

THE IMPLICATIONS OF DEVELOPMENTAL COGNITIVE RESEARCH ON “EVOLVING STANDARDS OF DECENCY” AND THE IMPOSITION OF THE DEATH PENALTY ON JUVENILES

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“[J]uveniles as a class have not the level of maturation and responsibility that we presume in adults and consider desirable for full participation in the rights and duties of modern life. The reasons why juveniles are not trusted with the privileges and responsibilities of an adult also explain why their irresponsible conduct is not as morally reprehensible as that of an adult.”¹

INTRODUCTION

Sixteen years after the United States Supreme Court declared capital punishment constitutional for sixteen- and seventeen-year-old offenders in *Stanford v. Kentucky*,² the Court will revisit this issue in *Roper v. Simmons*.³ The Court heard oral arguments for *Roper* on October 13, 2004, and will determine the validity of the Missouri Supreme Court’s holding, in *State ex rel. Simmons v. Roper*, that the juvenile death penalty is unconstitutional under the Eighth Amendment’s Cruel and Unusual Clause.⁴ In its surprising decision in 2003, the Missouri Supreme Court

1. *In re Stanford*, 537 U.S. 968, 969 (2002) (Stevens, J., dissenting) (citing *Stanford v. Kentucky*, 492 U.S. 361, 394-96 (1989)).

2. 492 U.S. 361 (1989).

3. *See State ex rel. Simmons v. Roper*, 112 S.W.3d 397 (Mo. 2003) (en banc) (setting aside the death sentence of Christopher Simmons, a death-row inmate who was seventeen at the time of his offense, and holding that the execution of persons who were under the age of eighteen at the time of the offense was unconstitutional), *cert. granted*, 540 U.S. 1160 (2004).

4. *Id.* at 399; *see also* *State v. Simmons*, 944 S.W.2d 165, 169-70 (Mo. 1997) (en banc) (recounting the facts of the *Simmons* case). In summarizing the facts, the court stated that Mr. Simmons devised a plan to commit a crime and had first described his plan to two friends. *Id.* at 169. He described how he would find someone to burglarize and then murder that person by tying together the person’s hands and feet and pushing the person off a bridge. *Id.* In the early hours of September 9, 1993, Mr. Simmons and an accomplice (who was also under eighteen at the time of the offense) broke into Shirley Crook’s home, bound her hands and feet, and pushed her off a nearby railroad trestle to her death. *Id.* at 169-70. Mr. Simmons told his friends that he believed they would “get away with it” because of their age. *Id.* at 169.

The gruesome facts of this case indicate that the Missouri Supreme Court did not simply spare Mr. Simmons’s life because the facts of his case warranted more lenient treatment. The Missouri Supreme Court’s decision was based solely on the fact that Mr. Simmons was a juvenile and that standards of decency had evolved since *Stanford* to the point where juvenile executions should be considered cruel and unusual. *State ex rel. Simmons v. Roper*, 112 S.W.3d 397, 399 (Mo. 2003) (en banc).

appeared to have broken from *Stanford* by reversing the death sentence of defendant Christopher Simmons, a seventeen-year-old at the time of the crime, on constitutional grounds.⁵ This Comment suggests, however, that the Missouri Supreme Court reached the correct result and advocates for a broadening of the legal standard under which death penalty cases are decided. Specifically, this Comment argues that the Supreme Court, in *Roper*, should incorporate current scientific research on the development of adolescent brains into its analysis of whether juvenile capital punishment comports with the Eighth Amendment. In doing so, the Court should ultimately hold that the execution of juveniles is constitutionally prohibited under the Eighth Amendment's Cruel and Unusual Clause.

Since 2000, numerous brain-scan studies have established that the human brain does not fully mature until an individual is in his or her early to mid-twenties.⁶ This empirical evidence was not available when the Supreme Court last addressed the issue of the juvenile death penalty in 1989.⁷ Such scientific findings present a strong case that the Supreme Court should make a categorical distinction between adults and juveniles for the purpose of prosecuting capital offenses.⁸ This Comment proposes that the Court should therefore integrate recent cognitive research on juvenile brains into the modern capital punishment framework set forth in *Atkins v. Virginia*.⁹ In advocating for a categorical distinction for juvenile offenders with respect to the death penalty, this Comment reviews the modern neurobiological and behavioral research on pre-frontal cortex

5. *State ex rel. Simmons v. Roper*, 112 S.W.3d 397 (Mo. 2003) (en banc); see also S. Starling Marshall, "Predictive Justice"?: *Simmons v. Roper and the Possible End of the Juvenile Death Penalty*, 72 *FORDHAM L. REV.* 2889, 2890 (2004) (reporting that the Missouri Supreme Court was criticized for not following the letter of the law as it was laid out in *Stanford*, and instead acted on a "hunch" as to how the United States Supreme Court would answer the question of juvenile capital punishment in the wake of *Atkins v. Virginia*, 536 U.S. 304 (2002)).

6. See Claudia Wallis, *What Makes Teens Tick*, *TIME*, May 10, 2004, at 59-60 (noting that behavioral problems among adolescents can be attributed, in part, to immaturity in the region of the brain that controls responsibility and the weighing of consequences); see also discussion *infra* Part II.A (detailing contemporary scientific studies that evaluate the developmental maturity of the juvenile pre-frontal cortex).

7. See Elizabeth R. Sowell et al., *Development of Cortical and Subcortical Brain Structures in Childhood and Adolescence: A Structural MRI Study*, 44 *DEVELOPMENTAL MED. & CHILD NEUROLOGY* 4 (2002) (explaining that technologically-advanced neuroimaging tools replaced the dated technique of post-mortem observation in the 1990s).

8. See *infra* Part II.A (summarizing recent scientific studies that have found marked differences in the functionality of adult and juvenile brains).

9. See 536 U.S. at 321 (holding that the death penalty is "cruel and unusual" for mentally retarded offenders because these offenders are less legally culpable and thus the punishment is excessive and disproportionate). The legal framework employed in *Atkins* is relevant to a determination of the constitutionality of juvenile capital punishment because the Court utilizes the same basic Eighth Amendment standard for every death penalty case. See *infra* Part I.A (chronicling the high court's death penalty jurisprudence and the "evolving standards of decency" framework from the early twentieth century to the present).

development that was unavailable at the time of *Stanford*. This Comment argues that this research, when considered with a number of other relevant factors, establishes that the “standards of decency” regarding the execution of adolescents have evolved to a point where this practice must be considered cruel and unusual.¹⁰

Part I of this Comment presents a brief history of death penalty jurisprudence to place the current debate on juvenile capital punishment in context.¹¹ Part II.A discusses the pioneering scientific research on the maturation of the pre-frontal cortex. Specifically, this section addresses how cognitive differences between adults and juveniles affect vital processes such as reasoning and problem solving. Part II.B compares the immature development of the pre-frontal cortex in juveniles to that of the mentally retarded and to persons with a dysfunctional or damaged pre-frontal cortex. In doing so, this section demonstrates that the various forms of immature brain development can result in comparable behavioral patterns and claims that juveniles therefore deserve the same categorical exemption as the mentally retarded from society’s most severe form of punishment. Finally, Part III deconstructs the legal standard that the Court employs in death penalty cases—“the evolving standards of decency that mark the progress of a maturing society”¹²—and proposes that the “standards of decency” analysis be broadened to incorporate the considerable psychological data on cognitive development to find that the practice of executing juveniles is unconstitutional.

I. Background Principles: The Evolution of Eighth Amendment Capital Punishment Jurisprudence

The belief that juveniles are not psychologically mature or as legally culpable as adults is not a new phenomenon. In fact, early English law presumed that children under the age of seven were incapable of committing crimes because they lacked the requisite mental intent.¹³ At that time, a similar rebuttable presumption applied to children aged seven

10. Whether the death penalty in general is constitutional under the Eighth Amendment is beyond the scope of this article.

11. While Part I.A primarily outlines the Supreme Court decisions regarding capital punishment for juveniles, Part I.B addresses high court decisions involving the mentally retarded because these decisions address similar issues and employ the same legal framework. Part I.C reviews the Court’s most current and relevant death penalty decisions and looks to the Court’s 2004–2005 term, when it is due to rule on the constitutionality of the juvenile death penalty in *Roper*.

12. *Trop v. Dulles*, 356 U.S. 86, 101 (1958).

13. See Jeffery Fagan, *Atkins, Adolescence, and the Maturity Heuristic: Rationales for a Categorical Exemption for Juveniles from Capital Punishment*, 33 N.M. L. REV. 207, 226 (2003) (explaining that youths’ crimes were not excused, but because children under the age of seven may have lacked the element of criminal intent that was required to prove guilt for adult offenders, their punishment was often commuted).

to fourteen; youths between these ages were assumed incapable of committing crimes unless the opposite was proven in a court of law.¹⁴ Evidence suggests that, while children under the age of fourteen may theoretically have been eligible to receive the death penalty, courts in England and the United States were reluctant to enforce this punishment during the nineteenth century.¹⁵

Despite the apparent common law distinction between youths and adults, the formal separation of children from adults in the American criminal justice system did not appear until the late nineteenth century.¹⁶ Although juveniles had been treated differently since the 1820s,¹⁷ Massachusetts was the first state to begin trying juveniles separately from adults in 1875.¹⁸ By the time Congress passed the Federal Juvenile Delinquency Act in 1938,¹⁹ juvenile offenders in every state were being prosecuted in a separate judicial system based, at least in part, on the notion that juveniles lacked the skills and maturity of adults.²⁰ Although this formal judicial distinction

14. *See id.* (noting that there was no officially sanctioned measure of criminal culpability, and therefore, the determination of when a child was fully responsible for his or her behavior was inconsistent, varying between courts and over time).

15. *See* AMERICAN BAR ASSOCIATION, ABA JUVENILE JUSTICE POLICIES: JUVENILE DEATH PENALTY 985 (noting that, in one London court, 103 children under the age of fourteen were sentenced to death between 1801 and 1836, but not one was actually executed, and that only two juveniles less than fourteen years old were judicially executed in the United States between the years 1806 and 1882), available at <http://www.abanet.org/crimjust/juvjus/jdppolicy.html> (last visited Feb. 19, 2005); *see also* Anthony Platt & Bernard L. Diamond, *The Origins of the "Right and Wrong" Test of Criminal Responsibility and Its Subsequent Development in the United States: An Historical Survey*, 54 CAL. L. REV. 1227, 1246 (1966) (concluding that there is no justification for the contention that children were regularly executed in the United States during the nineteenth century); Elizabeth S. Scott & Laurence Steinberg, *Blaming Youth*, 81 TEX. L. REV. 799, 804 (2003) (contending that at early common law, once children reached fourteen years of age, they were presumed to have the moral capacity of adults, but that the prosecutor had to prove the defendant understood the wrongfulness of his act).

16. *See* THOMAS HINE, *THE RISE & FALL OF THE AMERICAN TEENAGER* 173 (1999) (observing that the Progressive era, around the turn of the twentieth century, pioneered greater legal protections for juveniles from a number of dangers, such as excessive punishment, but that the presumed incompetence of adolescents also resulted in the constriction of their long-established rights).

17. *See id.* (acknowledging that many states had houses of refuge, truant schools, or other systems in place to imprison young offenders separately from adult criminals before the formal juvenile justice system emerged).

18. *See id.* (stating that this trend spread quickly and by 1909, ten states had separate juvenile court systems); *see also* *Commonwealth v. Donahue*, 126 Mass. 51 (1878) (citing the 1877 law that codified the practice of distinguishing between juvenile and adult trials).

