprecision for drawing a boundary, the psychologists advanced policy arguments in support of one. For instance, they rejected a case-by-case approach for mitigation as an unacceptable, "error-prone undertaking" when the stakes are life and death. See id. They also advocated a boundary, even when it excluded potentially deserved youth, to avoid practical inefficiencies and cases in which immaturity might be ignored due to particular desires to impose punitive punishments. See id. For discussion of how a youthfulness presumption could address these concerns, see *infra* Parts III.A.1 & III.B.2.

1111

See, e.g., Steinberg & Scott, supra note 62, at 1012 (citing Elizabeth Cauffman & Laurence Steinberg, (Im) maturity of Judgment in Adolescence: Why Adolescents May Be Less Culpable Than Adults, 18 Behav. Sci. & L. 741 (2000)). Cauffman and Steinberg examined the relationship between age, psychosocial maturity, and antisocial decisionmaking, finding that "the period between 16 and 19 marks an important transition point in psychosocial development that is potentially relevant to debates about the drawing of legal boundaries between adolescence and adulthood." Cauffman & Steinberg, supra, at 756. For a thorough critique of the Supreme Court's scientific pitfalls in Roper, see generally Deborah W. Denno, The Scientific Shortcomings of Roper v. Simmons, 3 Ohio St. J. Crim. L. 379 (2006).

1112

Miller, 132 S. Ct. at 2464 n.5.

1113

Brief of Amici Curiae J. Lawrence Aber et al. In Support of Petitioners at 15-16, Miller, 132 S. Ct. 2455 (Nos. 10-9646, 10-9647) (citations omitted).

1114

Id. at 16 n.19 (citing Jay N. Giedd, Structural Magnetic Resonance Imaging of the Adolescent Brain, 1021 Annals N.Y. Acad. Scis. 77, 83 (2004); see also supra note 61.

1115

See Brief for American Psychological Ass'n et al. as Amici Curiae In Support of Petitioners at 5, 9, Miller, 132 S. Ct. 2455 (Nos. 10-9646, 10-9647).

1116

See id. at 6 n.3. The error is understandable: "Adulthood," "adolescence," and "early adulthood" have no clear definitional parameters, and researchers often prescribe different labels. See Nitin Gogtay et al., Dynamic Mapping of Human Cortical Development During Childhood Through Early Adulthood, 101 Procs. Nat'l Acad. Scis. 8174, 8174 (describing "adolescence and early adulthood" as encompassing ages seventeen to nineteen but also describing as "children and adolescents" a sample of people ages four to twenty-one). Compare Casey et al., supra note 108, at 117 fig.4 (showing measures in a bar graph for "adolescents" (ages thirteen to seventeen) and "adults" (ages twenty-three to twenty-nine)), with id. at 118 fig.5 (showing a measure in a scatterplot for "adults" (ages eighteen to thirty)).

1117

In 1904, G. Stanley Hall published his two-volume magnum opus on what was then considered a new life stage, adolescence. G. Stanley Hall, *Adolescence: Its Psychology and Its Relations to Physiology, Anthropology, Sociology, Sex, Crime, Religion and Education* (1904).

1118

This period of young adulthood - subjected to many labels, such as "adulthood," "extended adolescence," and "youthhood" - has become the subject of much interest. See Kay S. Hymowitz, Where Have the Good Men Gone?, Wall St. J., Feb. 19, 2011, at C1; Hope Reese, Yes, 20-Somethings Are Taking Longer to Grow Up - but Why?, Atlantic (Nov. 30, 2012, 12:52 PM), <http://goo.gl/FS0mu8>; see also Lev Grossman, Grow Up? Not So Fast, Time, Jan. 16, 2005, at 43; Press Release, MacArthur Foundation, Interdisciplinary Research on the Transition to Adulthood (Aug. 5, 2004), available at <http://goo.gl/7U7Vbz> (announcing a \$ 5.2 million grant in support of research "examining the new challenges facing young people, ages 18 to 34").