19. Federal Juvenile Delinquency Act, ch. 486, 52 Stat. 74 (1938) (current version at 18 U.S.C. §§ 5031-5042 (2000)). The Federal Juvenile Delinquency Act ("the Act") allowed the Attorney General to seek the prosecution of a juvenile as an adult in special circumstances, except where the offense carried the punishment of the death penalty or life imprisonment. *Id.* The Act also prohibited juveniles from being sentenced to a term beyond the age of twenty-one. *Id.* *See also* Fagan, *supra* note 13, at 227 n.106 (stating that prior to 1938, there was no federal legislation providing separate treatment of adults and juveniles within the criminal justice system).

20. *See* Fagan, *supra* note 13, at 226 (noting that juveniles in various American colonial

has become blurred,²¹ American society remains protective of juveniles through minimum age statutes.²² Such statutes typically establish eighteen as the threshold age for exercising certain rights and responsibilities, illustrating that public opinion still recognizes adolescents as psychologically less mature than adults.²³ A distinction that permits the justice system's most extreme punishment for juveniles, yet prevents juveniles from enjoying certain social privileges, is both hypocritical and inconsistent.²⁴

A. *Capital Punishment for Juvenile Offenders*

Opponents of the juvenile death penalty argue that the execution of adolescents is unconstitutional under the Eighth Amendment,²⁵ given the immaturity and reduced legal culpability of juveniles, because such punishment violates the principle of proportionality.²⁶ Over time, the

courts were subject to distinct culpability standards from adults, i.e., "mentally capable of distinguishing between right and wrong"); see also HINE, *supra* note 16, at 173 (noting that every state had a formally distinct juvenile court system by 1945, although juveniles did not begin to share the same constitutional rights as adults for over two decades).

21. Today, juveniles under the age of eighteen can be subjected to adult criminal liability in all states. Fagan, *supra* note 13, at 227-28. The Supreme Court's decision in *Kent v. United States*, 383 U.S. 541 (1966), which allowed courts to sentence juveniles to the same punishments as adult offenders, further weakened judicial protection of juveniles. *Id.* See also Julian V. Roberts, *Public Opinion and Youth Justice*, 31 CRIME & JUST. 495, 495 (2004) (crediting the shift to punishing juveniles as adults in part to the increased public concern about youth crime).

22. See Fagan, *supra* note 13, at 232 (citing *Thompson v. Oklahoma*, 487 U.S. 815, 823 (1988), and mentioning that the *Thompson* Court documented numerous examples of rights and privileges that are not accorded to juveniles, including the right to serve on a jury, the right to vote, and the right to marry).

23. See *Hearing Before the House Criminal Justice and Public Safety Committee*, 2004 Leg., 108 Cong. 2d Sess. (N.H. 2004) (testimony of David Fassler, M.D.) at 2 (mentioning that eighteen is the minimum age limit to exercise the right to vote, enter military service, marry, and make independent medical decisions), available at <http://ccjr.policy.net/relatives/22020.pdf>; see also *Thompson*, 487 U.S. at 823, 834 (inferring that the American people have supported legislation prohibiting juveniles from serving on a jury, marrying without parental consent, or purchasing alcohol and cigarettes, because they recognize that juveniles are "less mature and responsible" and lack the "judgment" expected of adults).

24. *But see* *Stanford v. Kentucky*, 492 U.S. 361, 374 (1989) (discounting minimum age statutes as irrelevant to a determination of the constitutionality of the juvenile death penalty because society cannot make individualized determinations about which youths are mature enough to engage in certain activities, while the court system can consider the maturity of each juvenile capital offender on a case-by-case basis).

25. See U.S. CONST. amend. VIII (providing that no "cruel and unusual punishments [shall be] inflicted" upon any person).

26. See *Enmund v. Florida*, 458 U.S. 782, 798 (1982) (explaining that the principle of proportionality is unique with respect to capital punishment because the Eighth Amendment requires "individualized consideration as a constitutional requirement in imposing the death sentence" (quoting *Lockett v. Ohio*, 438 U.S. 586, 605 (1978))). As a result, the proportionality analysis is a subjective one that essentially focuses on the individual culpability of the offender, and not the more objective analysis of whether death is an appropriate punishment for murder. *Id.* The *Enmund* Court therefore focused on the character and the record of the offender to determine if he or she had the "cold calculus that

Supreme Court has established a framework that determines when a punishment may be considered cruel and unusual. Around the turn of the twentieth century, the Supreme Court, in *Weems v. United States*,²⁷ mandated that the Cruel and Unusual Clause of the Eighth Amendment is not static and inviolable, but rather “progressive, and is not fastened to the obsolete but may acquire meaning as public opinion becomes enlightened by a humane justice.”²⁸ The Court similarly interpreted the Cruel and Unusual Clause almost a half a century later in *Trop v. Dulles*²⁹ by requiring that all punishments comport with “evolving standards of decency that mark the progress of a maturing society.”³⁰ The *Trop* Court, however, did not limit its definition of society to a national one, but rather considered the practices of *all* “civilized” nations when holding that the practice of expatriation was cruel and unusual.³¹ In 1976, *Gregg v.*

precedes the decision to act.” *Id.* at 799 (quoting *Gregg v. Georgia*, 428 U.S. 153, 186 (1976)).

Justice Scalia, writing for the majority in *Stanford*, attempted to remove the proportionality analysis completely, taking an objective approach to the death penalty question. See Robert E. Searfoss III, Comment, *Waiver of Juvenile Jurisdiction and the Execution of Juvenile Offenders: Why the Eighth Amendment Should Require Proof of Sufficient Mental Capacity Before the State Can Exact Punishment*, 35 U. TOL. L. REV. 663, 672 (2004) (mentioning that Justice Scalia proposed that the Court refrain from imparting its views on the culpability of the offender and should instead look primarily to whether state legislatures endorse the practice). This approach is highly controversial among members of the Court, however, and four dissenting Justices accordingly reproached the *Stanford* majority for eliminating the measure of proportionality that they, and preceding Courts, considered to be constitutionally required by the Eighth Amendment. *Id.*

The principle of proportionality is also embraced in *Atkins*, the Court’s most recent death penalty case, holding that individual culpability is a critical part of the constitutionality determination. See Fagan, *supra* note 13, at 230 (explaining that Justice Stevens’ majority opinion in *Atkins* reasoned that the ultimate expression of moral outrage should be reserved for offenders committing the most egregious conduct against society, and that juveniles, who are less able to evaluate the consequences of their conduct, do not possess the moral culpability deserving of such a serious sanction). Fagan suggests that the sanction of executing juveniles is also excessive because it fails under both the retributive and deterrence models of punishment. *Id.* See also *Coker v. Georgia*, 433 U.S. 584, 592-98 (1977) (explaining that the Eighth Amendment bars punishments that are excessive in relation to the crime committed, and, relying in part on legislative enactments and jury verdicts, determining that the death penalty is a disproportionate punishment for the crime of rape).

27. 217 U.S. 349 (1910) (holding that a fifteen-year imprisonment term for falsifying an official public document was cruel and unusual punishment under the Eighth Amendment).

28. See *id.* at 373 (“Time works changes, brings into existence new conditions and purposes. Therefore a principle to be vital must be capable of wider application than the mischief which gave it birth.”).

29. 356 U.S. 86 (1958).

30. *Id.* at 101. “Evolving standards of decency” remains the standard under which all death penalty cases are evaluated. See, e.g., *Thompson v. Oklahoma*, 487 U.S. 815, 821 (1988) (using the standard to determine if the death penalty is an appropriate punishment for defendants who were less than sixteen at the time they committed the crime at issue); *Gregg v. Georgia*, 428 U.S. 153, 173 (1976) (invoking the standard as a means of determining if the death penalty is an appropriate punishment for murder arising out of armed robbery).

31. See *Trop*, 356 U.S. at 102-03 (“The civilized nations of the world are in virtual unanimity that statelessness is not to be imposed as punishment for crime. It is true that

*Georgia*³² built on this standard and established that evolving standards of decency are to be determined, not by the subjective views of the Court, but by “objective indicia that reflect the public attitude toward a given sanction.”³³ Notably, the *Gregg* Court asserted that these indicia should include, but should not be entirely comprised of, legislative judgments.³⁴

Consistent with this standard, *Thompson v. Oklahoma*,³⁵ in 1988, rendered the death penalty unconstitutional for juveniles under the age of sixteen, defining “evolving standards of decency” according to three contemporary, objective factors.³⁶ First, Justice Stevens’ opinion looked to state legislative action as the primary indicator of public opinion on the issue, finding that each of the eighteen states that had set a minimum age for the execution of juveniles required the defendant to be at least sixteen years of age at the time of the capital offense.³⁷ Second, the Court looked to the behavior of juries, citing the infrequent and haphazard imposition of death sentences on adolescents under the age of sixteen by capital juries as

several countries prescribe expatriation But use of denationalization as punishment for crime is an entirely different matter. The United Nations’ survey of the nationality laws of 84 nations of the world reveals that only two countries, the Philippines and Turkey, impose denationalization as a penalty for desertion.”); *see also* discussion *infra* Part III.B (considering the relevance of international law in determining if a practice is cruel and unusual under the Eighth Amendment).

32. 428 U.S. 153 (1976) (upholding the constitutionality of Georgia’s death penalty statute, which, before the death penalty could be imposed, required a bifurcated trial on the issues of guilt and penalty, and a finding beyond a reasonable doubt of one of ten specified aggravating circumstances).

33. *See id.* at 173 (adding that public perceptions of decency are not the only guide, but that the punishment must also be proportional to the crime and not involve the unnecessary and wanton infliction of pain). The *Gregg* Court also offered guidance to future courts by holding that the death penalty is designed to serve the dual purposes of retribution and deterrence of offenders and cautioned that when these two goals are not reached, the result is the “gratuitous infliction of suffering.” *Id.* at 183.

34. *See id.* at 174 n.19 (“Although legislative measures adopted by the people’s chosen representatives provide one important means of ascertaining contemporary values, it is evident that legislative judgments alone cannot be determinative of Eighth Amendment standards since that Amendment was intended to safeguard individuals from the abuse of legislative power.”); *see also* Sharon Ongerth, *Deference to the Majority: Why Isn’t the Supreme Court Applying the Reasoning of Atkins v. Virginia to Juveniles?*, 37 LOY. L.A. L. REV. 483, 505-06 (2003) (noting that a strict legislative count of states that do execute juvenile offenders likely does not accurately depict the national consensus on this issue, as only six states that have capital punishment statutes have actually executed a juvenile offender since *Stanford*). *See generally* discussion *infra* Part III.A-B (reviewing the Court’s recent move to redefine the meaning of “society” under the “evolving standards of decency” framework).

35. 487 U.S. 815 (1988).

36. *See id.* at 824-25 (holding that juveniles’ immaturity can mitigate culpability and that individualized consideration of maturity is inadequate, thus warranting a categorical distinction for adolescents under the age of sixteen).

37. *See id.* at 824 (mentioning that in all fifty states, no minor under the age of sixteen could vote, serve on a jury, or purchase pornographic materials, that in only one state could a minor under sixteen drive, and that in only four states could such a minor marry without parental consent). The Court concluded that the history of the law indicated that society does not believe that a fifteen-year-old has the “capacity” to act as an adult. *Id.* at 825.

an indication that the practice no longer comported with society's decency standards.³⁸ Finally, the Court took into account the views of respected national and international organizations, along with the legislative practices of the international community, to determine "evolving standards."³⁹

In the following year, a divided 4-1-4 plurality in *Stanford v. Kentucky*⁴⁰ deviated from the holding of the *Thompson* Court, concluding that the Eighth Amendment did not prohibit the execution of sixteen- and seventeen-year-old juveniles because current standards of decency are to be determined almost entirely by statute.⁴¹ While Justice Scalia, writing for the majority, did evaluate the behavior of juries when defining "evolving standards of decency," he rejected the opportunity to look to public opinion polls, the views of professional organizations, and the international community.⁴² Because the majority of states permitting the death penalty allowed the punishment for sixteen- and seventeen-year-olds,⁴³ Justice

38. See *id.* at 831 (citing *Furman v. Georgia*, 408 U.S. 238, 249 (1972) and concluding that the rarity of death penalty sentences that are imposed on juveniles reflects an inference of arbitrariness, expressly prohibited by the Eighth Amendment); Jeffery M. Banks, Student Article, In *Re Stanford: Do Evolving Standards of Decency Under the Eighth Amendment Jurisprudence Render Capital Punishment Inapposite for Juvenile Offenders?*, 48 S.D. L. REV. 327, 348 (2002-2003) (stating that only twenty-one juvenile executions have taken place since 1973 (fourteen of which have occurred in Texas)). In 1973, most states had to redraft their death penalty statutes in response to the procedural guidelines, formulated by the Supreme Court in *Furman*, for implementing the death penalty. *Id.* See also Jill M. Cochran, Note, *Courting Death: 30 Years Since Furman, is the Death Penalty any Less Discriminatory? Looking at the Problem of Jury Discretion in Capital Sentencing*, 38 VAL. U. L. REV. 1399, 1407-08 nn.40 & 42 (2004) (explaining that the death penalty was generally so unpopular among juries that every state abolished the mandatory death penalty because a jury would vote for acquittal instead of imposing the required sentence).

39. See *Thompson*, 487 U.S. at 830-31 (noting that the American Bar Association and American Law Institute, among other professional organizations, denounced the practice, and that Anglo-American nations including Canada, all of the Western European countries, and the Soviet Union prohibited juvenile executions).

40. 492 U.S. 361, 380 (1989).

41. See *id.* (upholding the death sentence of an offender who was seventeen-years-and-four-months-old at the time of his crime).

42. See *id.* at 377 (denouncing public opinion polls and views of interest groups and professional organizations as "uncertain foundations" upon which to base constitutional law). Justice Scalia did not directly address international law in his opinion; rather, he failed to mention it, or to respond to the dissent's application of international law when determining that the death penalty for juveniles was against contemporary standards of decency. *Id.* at 389-90 (Brennan, J., dissenting). But see Marshall, *supra* note 5, at 2926-27 (stating that international opinion on the death penalty was recognized as early as *Trop* and remains an important indicator of societal norms). International consensus is at least as strong on the issue of the juvenile death penalty as it is on the issue of executing the mentally retarded and the *Atkins* majority considered international opinion in deciding on the constitutionality of the death penalty for the mentally retarded. *Id.* Further, treaty law on the death penalty is more explicit for juveniles than for the mentally retarded. *Id.*

43. See *Stanford*, 492 U.S. at 370 (stating that of the thirty-seven states that imposed the death penalty in 1989, only fifteen declined to impose it on sixteen-year-olds and only twelve declined to impose it on seventeen-year-olds). But see *In re Stanford*, 537 U.S. 968, 971 (2002) (Stevens, J., dissenting) (noting that, since *Stanford v. Kentucky* was decided in 1989, no state has lowered the age of eligibility for the death penalty to sixteen or seventeen, and that the legislative trend in determining the legal rights and obligations of juveniles in

Scalia concluded that the practice met with public approval, as exemplified through the workings of the democratic process.⁴⁴

B. Capital Punishment for Mentally Retarded Offenders

In order to generate a thorough perspective of Eighth Amendment jurisprudence for juvenile offenders, it is necessary to also survey the Court's jurisprudence respecting the execution of the mentally retarded, as the Court's treatment of these two issues is substantively similar.⁴⁵ Accordingly, the Court decided *Penry v. Lynaugh*⁴⁶ on the same day as *Stanford* and, invoking the same standard used in *Stanford*, held that the Eighth Amendment does not prohibit the execution of the mentally retarded.⁴⁷ The Court in *Atkins v. Virginia*, however, overturned this decision in 2002 by a margin of 6-3 when it held that standards of decency had evolved since *Penry*, and that capital punishment for the mentally retarded was no longer constitutional.⁴⁸ Following *Thompson* rather than *Stanford*, Justice Stevens authored the majority decision in *Atkins* that evaluated three main factors: legislative intent, the rarity of the imposition of the death penalty on the mentally retarded, and the opinions of

other areas has been to require juveniles to be older rather than younger before they are granted those rights and responsibilities).

44. See *Stanford*, 492 U.S. at 374-75 (finding that minimum age statutes are not relevant to a determination of the constitutionality of the juvenile death penalty (e.g., that the legislature did not intend for these statutes to dictate that *all* juveniles should be treated differently than adults in every area of the law)). Justice Scalia theorized that individualized testing of juveniles' maturity levels is not possible with regard to all general social privileges, so therefore a blanket exclusion is necessary in these cases. *Id.* Justice Scalia contrasted that situation with the circumstances of a trial and concluded that because the criminal justice system allows for each juvenile capital defendant to be judged on a case-by-case basis, such a categorical distinction is not appropriate for the death penalty. *Id.*

45. The issues are substantively similar because some of the same problematic behavioral patterns observed in the mentally retarded are often observed, if to a lesser degree, in juveniles and because the Supreme Court uses the same "evolving standards of decency" framework for both issues. See discussion *infra* Part II.B (addressing specific scientific data that indicates that youths with immature pre-frontal cortexes manifest some comparable problematic behavioral patterns to people with damaged pre-frontal cortexes or mental retardation).

46. 492 U.S. 302, 340 (1989) (claiming that legislative action and jury behavior presented an insufficient national consensus to categorically prohibit the execution of mentally retarded offenders).

47. See *id.* at 334 (finding that the execution of a twenty-two-year-old offender with the mental age of six-and-a-half, who had organic brain damage and was mentally retarded, was constitutional because only two states had enacted legislation categorically exempting the mentally retarded from the death penalty).

48. See *Atkins v. Virginia*, 536 U.S. 304, 313-15 (2002) (stating that the first death penalty statute to prohibit execution of the mentally retarded was passed in 1986, only three years before *Penry* was decided, and that by the time of *Atkins*, eighteen states had passed legislation prohibiting the practice). When taken with the twelve states that prohibited the death penalty entirely, the legislative count totaled thirty states, enough to establish a national consensus against executing the mentally retarded. *Id.* at 316.

professional, social, and religious organizations, as well as the international community.⁴⁹

C. Modern Capital Punishment Jurisprudence

The twenty-first century will likely continue to spawn even greater developments in the Court's death penalty jurisprudence. In the same year as *Atkins*, Kevin Stanford petitioned the Supreme Court for a writ of habeas corpus in *In re Stanford*, yet the Court refused to grant certiorari on his case.⁵⁰ Although the majority did not issue an opinion, Justice Stevens wrote a strong dissent, expressing a desire to "put an end to th[e] shameful practice" of executing juveniles.⁵¹ Most notably, the dissenting Justices broke with death penalty jurisprudence practice and cited recent scientific evidence supporting a claim that adolescents are without the same "capacity to control their conduct and to think in long-range terms" as adults.⁵² The dissenting Justices further reasoned that no legislature had lowered the age of the death penalty to sixteen or seventeen (from eighteen) since *Stanford*.⁵³ Rather, states were moving to abolish the death penalty for juveniles.⁵⁴

49. See *id.* at 316 n.21 (departing from *Stanford* by citing *Thompson*'s holding that the Court should consider the views of "respected professional organizations, by other nations that share our Anglo-American heritage, and by the leading members of the Western European community"). The *Atkins* Court broadly held that public opinion had changed considerably since *Penry* for the following reasons: a large number of states prohibited capital punishment for the mentally retarded, even the states that permitted this practice rarely executed the mentally retarded, and a broad social and professional consensus had developed against the practice. *Id.* at 315-16. The *Atkins* decision was based on these three foregoing factors, but also took into consideration the results of the Court's independent examination of the practice, which found that the punishment was excessive in light of the diminished culpability of the mentally retarded. *Id.* at 321.

50. 537 U.S. 968 (2002).

51. See *id.* at 972 (Stevens, J., dissenting) (dissenting opinion joined by Justices Breyer, Ginsburg, and Souter).

52. *Id.* at 970 (citing *Stanford v. Kentucky*, 492 U.S. 361, 395 (1989) (Brennan, J., dissenting) (citing TWENTIETH CENTURY TASK FORCE ON SENTENCING POLICY TOWARD YOUNG OFFENDERS, CONFRONTING YOUTH CRIME 7 (1958)). Justice Stevens' dissenting opinion presented scientific advances such as magnetic resonance imaging ("MRI") studies to support the claim that juveniles "are more vulnerable, more impulsive, and less self-disciplined than adults." *Id.* Until *In re Stanford*, the Court had not used scientific evidence to support the claim that the death penalty was unconstitutional with regard to juveniles or the mentally retarded, perhaps because there was no such evidence available. See also Marshall, *supra* note 5, at 2928-29 (stating, in reference to Justice Stevens' comment in *In re Stanford* regarding MRI studies on juvenile pre-frontal cortex development, that "[s]ome Supreme Court Justices recently took notice of this new vein of research").

53. *In re Stanford*, 537 U.S. at 971.

54. See *id.* at 969 (indicating that since *Stanford*, four state legislatures (Indiana, Kansas, Montana, and New York) and the Supreme Court of the State of Washington had forbidden the execution of persons under the age of eighteen). Justice Stevens pointed out that the number of state statutes that opposed the death penalty for juveniles in October 2002 (twenty-eight) was only two fewer than the number of state statutes that opposed the death penalty for the mentally retarded in June 2002 (thirty), a number sufficient for the *Atkins* Court to hold that the national consensus did not support the practice of executing the

Juvenile capital punishment continued to garner the attention of the courts during this period. Less than a year after *In re Stanford*, the Missouri Supreme Court heard *State ex rel. Simmons v. Roper*,⁵⁵ a similar case regarding a juvenile who had committed a capital crime.⁵⁶ In August 2003, the Missouri Supreme Court declared the execution of juveniles cruel and unusual and predicated their ruling on the Supreme Court's reasoning in *Thompson* and *Atkins*, holding that a national consensus *against* executing juveniles had evolved since *Stanford*.⁵⁷ Looking at national legislation in 2003, sixteen states prohibited the execution of juveniles under eighteen⁵⁸ and eleven other states, as well as the District of Columbia, barred the death penalty at the time of this decision.⁵⁹ The

mentally retarded. *Id.* at 968. Justice Stevens reasoned that it was remarkable that state legislatures were even making a point to change their statutes regarding juvenile capital punishment during this period, considering that only two percent of the population of death row inmates were juveniles, thus implying that few state legislatures would be compelled to change their existing statutes when their state had not implemented the practice in decades. *Id.* at 972. He concluded that because the states that changed their death penalty statutes uniformly did so by *raising* the age for execution to eighteen, public opinion had clearly shifted since *Stanford*. *Id.*

55. 112 S.W.3d 397 (Mo. 2003) (en banc), *cert. granted*, 540 U.S. 1160 (2004).

56. *Id.* The Missouri Supreme Court originally heard Christopher Simmons' case in 1997, and rejected the argument that Mr. Simmons' age was a mitigating circumstance that would consequently bar the imposition of the death penalty. *State v. Simmons*, 944 S.W.2d 165, 191 (Mo. 1997) (en banc). The Missouri Supreme Court, in 1997, upheld his death sentence under controlling state precedent. *Id.* Mr. Simmons, however, brought a second appeal in 2002 after *Atkins*, where he argued that a national consensus against the execution of juveniles had developed since *Stanford*. *Simmons*, 112 S.W.3d at 399.