1119

See Jeffrey Jensen Arnett, Emerging Adulthood: The Winding Road from the Late Teens Through the Twenties, at v (2004) (noting how sociologists define the transition to adulthood in terms of young people finishing school, entering full-time work, getting married, and becoming parents); see also Jennifer M. Silva, Coming Up Short: Working-Class Adulthood in an Age of Uncertainty 6 (2013). For a suggestion of "new" adult milestones, see Sue Shellenbarger, New Ways to Gauge What Grown-Up Means, Wall St. J., June 19, 2013, at D3.

1120

See Frank F. Furstenberg, Jr. et al., On the Frontier of Adulthood: Emerging Themes and New Directions, in On the Frontier of Adulthood: Theory, Research, and Public Policy 3, 5 (Richard A. Settersten, Jr. et al. eds., 2005) [hereinafter On the Frontier]; see also Robin Marantz Henig, What Is It About 20-Somethings?, N.Y. Times Mag., Aug. 22, 2010, at 28.

1121

See Jeffrey Jensen Arnett & Susan Taber, Adolescence Terminable and Interminable: When Does Adolescence End?, 23 J. Youth & Adolescence 517, 534 (1994) (coining the phrase). See generally Arnett, supra note 119; Emerging Adults in America: Coming of Age in the 21st Century (Jeffrey Jensen Arnett & Jennifer Lynn Tanner eds., 2006); Jeffrey Jensen Arnett, Emerging Adulthood: A Theory of Development from the Late Teens Through the Twenties, 55 Am. Psychol. 469 (2000). Professor Arnett's term "emerging adulthood" seems to have taken off, while previous characterizations, such as "the postponed generation" or "incompletely-launched young adults," have not. In fact, a multidisciplinary, international research organization dedicated to the study of "emerging adulthood" has formed. See About SSEA, Soc'y for the Study of Emerging Adulthood, <http://goo.gl/BU2FPB> (last visited Mar. 15, 2014).

1122

See Arnett, supra note 119, at 4-5; Silva, supra note 119, at 6.

1123

See Erin Migdol, Delaying Marriage Has Serious Consequences for Some, New Research Reveals, Huffington Post (Mar. 15, 2013, 11:14 AM), <http://goo.gl/Pxgscd> (describing how the average ages for marriage have never been higher than they are now for women (26.5) and men (28.7)); see also U.S. Census Bureau, Median Age at First Marriage by Sex: 1890 to 2013, at fig.M5-2 (2013), available at <http://goo.gl/RwBjwl>.

1124

See Richard Fry, Pew Res. Ctr., A Rising Share of Young Adults Live in Their Parents' Home 11 (2013), available at <http://goo.gl/BJUVGS>; see also Robert F. Schoeni & Karen E. Ross, Material Assistance from Families During the Transition to Adulthood, in On the Frontier, supra note 120, at 396, 413 ("In 1990, 70% of eighteen-year-olds lived with their parents, falling to 30% by age twenty-four and to 10% by age thirty. Between 1970 and 1990 there was a monotonic rise in shared housing. Between the ages of twenty and twenty-six, there was a roughly 10 percentage point rise in the share of children living at home.").

1125

See Elizabeth Fussell & Frank F. Furstenberg, Jr., The Transition to Adulthood During the Twentieth Century: Race, Nativity, and Gender, in On the Frontier, supra note 120, at 29, 31, 33 fig.2.3, 58.

126

For critiques of the millennial generation as self-absorbed and needlessly coddled, see, for example, Jeffrey Zaslow, *The Coddling Crisis: Why Americans Think Adulthood Begins at Age 26*, Wall St. J., Jan. 6, 2005, at D1; 60 Minutes: *The Millennials Are Coming* (CBS television broadcast May 25, 2008), available at <http://goo.gl/HFh1h0>.

127

See Amett, *supra* note 119, at 6, 8-9.

128

See *id.*, at 5.

129

See *id.* at 5-6; see also Furstenberg, Jr. et al., *supra* note 120, at 3, 6.

130

See Shellenbarger, *supra* note 119; see also Derek Thompson, *Adulthood, Delayed: What Has the Recession Done to Millennials?*, Atlantic (Feb. 14, 2012, 9:00 AM), <http://goo.gl/00jg5B>.