57. *Simmons*, 112 S.W.3d at 401. The Missouri Supreme Court did not refuse to follow *Stanford* or the national "evolving standards of decency" framework. *Id.* Instead, the *Simmons* Court held that the rationale for the Supreme Court's decision in *Stanford*—that the execution of juveniles was not cruel or unusual—had disappeared as a result of recent state legislative enactments prohibiting the execution of juveniles, and that sentencing juveniles to death had become truly unusual over the decade or so since *Stanford*. *Id.* The Missouri court also relied on *Thompson* and *Atkins* in considering the views of respected national and international organizations to determine that society's "standards of decency" had evolved. *Id.*

58. California (CAL. PENAL CODE § 190.5(a) (West 1999)); Colorado (COLO. REV. STAT. ANN. § 18-1.3-1201 (West 2002)); Connecticut (CONN. GEN. STAT. ANN. § 53a-46a(h)(1)(West 2001)); Illinois (720 ILL. COMP. STAT. ANN. 5/9-1(b) (West 2002)); Indiana (IND. CODE ANN. § 35-50-2-3(b)(1) (Michie 2004)); Kansas (KAN. STAT. ANN. § 21-4622) (1995); Maryland (MD. CODE ANN., CRIM. LAW § 2-202(b)(2)(i) (2002)); Montana (MONT. CODE ANN. § 45-5-102(2) (2003)); Nebraska (NEB. REV. STAT. § 28-105.01(1) (Supp. 2003)); New Jersey (N.J. STAT. ANN. §§ 2A:4A-22(a), 2C:11-3(g) (West 1987, Supp. 2004)); New Mexico (N.M. STAT. ANN. §§ 28-6-1(A), 31-18-14(A) (Michie 2002)); New York (N.Y. PENAL LAW § 125.27(1)(a)-(b) (McKinney 2004)); Ohio (OHIO REV. CODE ANN. §§ 2929.023, 2929.03(E) (West 2003)); Oregon (OR. REV. STAT. § 137.707(2) (2003)); Tennessee (TENN. CODE ANN. §§ 37-1-102(4), 37-1-103, 37-1-134(a)(1) (2001)); Washington (*State v. Furman*, 858 P.2d 1092, 1103 (Wash. 1993) (en banc) (interpreting the Washington code to comply with *Thompson*)).

59. Alaska (ALASKA STAT. § 12.55.015 (Michie 2004)); District of Columbia (D.C. CODE ANN. § 22-2104 (2001)); Hawaii (HAW. REV. STAT. ANN. § 706-656 (Michie 2003)); Iowa (IOWA CODE ANN. § 902.1 (West 2003)); Maine (ME. REV. STAT. ANN. tit. 17-A, §§ 1152, 1251 (West 1964, Supp. 2004)); Massachusetts (*Commonwealth v. Colon-Cruz*, 470 N.E.2d 116, 124 (Mass. 1984) (barring the death penalty for guilty pleas entered in the

Missouri Supreme Court specifically noted that, while no state had lowered the age for execution below eighteen in the fourteen years since *Stanford*, five states had raised the minimum age to, or established it at, eighteen.⁶⁰ Following the same analysis as *Atkins*, the court in *Simmons* interpreted the Eighth Amendment “in a flexible and dynamic manner,”⁶¹ as set forth in *Stanford*.⁶² The Supreme Court must now decide if the Missouri Supreme Court was correct in finding that standards have evolved since *Stanford* and determine if the death penalty framework shall follow that of *Stanford* or *Atkins*.

II. INCORPORATING SCIENCE INTO THE CONSTITUTIONAL CALCULUS

A. *Scientific Research on Juvenile Cognitive Development*

For many years, scientists believed that the brain reached maturity in the pre-adolescent years.⁶³ Yet recent technological advancements, such as the onset of high-resolution magnetic resonance imaging (“MRI”) in the 1980s,⁶⁴ have changed the way that researchers examine the brain⁶⁵ and

absence of a jury trial)); Michigan (MICH. CONST. art. IV, § 46 (1963); MICH. COMP. LAWS § 750.316 (2003); Minnesota (MINN. STAT. ANN. §§ 609.10, 609.185 (West 2003); North Dakota (N.D. CENT. CODE § 12.1-32-01 (1997); Rhode Island (R.I. GEN. LAWS § 11-23-2 (2002); West Virginia (W. VA. CODE §61-11-2 (1965); Wisconsin (WIS. STAT. ANN. §§ 939.50(3)(a), 940.01 (West 1996, Supp. 2004).

60. See *Simmons*, 112 S.W.3d at 408 (noting that Indiana and Montana raised the age of execution to eighteen, Kansas and New York reinstated the death penalty solely for offenders over the age of eighteen at the time of the crime, and the Washington Supreme Court held that its state statute could not be construed to authorize the death penalty for juveniles).

61. *Id.* at 406.

62. See *id.* at 406-07 (basing its decision on the following objective indicia in order to align the decision with the reasoning of *Stanford*: state legislation, frequency of the imposition of the death penalty on juveniles, national and international opinion, and an independent court examination).

63. See Wallis, *supra* note 6, at 56-58 (noting that psychological literature tracing back to Jean Piaget, a prominent Swiss developmental psychologist, posits that even the most sophisticated human brain development is complete by the age of twelve).

64. See Florence Antoine, *Cooperative Group Evaluating Diagnostic Imaging Techniques*, 81 J. NAT'L CANCER INST. 1347, 1348 (1989) (“MRI measures the response of atoms in different tissues when they are pulsed with radio waves that are under the influence of magnetic fields thousands of times the strength of the earth’s. Each type of tissue responds differently, emitting characteristic signals from the nuclei of its cells. The signals are fed into a computer, the position of those atoms is recorded, and a composite picture of the body area being examined is generated and studied in depth.”); see also Wallis, *supra* note 6, at 62 (discussing the difference between MRI and *functional* magnetic resonance imaging (fMRI): MRI simply reveals brain structure, whereas fMRI actually shows brain activity while subjects are performing tasks).

65. See Sowell, *supra* note 7, at 4 (discussing that these neuroimaging tools differ largely from that which was available during the *Thompson* and *Stanford* era, when post-mortem observations were the main device for understanding brain development). This new technology has allowed researchers to understand how a live brain operates and how it develops longitudinally over time. *Id.*

have cast doubt on this theory. Current MRI and behavioral studies indicate that the brain does not fully mature until the early- to mid-twenties.⁶⁶ There is also clear evidence that the brain does not reach its full weight until approximately age twenty and that the “myelination” process⁶⁷ continues into the early twenties;⁶⁸ markedly so in young men.⁶⁹ Variance in myelination is associated with differences in intelligence, indicating that increased complexity of the brain’s nervous system appears to result in more effective brain functioning.⁷⁰

One of the most high profile of these contemporary MRI studies has advanced the theory that significant neuronal connections in the brain also continue their “pruning” process⁷¹ into the early twenties.⁷² Despite the

66. See, e.g., Jay N. Giedd et al., *Brain Development During Childhood and Adolescence: A Longitudinal MRI Study*, 2 NATURE NEUROSCIENCE 861, 861 (1999) (concluding that the volume of cortical gray matter, where nerve centers are housed, continues to increase through the age of twenty); see also Wallis, *supra* note 6, at 58 (explaining that studies show that gray and white matter in the brain may develop until around age twenty-five). But see Scott & Steinberg, *supra* note 15, at 811 (theorizing that adolescents’ cognitive capacity for reasoning may be comparable to that of adults and that the differences between these two age groups exist mainly in adolescents’ application of their mental skills when reacting in stressful, real-life situations).

67. See MICHAEL S. GAZZANIGA ET AL., COGNITIVE NEUROSCIENCE: THE BIOLOGY OF THE MIND 27-28, 41-42 (1998) (explaining that myelination is the process where the conduction of nerve impulses along the axon are increasingly coated with white matter called myelin as the adolescent brain matures, making the connections quicker and more reliable).

68. See Petition for Writ of Certiorari at 13, *Patterson v. Texas*, 536 U.S. 984 (2002) [hereinafter *Patterson Petition*] (describing that these results were obtained from a study performed on young adults between the ages of eighteen and twenty-five), available at <http://www.abanet.org/crimjust/juvjus/supreme%20court%20petition.pdf>.

A finding that brain weight continues to increase through the mid-twenties correlates with a marked increase in violent crime among persons in late adolescence. See Fagan, *supra* note 13, at 235 (theorizing that a peak in crime rates in late adolescence and a subsequent decline in early adulthood may be partially explained by a general immaturity in psychosocial development among juveniles). But see John H. Laub & Robert J. Sampson, *Understanding Desistance from Crime*, 28 CRIME & JUST. 1, 46-48 (2001) (discussing the important influence of peer variables on the correlation of age and crime).

69. See Ruben C. Gur, Ph.D., Declaration of Ruben C. Gur, Ph.D. at 11, *Patterson v. Texas*, 536 U.S. 984 (2002) (expert opinion on the juvenile death penalty in support of the state Habeas Corpus Petition) (claiming that the maturation of white matter in the pre-frontal cortex is typically slower in males and extends later into the twenties, and that MRI analyses on pre-adolescent children show a similar pattern where white matter in females’ brains typically matures more quickly than in the males’ brains), available at <http://www.abanet.org/crimjust/juvjus/Gur%20affidavit.pdf>.

70. See Edward M. Miller, *Intelligence and Brain Myelination: A Hypothesis*, 17 PERSONALITY AND INDIVIDUAL DIFFERENCES 803, 804 (1994) (hypothesizing that brains that have achieved a higher level of myelination are faster and less prone to error). Myelination results in quicker connections between neurons and it appears that the more effective each neuron, the fewer the neurons that need to be activated for each problem, which in turn appears to conserve energy in the more “intelligent” brains. *Id.*

71. See Interview with Jay Giedd, in *Frontline: Inside the Teen Brain* [hereinafter Interview with Dr. Jay Giedd] (explaining that the “pruning” process is the thinning of gray matter as excess connections between brain cells are eliminated, making the neuronal process more efficient), available at <http://www.pbs.org/wgbh/pages/frontline/shows/teenbrain/interviews/giedd.html>. The brain’s gray matter continues to

fact that brain density typically reaches ninety to ninety-five percent of its adult size by the age of six,⁷³ research shows that the pre-frontal cortex—responsible for organization, decision-making, rational thought and other executive functions—is the last part of the brain to mature.⁷⁴ Instead of using the pre-frontal cortex to make decisions, research indicates that adolescents rely more heavily on the amygdala, the emotional center of the brain.⁷⁵ Consequently, adolescents typically exhibit poorer risk assessment than adults⁷⁶ and behave in a more impulsive manner.⁷⁷

Brain-imaging studies that concentrate on adolescents' over-reliance on the emotional center of the brain have specifically found that juveniles may misidentify the emotions of others as a result.⁷⁸ While *one hundred* percent of participants aged eighteen or older were able to correctly identify the emotion of fear on a test subject, only about *half* of those under the age of eighteen were able to do so.⁷⁹ Such a finding indicates that adolescents

thicken until around the age of eleven for girls and twelve for boys. *Id.*

72. See Sharon Begley, *Getting Inside a Teen Brain*, NEWSWEEK, Feb. 28, 2000, at 58 (explaining that Dr. Jay Giedd of the National Institute of Mental Health performed MRI studies on the brains of healthy subjects whose ages ranged from four to twenty-one).

73. See Wallis, *supra* note 6, at 59 (noting that humans are born with most of the neurons their brains will ever have).

74. See *id.* at 59-60 (attributing behavioral problems in adolescents not only to hormonal changes, but to the immaturity of the part of the brain that is attributed to responsibility and the weighing of consequences).

75. See *id.* at 62 (noting that this may explain why adolescents have difficulty reading emotional signals).

76. See Susan A. Ferguson, *Other High-Risk Factors for Young Drivers—How Graduated Licensing Does, Doesn't, or Could Address Them*, 34 J. SAFETY RES. 71, 72 (2003) (indicating that studies have documented that teen drivers have different risk perception than adult drivers, drive in a more risky manner, and tend to rate hazardous situations as less risky than adults). Although this observation is compounded by the fact that young drivers have limited driving skill and experience, there is evidence to support the assertion that, skill notwithstanding, teens' assessments of their own ability level are not commensurate with their actual limited abilities, and can therefore result in particularly risky behavior. *Id.*

77. See Wallis, *supra* note 6, at 62 (reporting that researchers believe that rapidly changing dopamine-rich areas of adolescent brains affect inhibitions); see also One Reason Teens Respond Differently to the World: Immature Brain Circuitry, in *Frontline: Inside the Teen Brain*: [hereinafter Immature Brain Circuitry] (explaining that the relative lack of activation of the frontal cortex compared to the amygdala leads to an increased reliance on the emotional center of the brain which is more likely to result in a "gut reaction"), available at <http://www.pbs.org/wgbh/pages/frontline/shows/teenbrain/interviews/todd.html>. In response to these results, Dr. Yurgelun-Todd theorized that juveniles will respond to emotional situations in a more impulsive manner, instead of with a thoughtful or measured response that is more likely in the case of a person with a mature pre-frontal cortex. *Id.*

78. See Immature Brain Circuitry, *supra* note 77 (stating that neuropsychologist Dr. Yurgelun-Todd drew this conclusion from an fMRI study that asked adults and adolescents, between the ages of eleven and seventeen, to identify human emotions in photographs).

79. See *id.* (discovering that images of teen brains indicated considerably less activity in the frontal lobes and much greater activity in the amygdala in comparison to adult brains). Dr. Yurgelun-Todd explained that when viewing pictures of people exhibiting the emotion of fear, teens often labeled the expressions incorrectly as sadness, anger, or confusion. *Id.*

process emotional information from external stimuli differently than adults and are therefore more likely to misunderstand situations with others and react inappropriately as a result.⁸⁰

Neuro-scientific research has also shown that the brain's neuronal pathways are continuing to transform throughout the adolescent period.⁸¹ Because the relative size of the pre-frontal cortex decreases during this "remodeling" phase, the formation of new nerve connections and the "pruning" of other connections have a substantial impact on goal-directed behaviors.⁸² Additionally, adolescents typically show less activity in the pre-frontal cortex than adults when exposed to a variety of stimuli.⁸³ Scientists theorize that this may be due to the continuing development of neuronal pathways, most notably in the stressor-sensitive brain regions.⁸⁴ Consequently, juveniles may seek additional stimuli by way of risk-taking behavior.⁸⁵

80. Considering that fear is likely to be a common expression encountered in the commission of a capital crime, the fact that adolescents exhibit a substantially impaired ability to correctly identify the emotion of fear, and consequently often confuse a fearful expression with one of anger or confusion, is vitally relevant when considering the level of culpability to attach to a juvenile offender's behavior. *Cf. id.* (noting that most "fairly sophisticated adolescents did not correctly identify fear" in a clinical study).

81. See L.P. Spear, *The Adolescent Brain and Age-Related Behavioral Manifestations*, 24 NEUROSCIENCE & BIOBEHAVIORAL REVS. 417, 446 (2000) (concluding that the adolescent brain is in transition and differs both anatomically and neurochemically from that of an adult).

82. See Linda Patia Spear, *Neurobehavioral Changes in Adolescence*, 9 CURRENT DIRECTIONS IN PSYCHOLOGICAL SCI. 111, 112-13 (2000) (analyzing that behaviors such as rule learning, spatial learning, and the emotional processing of aversive stimuli are greatly affected by the "pruning" process).

83. See, e.g., *Immature Brain Circuitry*, *supra* note 77 (illustrating that adolescents have less pre-frontal cortex activity when discerning emotions from pictures by comparing fMRIs of an adolescent brain and an adult brain).

84. See Spear, *supra* note 81, at 446 (explaining that the stress-sensitive brain regions, whose neuronal pathways are undergoing a great degree of remodeling, are responsible for moderating the flow of motivationally relevant information received from various stimuli). In other words, the neurons in these areas are responsible for assessing the value of incoming stimuli. Spear, *supra* note 82, at 113. The less developed these neuronal pathways, the lesser the value attained from the incoming stimuli, thus resulting in more subdued cognitive activity than is observed with more developed brains in response to the same level of stimuli. Spear, *supra* note 81, at 446. This subdued cognitive response increases the likelihood that adolescents will seek out more risky activities in an attempt to elicit more rewarding feedback. *Id.* This developmental cycle may explain how the stress-sensitive dopamine system in the brain is related to novelty seeking, which is a common behavioral alteration seen in adolescence. Spear, *supra* note 82, at 113. Spear, however, cautions that, in addition to cognitive studies, it is necessary to investigate the "complex multidirectional influences among environmental context, behavior, hormones and brain function during the transitions of adolescence," because the causality between brain maturity and risk-taking behavior cannot be automatically inferred. Spear, *supra* note 81, at 447.

85. See Spear, *supra* note 81, at 446-47 (offering that a propensity to seek additional reinforcing stimuli may be expressed in alcohol and drug use and other problem behaviors, especially when bolstered by a juvenile's social environment); see also Spear, *supra* note 82, at 113 (claiming that increases in dopamine in the pre-frontal cortex and the limbic region may contribute to the behavioral modifications seen in adolescents). These

Such scientific findings are particularly significant when understood in a broader sociological context because they indicate that adolescents under the age of eighteen have diminished decision-making capacity when compared with adults, especially when subjected to stressful situations.⁸⁶ Specifically, adolescents tend to have greater susceptibility to peer influence when making decisions and conducting cost-benefit analyses,⁸⁷ lack realistic risk-assessment abilities,⁸⁸ and are not as future-oriented as adults.⁸⁹ Evidence also suggests that the rate of brain maturation can be severely retarded by abuse and neglect—conditions that affect most juvenile offenders on death row.⁹⁰ These and other factors serve to exacerbate a juvenile's cognitive immaturity, and consequently, lessen legal responsibility.⁹¹

modifications include the pursuit of new, exciting, potentially rewarding stimuli and a visible, increased importance placed on social reinforcement from peers. *Id.*

86. See Patterson Petition, *supra* note 68, at 15 (establishing that, in stressful situations, adolescents are less able than adults to use even their most advanced cognitive skills as effectively and are unable to foresee consequences of unanticipated events at the same level as adults); cf. Spear, *supra* note 81, at 431 (noting that substantial research indicates that adolescent rodents differ both behaviorally and physiologically in the way they respond to stressors when compared with adult rodents).

87. See Brief of Amici Curiae American Medical Association et al. at 5-6, *Roper v. Simmons*, 540 U.S. 1160 (2004) (No. 03-633) [hereinafter AMA Brief] (claiming that while adolescents do know the difference between right and wrong and have the ability to conduct cost-benefit analyses, adolescents are often unable to perceive risks accurately, the way adults do). This conclusion was reflected in a study of over 1,000 adolescents and adults that showed that general psychosocial maturity continues to develop until around the age of nineteen, at which point it plateaus. *Id.* at 7.

88. *Id.*; see also Ferguson, *supra* note 76, at 72 (discussing driving abilities).

89. See Laurence Steinberg & Elizabeth Scott, *Less Guilty by Reason of Adolescence: Developmental Immaturity, Diminished Responsibility, and the Juvenile Death Penalty*, 58 AM. PSYCHOLOGIST 1, 4-5 (2003) (“Whereas cognitive capacities shape the process of decision making, psychosocial immaturity can affect decision-making outcomes, because these psychosocial factors influence adolescent values and preferences in ways that drive the cost-benefit calculus in the making of choices.”).

90. See NATIONAL COALITION TO ABOLISH THE DEATH PENALTY, FACT SHEET: THE JUVENILE DEATH PENALTY, at http://www.ncadp.org/juvenile_fact_sheet.html (last visited Jan. 12, 2005) (on file with the American University Law Review) (arguing that international, medical, and social factors militate to the abolition of the death penalty for adolescents).

This Comment does not address such childhood abuse and its effects on brain maturation because it purely attempts to analyze general trends in adolescent cognitive development in order to advocate for a categorical ban on juvenile capital punishment. It is worth noting, however, that many juvenile offenders on death row have seriously under-developed brains or cognitive disorders. See, e.g., Maria M. Homan, Note, *The Juvenile Death Penalty: Counsel's Role in the Development of a Mitigation Defense*, 53 BROOK. L. REV. 767, 769-76 (1987) (reviewing studies that indicate that juvenile murderers frequently share similar childhood experiences of abuse, neglect, educational deprivation, and undiagnosed psychiatric and neurological disorders). This evidence makes the comparison between mentally retarded offenders and juvenile offenders even more relevant and provides greater support for adopting a similar legal framework for both issues.

91. See *Thompson v. Oklahoma*, 487 U.S. 815, 835 (1988) (“[T]he Court has already endorsed the proposition that less culpability should attach to a crime committed by a juvenile than to a comparable crime committed by an adult.”); *Eddings v. Oklahoma*, 455 U.S. 104, 115-16 (1982) (“[Y]outh is more than a chronological fact. It is a time and

The foregoing scientific findings have gained wide acceptance among medical and legal professional organizations.⁹² Support from some of the most prominent professional groups in the fields of psychology, psychiatry and neurobiology indicates that, while the foregoing findings may be contemporary, they are simultaneously reliable and corroborated by similar research on pre-frontal cortex development in adolescents.⁹³ Accordingly, the Fourth Edition of the Diagnostic and Statistical Manual of Mental Disorders (“DSM-IV”) limits the diagnosis of anti-social personality disorder to individuals over the age of eighteen because psychiatrists typically cannot make a reliable judgment about an adolescent’s personality prior to this age.⁹⁴ Such a diagnostic restriction likely indicates that a case-by-case analysis is not a workable approach with respect to personality disorders, and instead, that a categorical distinction for juveniles under eighteen is necessary as a result of tangible cognitive differences between juveniles and adults.⁹⁵ Further, in 2002, the American Bar Association released a statement that summarized current brain research and urged all states to ban the practice of executing juveniles.⁹⁶

Although Justice Scalia, in his majority opinion in *Stanford v. Kentucky*, rejected the use of professional opinions and scientific evidence to gauge

condition of life when a person may be most susceptible to influence and to psychological damage. . . . Particularly ‘during the formative years . . . minors often lack the experience, perspective, and judgment’ expected of adults.”) (quoting *Bellotti v. Baird*, 443 U.S. 622, 635 (1979)).

92. See INT’L JUSTICE PROJECT, BRAIN DEVELOPMENT, CULPABILITY AND THE DEATH PENALTY (discussing that the American Psychiatric Association and the American Academy of Child and Adolescent Psychiatry have joined the American Society of Adolescent Psychiatry in endorsing findings on adolescents’ brains and adopting policies opposing the death penalty for juveniles under the age of eighteen), available at <http://www.internationaljusticeproject.org/pdfs/juvBrainDev.pdf> (last visited Feb. 19, 2005).

93. See, e.g., AMA Brief, *supra* note 87, at iv-xii (supporting the argument of eight medical, social work, and mental health organizations that the juvenile death penalty should be abolished by citing over fifty psychological and neurobiological research papers that addressed the immaturity of the adolescent pre-frontal region).

94. See Transcript of Oral Argument, *Roper v. Simmons*, No. 03-633, at 40-41 (U.S. Oct. 13, 2004) (explaining that there are a number of confounding factors related to adolescent personality development that make it difficult for psychiatrists to determine if anti-social behavior is part of the juvenile’s fixed character), available at http://www.supremecourtus.gov/oral_arguments/argument_transcripts/03633.pdf.

95. See KENTUCKY DEP’T OF PUB. ADVOCACY, MENTAL HEALTH & EXPERTS MANUAL ch.5 (6th ed. 2002) (proffering that prior to the age of eighteen, personalities are often not well-developed, and the problematic traits that are observed during adolescence may disappear during early adulthood).