131

Recall the Court reasoned that although "the qualities that distinguish juveniles from adults do not disappear when an individual turns 18 ... the age of 18 is the point where society draws the line for many purposes between childhood and adulthood." *Roper v. Simmons*, 543 U.S. 551, 574 (2005); see also Ronald Roesch et al., *Social Science and the Courts: The Role of Amicus Curiae Briefs*, 15 *Law & Hum. Behav.* 1, 4 (1991) ("Because judges are trained in the law and are generally unfamiliar with psychology's research methodology and statistics, they are naturally more inclined to rely on legal scholarship and precedent when they make their decisions. The differences in training and approaches to scholarship make communication between the two disciplines difficult.")

132

See Terry A. Maroney, *The False Promise of Adolescent Brain Science in Juvenile Justice*, 85 *Notre Dame L. Rev.* 89, 144-45 (2009) ("The impact of adolescent brain science on juvenile justice has been strongly cabined by the extrinsic reality of legal doctrine... Doctrinal forces are so entrenched and of such broad applicability within criminal law, adolescent brain science is inadequate to provoke deep change, at least within the courts."). The dissents in *Roper* argue that the other Justices' independent moral judgment about youth culpability - and not science - is the fulcrum on which the judgment turns. Justice O'Connor recognized that the rule decreed by the Court "rests, ultimately, on its independent moral judgment that death is a disproportionately severe punishment for any 17-year-old offender." *Roper*, 543 U.S. at 589 (O'Connor, J., dissenting). Additionally, Justice Scalia wrote that "of course, the real force driving today's decision is ... the Court's own judgment that murderers younger than 18 can never be as morally culpable as older counterparts." *Id.* at 615 (Scalia, J., dissenting) (Internal quotation marks and citations omitted).

133

The Twenty-Sixth Amendment guarantees eighteen-year-olds the right to vote, U.S. Const. amend. XXVI, and almost every state recognizes a voting age of eighteen, see *Roper*, 543 U.S. at 581 app. B.

134

See *Roper*, 543 U.S. at 583 app. C.

135

See *id.* at 585 app. D.

136

See *Thompson v. Oklahoma*, 487 U.S. 815, 842 app. C (1988) ("Most States have various provisions regulating driving age, from learner's permits through driver's licenses. In all States but one, 15-year-olds either may not drive, or may drive only with parental consent or accompaniment.")

137

See *id.* at 847 app. F.

138

See, e.g., Cal. Const. art. 20, § 22(d); Ala. Code § 28-1-5 (LexisNexis 2013); 235 Ill. Comp. Stat. Ann. 5/6-16 (West 2013); N.Y. Alco. Bev. Cont. Law § 65(1) (McKinney 2011); 47 Pa. Cons. Stat. Ann. § 4-493(1) (West Supp. 2013); Tex. Alco. Bev. Code Ann. § 106.03 (West Supp. 2013).

139

See, e.g., Ala. Code § 27-14-5(b) (LexisNexis 2007); Cal. Fam. Code § 6700 (West 2013); 215 Ill. Comp. Stat. Ann. 5/242 (West 2000); Mo. Ann. Stat. § 431.056 (West 2000); N.Y. Gen. Oblig. Law § 3-101(1) (McKinney 2012).

140

See, e.g., Ala. Code § 22-8-4 (LexisNexis 2006); Cal. Fam. Code § 6922 (West 2013); 410 Ill. Comp. Stat. Ann. 210/1 (West 2011); N.Y. Pub. Health Law § 2504 (McKinney 2012); 35 Pa. Cons. Stat. Ann. § 10101.1 (West 2012); see also Elizabeth S. Scott, *The Legal Construction of Childhood, in A Century of Juvenile Justice*, *supra* note 28, at 113, 120.

141

See Scott, *supra* note 141, at 120.

142

See Zimring, *supra* note 38, at 72 (noting such activities as driving).

143

See Andrew von Hirsch, *Selective Incapacitation Reexamined: The National Academy of Sciences' Report on Criminal Careers and "Career Criminals,"* 7 *Crim. Just. Ethics* 19, 27 (1988).