96. See Press Release, American Bar Association, Impending Execution of Juvenile Offender Runs Counter to Midwest and National Trends to Abolish Juvenile Death Penalty (Apr. 23, 2002) (stating that proposed bills in state legislatures that attempt to abolish the juvenile death penalty come at a time when new research on adolescent brain development increasingly finds that the intellectual and reasoning capacities of young people are less developed than those of adults), available at <http://www.abanet.org/crimjust/juvjus/simmonspressrel.html>.

modern society's conception of "decency,"⁹⁷ it is important to note that MRI studies were in their infancy at the time of the *Stanford* decision.⁹⁸ Current scientific evidence can therefore no longer be said to be simply "junk science."⁹⁹ The studies on brain maturity in adolescents have appropriately begun to shape the opinions of professional organizations,¹⁰⁰ and therefore, should play a role in determining the constitutionality of the juvenile death penalty, particularly in light of the *Atkins v. Virginia* decision.¹⁰¹ Therefore, since the majority in *Stanford* called for interpreting the Eighth Amendment in a "flexible and dynamic manner" and held that standards of decency "should be informed by objective factors to the maximum possible extent,"¹⁰² and cognitive science has advanced substantially since 1989, scientific evidence should be considered as one of the vital objective factors in *Roper v. Simmons*.

B. Comparing Frontal Lobe Dysfunction, Mental Retardation, and Juvenile Cognitive Development

While the *Roper* Court should follow the *Atkins* framework because it is

97. See *Stanford v. Kentucky*, 492 U.S. 361, 378-79 (1989) (disparagingly referring to the evidence cited in the petitioner's brief, regarding the psychological and emotional development of sixteen and seventeen-year-olds, as "socio-scientific" and "ethico-scientific"). Specifically, Justice Scalia stated that the Court has no power to substitute its own belief in scientific evidence with "society's apparent skepticism." *Id.* Justice Scalia's rejection of science as a possible foundation on which to base constitutional law is, however, at odds with Supreme Court jurisprudence. See, e.g., *Brown v. Bd. of Educ.*, 347 U.S. 483, 494-95 n.11 (1954) (citing K.B. CLARK, *EFFECT OF PREJUDICE AND DISCRIMINATION ON PERSONALITY DEVELOPMENT* (1950); WITMER & KOTINSKY, *PERSONALITY IN THE MAKING* (1952); Deutscher & Chein, *The Psychological Effects of Enforced Segregation: A Survey of Social Science and Opinion*, 26 J. PSYCHOL. 259 (1948); Chein, *What Are the Psychological Effects of Segregation Under Conditions of Equal Facilities?*, 3 INT'L J. OPINION & ATTITUDE RES. 229 (1949)) (referring to psychological research as "modern authority" to support the proposition that the segregation of white and black children in public schools was a denial of equal protection because it created feelings of inferiority among the minority students and was detrimental to the students' education).

98. See Antoine, *supra* note 64, at 1347 (noting that doctors began to use MRI diagnostic techniques in the 1980s).

99. *But see* Paul Davies, *Psychiatrists Question Death for Teen Killers*, WALL ST. J., May 26, 2004, at B1 (contrasting support for the science with criticism accusing scientists of manipulating their work to argue their personal positions against the death penalty).

100. See, e.g., AM. BAR ASS'N, JUVENILE JUSTICE CTR., NATIONAL ORGANIZATIONS THAT OPPOSE THE JUVENILE DEATH PENALTY (listing various respected, professional organizations that oppose the death penalty, including the American Academy of Pediatrics, the American Bar Association, the Coalition for Juvenile Justice, the National Association for Children's Behavioral Health, the National Association of Social Workers, the National Council on Crime and Delinquency, the National Education Association, and the National Mental Health Association), available at <http://www.abanet.org/crimjust/juvjus/nationalorgs.pdf> (last visited Feb. 19, 2005).

101. See 536 U.S. 304, 317-21 (2002) (reasoning that in addition to legislative behavior, clinical evaluations of the mentally retarded—specifically evidence of diminished reasoning capacity and impulse control—are relevant when determining society's "evolving standards of decency" with respect to the death penalty for this group).

102. *Stanford*, 492 U.S. at 369 (internal citations omitted).

the Court's most recent response to the death penalty question, this assertion is further strengthened through an analysis of the cognitive and behavioral commonalities that exist between juveniles and the mentally retarded.¹⁰³ And because aggressive and violent behavior is associated with stunted brain development,¹⁰⁴ it is also instructive to place cognitive development on a continuum, looking first to the effects of damaged or severely immature frontal lobes as the most extreme example of poor cognitive functioning.¹⁰⁵ While incomplete frontal lobe development in normal adolescents is likely not as extreme as in those with frontal lobe dysfunction or mental retardation, a comparison of cognitive and behavioral studies among these groups provides a better understanding of how juveniles' immature brains can lead to a similar pattern of behavior. Establishing such a continuum of cognitive development, particularly between the mentally handicapped and juveniles, and correlating brain development among these groups with problem behavior, further establishes a case for utilizing the *Atkins* reasoning in *Roper*.

Pre-frontal cortex damage is generally associated with serious behavioral changes.¹⁰⁶ In a famous study examining brain damage and criminal behavior, positron emission tomography ("PET")¹⁰⁷ brain scans evaluated the frontal lobes of violent offenders to explain such variances in behavior, and found significantly lower levels of frontal lobe activity in the offenders than in that of the control group, indicating some frontal lobe dysfunction.¹⁰⁸ Researchers concluded that there is a "strong association

103. See *infra* notes 111-125 and accompanying text (outlining differences and similarities in cognitive abilities of juveniles and the mentally retarded).

104. See *infra* notes 108-110 and accompanying text (discussing a clinical study of the pre-frontal brain activity of murderers).

105. Evaluating immature juvenile cognitive development on a continuum with pre-frontal cortex damage and mental retardation makes a reliance on *Atkins* all the more sensible when determining the constitutionality of the juvenile death penalty. In addition, an understanding of an offender's cognitive maturity level is essential to analyzing the proportionality of the punishment. See generally Steinberg & Scott, *supra* note 89 (looking at juvenile criminal culpability from a developmental perspective).

106. See Jessie A. Seiden, Comment, *The Criminal Brain: Frontal Lobe Dysfunction Evidence in Capital Proceedings*, 16 CAP. DEF. J. 395, 399-400 (2004) (explaining that because the brain's frontal region is the seat of impulse control, reasoning, and socially-responsible judgment, damage to the frontal lobes often causes violent and aggressive behavior).

107. See *id.* at 401 (explaining that PET scans differ from MRI scans in that they show blood flow and metabolic activity rather than brain structure); HOWARD HUGHES MEDICAL INSTITUTE, NEW IMAGING TECHNIQUES THAT SHOW THE BRAIN AT WORK: BRAIN SCANS THAT SPY ON THE SENSES, at <http://www.hhmi.org/senses/e110.html> (last visited Feb. 19, 2005) (on file with the American University Law Review) (noting that PET scans are similar to fMRIs in that they show brain activity, but that the newer fMRI does not require the use of radioactive chemicals and presents images at higher resolution than the PET scan).

108. Dr. Adrian Raine examined the PET scans of forty-one individuals convicted of murder or manslaughter in the 1990s, separating the "predatory," controlled killers from the "affective," emotionally impulsive killers. See Seiden, *supra* note 106, at 405-06 (citing

between increased aggression and reduced prefrontal cortical size or activity.”¹⁰⁹ Further, this research suggests that frontal lobe deficits are more commonly associated with “impulsive, rather than purposeful, violent crimes.”¹¹⁰

Mental retardation also strongly impacts behavior, as a limitation in intellectual functioning causes a decrease in adaptive behavior.¹¹¹ Adaptive behavior represents the interaction of personal, cognitive, social, and situational variables and refers to the ability of a person to function effectively in their social environment.¹¹² Similar to adolescents, mentally retarded persons typically understand the difference between right and wrong, yet simply have a diminished capacity to engage in logical reasoning, control impulses, and understand the reactions of others.¹¹³ It has also been shown that a significant number of juveniles have displayed impaired adjudicative competence to the same degree as the mentally ill.¹¹⁴

Adrian Raine et al., *Brain Abnormalities in Murderers Indicated by Positron Emission Tomography*, 42 *BIOLOGY & PSYCHIATRY* 495 (1997)). The study revealed that the “affective” group exhibited low pre-frontal activity, whereas the “predatory” killers’ frontal lobe activity level was closer to that of the control group. *Id.* at 406. Dr. Raine concluded that frontal lobe dysfunction may contribute to aggressive, emotionally charged behavior. *Id.*

109. *Id.*

110. *Id.* at 405-06 (explaining that the frontal lobes are instrumental in regulating socially appropriate behavior and suppressing impulses, so that in the case of underdeveloped or damaged frontal lobes, a person may lose the ability to control abnormal impulses or drives, perhaps leading to criminal behavior).

111. See Douglas Mossman, M.D., *Atkins v. Virginia: A Psychiatric Can of Worms*, 33 *N.M. L. REV.* 255, 266 (2003) (explaining that the American Association on Mental Retardation currently defines mental retardation as “a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills”).

112. *Id.* at 271; see also Fagan, *supra* note 13, at 219 (stating that a mentally retarded person appears to “lack[] the logical reasoning skills, the maturity, and the ability to think in long-range causal terms”).

113. See *Atkins v. Virginia*, 536 U.S. 304, 318 (2002) (stating that there is considerable evidence that mentally retarded persons are generally very susceptible to peer pressure, typically act as followers rather than leaders when in groups, and have trouble acting pursuant to a plan and therefore tend to act impulsively); see also Victor L. Streib, *Adolescence, Mental Retardation, and the Death Penalty: The Siren Call of Atkins v. Virginia*, 33 *N.M. L. REV.* 183, 201 (detailing the *Atkins* Court’s discussion of the psychological and behavioral characteristics of the mentally retarded). Streib explains that Justice Scalia, in his dissent in *Atkins*, used the word “childlike” to refer to the mentally retarded. *Id.* Streib indicates that where Justice Scalia simplistically described the mentally retarded as having the mental maturity of a child, he effectively legitimated the connection between cognitively immature juveniles and the mentally retarded. *Id.*

114. See Barry C. Feld, *Competence, Culpability, and Punishment: Implications of Atkins For Executing And Sentencing Adolescents*, 32 *HOFSTRA L. REV.* 463, 525-26 (2003) (quoting Thomas Grisso et al., *Juveniles’ Competence to Stand Trial: A Comparison of Adolescents’ and Adults’ Capacities as Trial Defendants*, 27 *LAW & HUM. BEHAV.* 333, 356 (2003)) (referencing one contemporary study reporting that “[a]pproximately one fifth of 14- to 15-year-olds are as impaired in capacities relevant to adjudicative competence as are seriously mentally ill adults who would likely be considered incompetent to stand trial by clinicians who perform evaluations for courts Not surprisingly, juveniles of below-average intelligence are more likely than juveniles of average intelligence to be impaired in

It therefore appears that a limitation in adaptive behavior is not only relevant to the crime committed by the offender, but that these limitations concomitantly have substantial ramifications on the offender's competency to stand trial.

Although brains suffering from frontal lobe dysfunction and mental retardation present more severe examples of the behavioral implications of an under-developed or damaged pre-frontal cortex than those of adolescent brains, there are some behavioral parallels between the groups.¹¹⁵ First, adolescents' frontal lobes exhibit limited cognitive activity in comparison to those of normal adults.¹¹⁶ A pattern of limited cognitive activity is also observed in people with frontal lobe damage, although those with damaged or dysfunctional frontal lobes show limited feedback to a considerably greater degree than adolescents.¹¹⁷ Lessened cognitive activity has been shown to correspond with more aggressive, impulsive, and irrational behavior.¹¹⁸ Such a result indicates that, while juveniles may not have the degree of cognitive immaturity as that of mentally handicapped persons, the parallels between these two groups further highlight the differences in cognitive functioning that exist between juveniles and adults. Second, although the mentally retarded exhibit limitations in adaptive behavior to a greater degree than adolescents, research on adolescent cognition demonstrates that adolescents also have trouble understanding the reactions of others¹¹⁹ and engaging in logical reasoning,¹²⁰ are more susceptible to peer pressure,¹²¹ and act more impulsively¹²² than normally-functioning

abilities relevant for competence to stand trial. Because a greater proportion of youths in the juvenile justice system than in the community are of below-average intelligence, the risk for incompetence to stand trial is therefore even greater."); see also Feld, *supra*, at 526 (stating that "Atkins also found that mental retardation exposed defendants to the dangers of erroneous convictions because of their greater susceptibility to interrogation techniques and the concomitant dangers of false confessions.").

115. See, e.g., Streib, *supra* note 113, at 215 (noting that the *Atkins* Court drew a comparison between the mentally retarded and juveniles with regard to their common lack of perspective and lower degree of moral culpability).

116. See *Immature Brain Circuitry*, *supra* note 77 (stating that in an adolescent brain, the relative activation of the frontal regions is less than in that of an adult).

117. See Seiden, *supra* note 106, at 406 (noting that criminal subjects with considerably low prefrontal activity—considered to have "frontal lobe deficits"—acted in a more impulsive, less controlled manner).

118. See *id.* at 406 (citing M.C. Brower & B.H. Price, *Neuropsychiatry of Frontal Lobe Dysfunction in Violent and Criminal Behaviour: A Critical Review*, 71 J. NEUROLOGICAL NEUROSURGERY & PSYCHIATRY 720, 721 (2001)) (concluding that Dr. Raine's study "shows 'a strong association between increased aggression and reduced pre-frontal cortical size or activity.'").

119. See *supra* notes 78-80 and accompanying text.

120. See, e.g., Interview with Dr. Jay Giedd, *supra* note 71 ("[In the teen years, this] part of the brain that is helping organization, planning and strategizing is not done being built yet . . . It's sort of unfair to expect [teens] to have adult levels of organizational skills or decision making before their brain is finished being built.").

121. See, e.g., Spear, *supra* note 82, at 111 (suggesting that adolescents' increased reliance on peer-directed social interactions may result from an instinctual response that

adults. Third, research indicates that abnormal “pruning” of neurons in the brain are associated with various neurodevelopmental disorders, including mental retardation.¹²³ Although not considered “abnormal,” an incomplete pruning process is also observed in juvenile brains,¹²⁴ and results in inefficient reasoning capabilities in juveniles when compared with adults.¹²⁵

The *Atkins* Court held that executing the mentally retarded is unconstitutional under a proportionality analysis as a result of this groups’ diminished reasoning capacity,¹²⁶ and scientific studies are consistently indicating that diminished reasoning capacity is associated with underdeveloped frontal regions of the brain.¹²⁷ In light of *Atkins*, it appears that a judicial determination on the constitutionality of the death penalty would be incomplete without consideration of current psychological research on brain maturation that suggests that juveniles also typically have diminished reasoning capacity and share some behavioral and cognitive commonalities with the mentally handicapped.

III. STANDARDS OF DECENCY HAVE EVOLVED TO THE POINT WHERE JUVENILE CAPITAL PUNISHMENT IS CRUEL AND UNUSUAL UNDER THE EIGHTH AMENDMENT

Having examined the current psychological research on juvenile brain development, it is now possible to incorporate this empirical research into the *Atkins v. Virginia* framework and apply the Court’s reasoning to juveniles.

provides for the opportunity to practice and model *adult* behavior patterns).

122. See *supra* note 77 and accompanying text.

123. See Frances J. Lexcen & N. Dickon Reppucci, *Effects of Psychopathology on Adolescent Medical Decision-Making*, 5 U. CHI. L. SCH. ROUNDTABLE 63, 80 (1998) (reporting that hyperdensities of neurons are associated with mental retardation).

124. See Wallis, *supra* note 6, at 59 (explaining that the pruning of gray matter begins in the late teens and does not completely taper off until the early twenties, at which point the brain has fewer but faster neuronal connections).

125. *Id.*

126. See *Atkins v. Virginia*, 536 U.S. 304, 319 (2002) (indicating that the death penalty is the most extreme form of punishment and that the average murderer does not possess the culpability deemed necessary to justify this extreme sanction). Therefore, the *Atkins* Court concluded that the substantially diminished culpability of a mentally retarded offender makes the death penalty for such an offender excessive, thus violating the Eighth Amendment. *Id.*

127. See, e.g., Giedd et al., *supra* note 66, at 861 (explaining that gray and white matter in the brain may be developing well into adulthood); Immature Brain Circuitry, *supra* note 77 (establishing that adolescents rely more heavily on the amygdala and less on the pre-frontal cortex, leading to less reasoned thought, especially in stressful situations).

A. *Developing A National Consensus: Looking Beyond Capital Punishment Legislation to Minimum Age Statutes*

Adolescents experience a coming of age in American society upon turning eighteen. Although some states allow juveniles to acquire full driving privileges at sixteen, youths acquire most of their rights, such as the right to vote, marry, enter the military, make contracts, purchase cigarettes, and make medical decisions at the age of eighteen.¹²⁸ Over the last 350 years in America, society has struggled to define the age at which children become adults and consequently attain full membership in the community.¹²⁹ Yet since the 1970s, many age restrictions have been implemented, or extended to a higher age, as American society becomes more protective of its youth.¹³⁰ In upholding the death penalty for sixteen- and seventeen-year-olds, the *Stanford v. Kentucky* Court stressed that standards of decency should be determined by a “national consensus.”¹³¹ But as society implements more legislation to limit the freedom of the nation’s youth, can it simultaneously intend to enforce the most severe criminal sanction available in this country against sixteen- and seventeen-year-old children? These positions are incompatible.

Over the past century, a paternalistic national consensus has developed; one that has moved toward expanding minimum age statutes that restrict the age at which youths can exercise various rights. For example, the introduction of the Fair Labor Standards Act of 1938¹³² set safety requirements for youths under the age of eighteen and made fourteen the minimum age for employment. Similarly, the National Minimum Drinking

128. See, e.g., U.S. CONST. amend. XXVI, § 1 (establishing the minimum voting age at eighteen); *Bellotti v. Baird*, 443 U.S. 622 (1979) (upholding states’ right to restrict marriage involving juveniles); *Bramley’s Water Conditioning v. Hagen*, No. 1503, 1985 WL 303824, at *2 (11th Cir. June 21, 1985) (refusing to enforce a contract with a person under the age of eighteen).

129. See HINE, *supra* note 16, at 45 (explaining that American society, during the 1960s and 1970s, seemed to be standardizing legal adulthood at eighteen years of age, but since then have extended some restrictions to age twenty-one).

130. See *id.* (offering juvenile curfews as an example of legislation that has been reintroduced over the past two decades).

131. The Court’s interpretation of “national consensus” has changed over time. For example, in *Stanford*, Justice Scalia concluded that the national consensus is determined virtually entirely by legislation, and proposed that the inquiry begins by determining how many states permit capital punishment in general. 492 U.S. 361, 371 (1989). Justice Scalia found that of states that permit the death penalty, where more states also permit the sanction for juveniles than refuse to impose it upon juveniles, then the national consensus supports juvenile capital punishment. *Id.* In *Atkins*, however, Justice Stevens defined “national consensus” more broadly and considered jury behavior and other indicators of public opinion to carry more weight than they were accorded in *Stanford*. 536 U.S. at 315 n.21.

132. See 29 U.S.C.A. § 212 (1938) (defining “oppressive child labor” as the employment of a child under the age of sixteen or the employment of a child between the ages of sixteen and eighteen in a “hazardous” job that is detrimental to the child’s health or well-being).

Age Act of 1984¹³³ set the national drinking age at twenty-one (up from eighteen in most states). Furthermore, the graduated licensing policy, designed to reduce the crash risk among teenagers, is a recent example of the longstanding legislative movement toward protecting juveniles in the United States.¹³⁴ Professionals in the transportation safety field explain that immaturity is a factor in the high crash risk for sixteen-year-olds, manifesting itself in poor judgment and high risk-taking behavior.¹³⁵ Accordingly, the idea behind graduated licensing is to reduce the crash risk for new drivers by delaying full-licensing privileges until the age of eighteen.¹³⁶ This theory is supported by psychological data that shows that reasoning, memory and attention processes, and problem solving abilities are not completely developed until around eighteen or nineteen years of age.¹³⁷

Taking the example of licensing, where the initial age requirements to obtain a driver's license were based on cultural mores and politics rather than cognitive science,¹³⁸ it becomes apparent that looking purely to national culture and public opinion may be an incomplete process for setting age limits for juveniles to exercise certain rights.¹³⁹ Moreover, it appears that a concern about adolescent maturity and judgment has driven the transportation safety field to look to psychological analyses to supplement crash statistics in an effort to make a more reliable determination about the ability of juveniles to drive safely.¹⁴⁰ This

133. 23 U.S.C. § 158 (1984).

134. See ALLAN F. WILLIAMS, INSURANCE INSTITUTE FOR HIGHWAY SAFETY, GRADUATED LICENSING IN THE UNITED STATES 2 (2000) (explaining that, since the mid-1990s, graduated licensing is an increasingly popular concept in the United States and Canada and involves a gradual phasing-in approach to gaining on-road driving privileges). In this system, a new driver has a period of supervised-only driving, followed by a restrictive stage where drivers may not be allowed to drive at night or with passengers, and progresses to an unsupervised stage when no crashes or violations have been sustained during this introductory period. *Id.*

135. Ferguson, *supra* note 76, at 72.

136. See WILLIAMS, *supra* note 134, at 3-6 (reasoning that the high-risk ages for new drivers are sixteen and seventeen, and documenting that countries and states that have implemented a graduated licensing program have significantly decreased their crash rates for novice drivers).

137. See DAVID W. EBY & LISA J. MOLNAR, UNIVERSITY OF MICHIGAN TRANSPORTATION RESEARCH INSTITUTE, MATCHING TRAFFIC SAFETY STRATEGIES TO YOUTH CHARACTERISTICS: A LITERATURE REVIEW OF COGNITIVE DEVELOPMENT xi-xiv (referring to the ability of youths to reason by analogy, think about more than one problem simultaneously, and think about relationships among multiple events in a bidirectional way).

138. See generally DANIEL R. MAYHEW ET AL INSURANCE INSTITUTE FOR HIGHWAY SAFETY, WHY 16? (2000) (addressing the origins of the age requirement for driver's licenses throughout the United States and abroad).

139. Cf. Paul Raeburn, *Idea Lab: Too Immature for the Death Penalty?*, N.Y. TIMES MAG., Oct. 17, 2004, at 26 (quoting Dr. Jay Giedd) ("The old idea was that adolescence was a social phenomenon, not biological [M]aybe it's not social, maybe there is actual biology to explain why a lot of cultures have put age limits on things.").

140. See EBY & MOLNAR, *supra* note 137, at viii (stating that the National Highway Traffic Safety Administration (NHTSA) began a program that was designed to understand

inclusive approach of looking to popular opinion, culture, *and* science shows that seventeen or eighteen years of age is a more appropriate age to obtain full licensing privileges, and this conclusion is echoed by most other countries outside of the United States and Canada.¹⁴¹

If society, state and federal legislatures, and professional organizations employ a multi-lateral approach—one that includes neurobiological and behavioral science—to determine the age at which juveniles are mature enough to handle privileges and constitutionally guaranteed rights, such an inclusive approach is only appropriate when the *Roper v. Simmons* Court determines the current state of a national consensus regarding juvenile capital punishment. Although Justice Scalia's view in *Stanford*—that age statutes are irrelevant to the death penalty debate—may be valid,¹⁴² the move away from the traditional, younger ages for privileges such as driving toward higher age requirements signals a clear shift in public opinion toward greater protection for juveniles.¹⁴³ Notwithstanding the argument that minimum age statutes themselves may not be dispositive of the issue of juvenile capital punishment, the statutes indicate that both the legislature and the public are increasingly making judgments about the age at which youths are mature enough to handle responsibility. This trend is validated, not only by common sense that adolescents are not psychologically mature, but also by psychological and behavioral data on juvenile cognitive maturity.¹⁴⁴ The consideration of empirical evidence should therefore be

the factors related to the high crash rates for drivers under the age of twenty-five). NHTSA recognized that mental factors, such as memory and risk perception, likely played a role in juveniles' driving ability. *Id.*

141. See MAYHEW, *supra* note 138, at 17-18 (mentioning that licensing ages are typically a year or two older in Australia and Europe).