144

See *id.*

145

Some children's rights advocates fear that criminal legal developments that do not recognize the differences between criminal law and other decisionmaking contexts might undermine youth autonomy. See Buss, *supra* note 46, at 43-44. Such fears are reasonable, given that developmental discoveries about youth immaturity have had implications beyond the realm of criminal sentencing. For example, proponents and opponents of a woman's ability to have an abortion have used the science. See Scott, *supra* note 140, at 569-76; see also *Roper v. Simmons*, 543 U.S. 551, 617-18 (Scalia, J., dissenting) (comparing scientific evidence presented in the sentencing and abortion contexts). Advocates seeking to prevent alcohol abuse and binge drinking among college students have likewise adopted its thrust. See Linda Patla Spear, *The Adolescent Brain and the College Drinker: Biological Basis of Propensity to Use and Misuse Alcohol, College Drinking - Changing the Culture* (last reviewed Sept. 23, 2005), <http://goo.gl/pTgugW>.

[146](#) Lockett v. Ohio, 438 U.S. 585, 605 (1978); see also id. ("The nonavailability of corrective or modifying mechanisms ... underscore[] the need for individualized consideration as a constitutional requirement in imposing the death sentence.").

[147](#) See Eddings v. Oklahoma, 455 U.S. 104, 115-16 (1982).

[148](#) Id. at 115.

[149](#) See supra notes 103 and 105, and accompanying text.

[150](#) See Miller v. Alabama, 132 S. Ct. 2455, 2475 (2012).

[151](#) Graham v. Florida, 130 S. Ct. 2011, 2027 (2010).

[152](#) Miller, 132 S. Ct. at 2465.

[153](#) See id. at 2465-66; Graham, 130 S. Ct. at 2028-30; Roper v. Simmons, 543 U.S. 551, 571-72 (2005).

[154](#) See Graham, 130 S. Ct. at 2028. The Graham Court noted that "the concept of proportionality is central to the Eighth Amendment." Id. at 2021. Other Justices, however, do not believe that the Eighth Amendment authorizes courts "to invalidate any punishment they deem disproportionate to the severity of the crime or to a particular class of offenders." Miller, 132 S. Ct. at 2483 (Thomas, J., dissenting); Ewing v. California, 538 U.S. 11, 31 (2003) (Scalia, J., concurring in the judgment) ("Proportionality - the notion that the punishment should fit the crime - is inherently a concept tied to the penological goal of retribution."); id. at 32 (Thomas, J., concurring in the judgment); Harmelin v. Michigan, 501 U.S. 957, 989 (1991).

[155](#) Atkins v. Virginia, 536 U.S. 304, 319 (2002).

[156](#) See Graham, 130 S. Ct. at 2028 ("The heart of the retribution rationale is that a criminal sentence must be directly related to the personal culpability of the criminal offender." (citation omitted)).

[157](#) See Roper, 543 U.S. at 571.

[158](#)

Id.

[159](#) See Graham, 130 S. Ct. at 2028-29.

[160](#) Id.

[161](#) Atkins v. Virginia, 536 U.S. 304, 319 (2002).

[162](#) See Andrew Ashworth, Sentencing and Criminal Justice 79 (5th ed. 2010).

[163](#) Id.

[164](#) See Roper v. Simmons, 543 U.S. 551, 570-72 (2005).

[165](#) See Graham, 130 S. Ct. at 2028-29.

[166](#) See id.

[167](#) See Ashworth, supra note 162, at 84.

[168](#) See Graham, 130 S. Ct. at 2029.

[169](#) See id.

[170](#) Id. at 2026.

[171](#) See Miller v. Alabama, 132 S. Ct. 2455, 2465 (2012) (citations omitted).

¹⁷² Bruce J. Cohen, *Theory and Practice of Psychiatry* 504 (2003) ("Since children's personalities are still subject to change at least into their young adulthoods, most clinicians are circumspect about diagnosing personality disorder in individuals under the age of 18.").

¹⁷³ See Nat'l Collaborating Ctr. for Mental Health, *Borderline Personality Disorder: Treatment and Management* 348 (2009) (discussing borderline personality disorder).

¹⁷⁴ See Waterman, *supra* note 51, at 355; see also Jennifer Lynn Tanner & Jeffrey Jensen Arnett, *The Emergence of "Emerging Adulthood: The New Life Stage Between Adolescence and Young Adulthood*, in *Handbook of Youth and Young Adulthood: New Perspectives and Agendas* 39, 42 (Andy Furlong ed., 2009) ("Emerging adulthood is an age period during which there is stronger potential for personality change compared to earlier and later decades."). Tanner and Arnett note that people's personalities over the period from adolescence through emerging adulthood "tend to make gains in forcefulness and decisiveness; ... show increases in self-control, reflecting tendencies to become more reflective, deliberate and pianful; and decrease in negative emotionality, including aggressiveness and alienation." *Id.* (citation omitted).

¹⁷⁵ Graham, 130 S. Ct. at 2029.

¹⁷⁶ See Ashworth, *supra* note 162, at 86.

¹⁷⁷ See Graham, 130 S. Ct. at 2030.

¹⁷⁸ *Id.*

¹⁷⁹ See *id.*

¹⁸⁰ See *supra* notes 16-27 and accompanying text. Whereas early determinations focused on culpability as it related to capacity, this scheme prioritizes responsibility.

¹⁸¹ See *Roper v. Simmons*, 543 U.S. 551, 573 (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, even where the juvenile offender's objective immaturity, vulnerability, and lack of true depravity should require a sentence less severe than death.").

¹⁸² See Elizabeth F. Emens, *Aggravating Youth: Roper v. Simmons and Age Discrimination*, 2005 *Sup. Ct. Rev.* 51, 76.

¹⁸³

See *id.* at 77; see also *supra* note 43. Note that Justice Kennedy's majority opinion in *Roper* found this tendency problematic, see 543 U.S. at 573-74, and Justice O'Connor deemed a prosecutor's attempt to argue youth to be aggravating as "troubling," *id.* at 603.

¹⁸⁴

See Barry C. Feld, *Adolescent Criminal Responsibility, Proportionality, and Sentencing Policy: Roper, Graham, Miller/Jackson, and the Youth Discount*, 31 *Law & Ineq.* 263, 321 & n.313 (2013) ("Surveys of jurors report that the heinousness of a crime invariably trumped a youth's immaturity.").

¹⁸⁵

Roper, 543 U.S. at 619 (Scalia ♣, J., dissenting); see also *Graham v. Florida*, 130 S. Ct. 2011, 2051-52 (2010) (Thomas, J., dissenting) (noting how the rarity of a sixteen-year-old sentenced to life without parole corresponded to his crime's rare brutality).

¹⁸⁶

See *supra* Part I.B.

¹⁸⁷

See *Roper*, 543 U.S. at 572-73.

¹⁸⁸

See *supra* notes 24-26 and accompanying text.

¹⁸⁹

For a discussion about the endpoint of twenty-five, see *infra* Part III.B.1.

¹⁹⁰

Due to its potential impact on plea bargaining, any determination regarding a defendant's eligibility for irrevocable punishments should precede the guilt phase of a trial.

¹⁹¹

Before *Roper*, *Graham*, and *Miller*, Professor Stephen Morse discussed a similar rebuttable presumption scheme but suggested that "fairness and efficiency should require the prosecution to prove beyond a reasonable doubt that a particular adolescent was fully responsible." Stephen J. Morse, *Immaturity and Irresponsibility*, 88 *J. Crim. L. & Criminology* 15, 63 (1997). He contended that such a high burden was necessary for cases involving defendants on the margin "in a system that prefers incorrect attributions of innocence (or lesser culpability) to incorrect attributions of guilt (or greater culpability)." *Id.* at 63-64.

¹⁹²

See *supra* notes 113-15 and accompanying text.

¹⁹³

See *supra* notes 118-25 and accompanying text.

¹⁹⁴

Matthew Mientka, *Adulthood Extended to Age 25 by Child Psychologists in UK*, *Medical Daily* (Sept. 24, 2013, 5:31 PM), <http://goo.gl/8JDJCF>; see also Lucy Wallis, *Is 25 the New Cut-Off Point for Adulthood?*, *BBC News* (Sept. 23, 2013, 5:52 PM), <http://goo.gl/ZRQ92V>.

[195](#) See *supra* Part II.C.

[196](#) *Graham v. Florida*, 130 S. Ct. 2011, 2028 (2010).

[197](#) See *Atkins v. Virginia*, 536 U.S. 304, 318 (2002) ("Clinical definitions of mental retardation require not only subaverage intellectual functioning, but also significant limitations in adaptive skills Mentally retarded persons frequently know the difference between right and wrong and are competent to stand trial. Because of their impairments, however, by definition they have diminished capacities"). The differences between a developmental disability defense and a youthfulness presumption are much starker than the ages for which they are applicable: the former reflects a defendant's diminished culpability as a result of transitory qualities. The latter reflects both a defendant's permanent diminished capacity and his resulting diminished culpability.

[198](#) See *Eddings v. Oklahoma*, 455 U.S. 104, 116 (1982).

[199](#) See *Miller v. Alabama*, 132 S. Ct. 2455, 2475 (2012).

[200](#) *Eddings*, 455 U.S. at 115.

[201](#) See *supra* notes 85-86 and accompanying text.

[202](#) See *Hoffmann*, *supra* note 106, at 281-82. See generally *supra* Part II.B.

[203](#) While police procedure and criminal sentencing are imperfect analogs, the Court in *J.D.B. v. North Carolina* recognized the need to carve out age as an exception to an otherwise objective *Miranda* rule. 131 S. Ct. 2394, 2407 (2011). In response to the State's argument that a child's age must be excluded from the custody analysis "to preserve clarity," Justice Sonia Sotomayor wrote that the Court has rejected a "more easily administered line, recognizing that it would simply enable the police to circumvent the constraints on custodial interrogations established by *Miranda*." *Id.* (internal quotation marks and citation omitted). In the sentencing context, however, the Court's bright line at age eighteen arguably enables some judges and juries to circumvent Eighth Amendment constraints on punishment.

[204](#) Commentators such as Professor Feld have previously recognized the burden that mitigating sentences based on youth might impose on courts. See, e.g., Feld, *supra* note 23, at 122 ("For ease of administration, age alone provides the most useful criterion upon which to allocate mitigation"). In part for this reason, Professor Feld has proposed a "youth discount" in which sentences would be reduced according to age. *Id.* at 122-23; see also Feld, *supra* note 184,

at 325-27 & n.328 (describing supporters of the "youth discount" principle). Professor Feld has argued that his approach "avoids the conceptual and administrative difficulties of a more encompassing subjective inquiry." Feld, *supra* note 23, at 122. This Comment rejects Professor Feld's age-based approach, siding instead with reasoning offered by Professor Morse, who asked, "Should not efficiency yield to the need to individualize for the small class of adults with the same characteristics as juveniles who therefore might not be responsible?" Morse, *supra* note 191, at 64; see also *id.* at 59 ("We must very carefully identify why adolescents might be treated differently, and if fairness requires differential treatment for the class, it also requires that adults with the same responsibility diminishing characteristics should be treated equally.").

[205](#) This Comment asserts that the Court has identified relevant factors for subsequent courts to consider when evaluating the blameworthiness of young adults. But see Feld, *supra* note 184, at 321-22.

[206](#) *Miller v. Alabama*, 132 S. Ct. 2455, 2464 (2012) (citing *Graham v. Florida*, 130 S. Ct. 2011, 2026 (2010); *Roper v. Simmons*, 543 U.S. 551, 569-70 (2005)).

[207](#) See *U.S. v. Booker*, 543 U.S. 220, 233 (2005).

[208](#) U.S. Sentencing Guidelines Manual ch. 5, pt. H, introductory cmt. (2012) (internal quotation marks and citations omitted), available at <http://goo.gl/cy1lMw>.

[209](#) *Id.* § 5H1.1.

[210](#) See *Atkins v. Virginia*, 536 U.S. 304, 317 (2002) (citing *Ford v. Wainwright*, 477 U.S. 399, 405, 416-17 (1986)). For a discussion about how the Court's approach has resulted in a myriad of procedures, see Allison Freedman, Note, *Mental Retardation and the Death Penalty: The Need for an International Standard Defining Mental Retardation*, 12 *Nw. J. Int'l Hum. Rts.* 1, 8-9 (2014).

[211](#) See *Miller*, 132 S. Ct. at 2469.

Content Type: Secondary Materials

Terms: 104 j. crim. l & criminology 667

Narrow By: -None-

Date and Time: Feb 07, 2020 07:46:49 a.m. CST