142. See *Stanford v. Kentucky*, 492 U.S. 361, 374-75 (1989) (contending that age statutes for activities such as voting and drinking alcohol are not pertinent to the constitutionality of the juvenile death penalty because they represent only a social judgment that the *vast majority* of youths are not responsible enough to partake in these activities, not that *all* youths are not responsible enough). *But see* Transcript of Oral Argument, *Roper v. Simmons*, No. 03-633, at 5 (U.S. Oct. 13, 2004) (questioning the logic in the assertion that a youth can be death eligible but not a member of the adult community), *available at* http://www.supremecourtus.gov/oral_arguments/argument_transcripts/03-633.pdf; *Stanford*, 492 U.S. at 382 (O'Connor, J., concurring) (proposing that the Court has an obligation to conduct a proportionality analysis, which appropriately calls for incorporating minimum-age statutes into Eighth Amendment considerations).

143. The idea that juveniles can be protected by greater age restrictions and that these restrictions are related to the juvenile death penalty debate is not a new one. See *Thompson v. Oklahoma*, 487 U.S. 815, 835 (1988) ("The reasons why juveniles are not trusted with the privileges and responsibilities of an adult also explain why their irresponsible conduct is not as morally reprehensible as that of an adult."); see also *Eddings v. Oklahoma*, 455 U.S. 104, 115-16 (1982) ("Our history is replete with laws and judicial recognition that minors . . . generally are less mature and responsible than adults.").

144. HINE, *supra* note 16, at 45; see also Transcript of Oral Argument, *Roper v. Simmons*, No. 03-633, at 40 (U.S. Oct. 13, 2004) (explaining that the science presented in Mr. Simmons' brief in *Roper* confirms what common sense already knows—that juveniles are mentally less mature than adults), *available at*

considered in *Roper* as “objective indicia that reflect the public attitude toward a given sanction,”¹⁴⁵ because the juvenile death penalty is an anomaly in our legislative system and it would be counterintuitive, in light of the recent studies on brain maturity and the societal trend towards protecting juveniles until the age of eighteen, not to appreciate that the national consensus on many juvenile justice issues is shifting.

To further bolster the view that a national consensus is shifting with regard to juvenile executions, one need only look to recent polls on the issue. Although public opinion polls are not considered a primary indicator of a national consensus,¹⁴⁶ the *Atkins* Court did look to polls to reinforce its decision that a national consensus had formed against the execution of the mentally retarded.¹⁴⁷ A similar consensus is forming against juvenile executions. A 2001 study found that, while sixty-two percent of Americans support the death penalty in general, only thirty-four percent favor it for juveniles under the age of eighteen.¹⁴⁸ A May 2002 Gallup poll also showed that sixty-nine percent of Americans oppose executing juveniles.¹⁴⁹ Because the public’s common-sense disapproval of this practice, as reflected in opinion polls, has been empirically validated, it is no longer the

http://www.supremecourtus.gov/oral_arguments/argument_transcripts/03-633.pdf (on file with the American University Law Review).

145. See *Gregg v. Georgia*, 428 U.S. 153, 173 (1976) (concluding that the Court must assess objective “contemporary values” in order to apply the Eighth Amendment requirements to the challenged sanction). The *Gregg* Court noted that public perception is one objective index relevant to the determination of “contemporary values.” *Id.* While legislative judgment is heavily weighted when ascertaining these values, because the courts act as a limit on legislative power, it is not the only inquiry that the Court must undertake. *Id.* at 175, 179. “[The] penalty must also accord with ‘the dignity of man,’ which is the ‘basic concept underlying the Eighth Amendment.’” *Id.* at 173. Further, the Court must consider the proportionality of the punishment, which requires it to make an independent analysis of the inherent humanity of the death penalty for the group of offenders involved to ensure it is not excessive in nature. *Id.*

Once the Court looks at the state legislative response to the juvenile death penalty, the additional “objective indicia” discussed above call for the incorporation of science and professional opinion into the framework; first, to guide the definition of “human dignity,” and second, to determine if the punishment is in fact proportional for a group that has been recognized as less morally and legally culpable by a number of Supreme Court Justices. *In re Stanford*, 537 U.S. 968 (2002).

146. See *Atkins v. Virginia*, 536 U.S. 304, 315-16 (2002) (stating that consistency in legislation between many States is “powerful evidence” of consensus).

147. See *id.* at 317 n.21 (noting that “polling data shows a widespread consensus among Americans, even those who support the death penalty, that executing the mentally retarded is wrong.”).

148. See AMERICAN BAR ASSOCIATION, JUVENILE JUSTICE CENTER, *EVOLVING STANDARDS OF DECENCY—CRUEL AND UNUSUAL PUNISHMENT: THE JUVENILE DEATH PENALTY 3* (Jan. 2004) (citing a University of Chicago study), available at <http://www.abanet.org/crimjust/juvjus/resources.html>. A similar study by Princeton Survey Research Associates showed that while seventy-two percent of Americans favored the death penalty, only thirty-eight percent thought that it should be applied to juveniles. *Id.*

149. See *id.* (indicating that this level of opposition has remained constant for seventy years); see also Marshall, *supra* note 5, at 2927-28 (“[E]vidence of the American public’s opinion of the practice [of executing juveniles] shows overwhelming disapproval.”).

“uncertain foundation” Justice Scalia admonished in *Stanford*.¹⁵⁰ These polls demonstrate that legislation on the issue of juvenile capital punishment does not sufficiently reflect the current national consensus. Therefore, further objective indicators of the national consensus, namely scientific data on cognitive development, should be considered by the Court under the “evolving standards of decency” framework.¹⁵¹

B. Defining “Evolving Standards of Decency” in the Wake of Atkins: Moving Away from Legislative and Jury Behavior to Focus on a Comprehensive “Societal” View of Juvenile Capital Punishment

The Supreme Court, over the past few years, appears to be making a push to redefine “society.” It is important to consider the current definition of society when discussing the juvenile death penalty, because the language of *Thompson v. Oklahoma*, *Stanford*, and *Atkins* rests heavily on a conception of *society’s* standard of decency.¹⁵² Whereas Justice Scalia, in his majority opinion in *Stanford*, focused solely on *American* conceptions of decency,¹⁵³ he departed from the *Trop v. Dulles* Court, which clearly used international law to guide its interpretation of what constitutes cruel and unusual punishment.¹⁵⁴ Justice Stevens and the majority in *Atkins* also disagreed with Justice Scalia, looking to the world to shape *human* standards of decency more generally.¹⁵⁵ In contrast to the United States, the international society overwhelmingly condemns the practice of juvenile execution,¹⁵⁶ with countries reasoning that the punishment is disproportionate in light of the diminished mental maturity of juveniles.¹⁵⁷

150. See 492 U.S. 361, 377 (1989).

151. See discussion *infra* Part IV.D (addressing the lag between the national consensus and individual states’ legislative response, particularly the need for the court to step in where the democratic process is moving too slowly in order to remedy fundamental rights violations).

152. See *Atkins*, 536 U.S. at 316 (establishing that “today our society views mentally retarded offenders as categorically less culpable than the average criminal.”); *Stanford*, 492 U.S. at 369 (reiterating that the court must look not to its own standard of decency, but rather the standards of “modern American society *as a whole*”) (emphasis added); *Thompson v. Oklahoma*, 487 U.S. 815, 821 (1988) (holding that standards are not static, but measured by the progress of a “maturing society”).

153. See 492 U.S. at 369 n.1 (finding that the juvenile sentencing practices of other nations are irrelevant to an interpretation of the Eighth Amendment).

154. See 356 U.S. 86, 102-03 (1958) (considering the dearth of countries that imposed expatriation when declaring the punishment unconstitutional under the Eighth Amendment).

155. See *Atkins*, 536 U.S. at 316-17 n.21 (considering international opinion, most notably that of the Western European community, in determining that there is a widespread consensus against executing the mentally retarded).

156. See *infra* note 169 and accompanying text.

157. See Brief of Amici Curiae Human Rights Committee of the Bar of England and Wales et al. at 11, *Roper v. Simmons*, 540 U.S. 1160 (2004) (No. 03-633) [hereinafter *British Brief*] (“[T]he emotional balance of young people under the age of 21 is unstable, and this instability reduces their responsibility, and that the instability of adolescents, *which in some cases may even amount to a form of mental disorder* is very often a factor in the

A broader outlook that considers the practices of the international community has indeed been a trend in recent Supreme Court opinions evaluating individual rights' issues. In 1997, for example, in his dissent in *Printz v. United States*,¹⁵⁸ Justice Breyer called for the Court to consider the values of European federalism when attempting to define the relationship between the federal government and state officials.¹⁵⁹ In 2003, Justice Ginsburg wrote a concurring opinion in *Grutter v. Bollinger*¹⁶⁰ citing the practices of the international community in supporting the tailored use of race in university admissions.¹⁶¹ Three days later, in *Lawrence v. Texas*,¹⁶² Justice Kennedy drew from British Parliamentary law and the European Convention on Human Rights to strike down a Texas law prohibiting sodomy.¹⁶³ It seems apparent that certain members of the current Court are willing to define "society" as a broader, international community, in which the United States looks to the practices and opinions of other countries when determining human rights matters.¹⁶⁴

The subject of international opinion is extremely topical on the eve of the Supreme Court's decision in *Roper*. On July 19, 2004, eighteen Nobel Prize Winners, twenty-eight religious groups, and forty-eight nations, along with the American Medical Association ("AMA") and various other health organizations, lobbied the Court to end the practice of executing juveniles who were sentenced under the age of eighteen.¹⁶⁵ World nations argued that imposing execution on juveniles "violates widely accepted human rights norms and the minimum standards of human rights set forth by the

crime.") (emphasis added) (quoting Report of the Select Committee on Capital Punishment at ¶ 193 (1930)(U.K.)).

158. 521 U.S. 898, 976-78 (1997).

159. *See id.* at 976-77 (maintaining that although the Court is interpreting the Constitution of the United States and not of another nation, the experiences of other countries may offer different solutions to the same legal problem).

160. 539 U.S. 306, 344-46 (2003).

161. *See id.* at 344 (providing that the Court's ruling on race-conscious programs accords with the international understanding of affirmative action, and referring specifically to the policy of The International Convention on the Elimination of All Forms of Racial Discrimination).

162. 539 U.S. 558 (2003).

163. *See id.* at 573 (examining a case in Northern Ireland heard by the European Court of Human Rights five years prior to *Lawrence*, which had factual parallels to the *Lawrence* case).

164. The identity of the Justices who have adopted this viewpoint in the foregoing cases (Justices Breyer, Ginsburg, Stevens, Kennedy, and Souter) may be significant when the Court hears *Roper*, as they are five of the six Justices who voted to put an end to the practice of executing the mentally retarded. *See Atkins v. Virginia*, 536 U.S. 304 (2002). Missing only Justice Kennedy, the other four Justices voted to hear *In re Stanford* and wrote a scathing opinion condemning the use of the juvenile death penalty. 537 U.S. 968 (2002).

165. *See Alan Cooperman, High Court Asked to End Execution of Minors*, WASH. POST, July 20, 2004, at A1 (mentioning that these groups contend that the practice of executing juveniles violates "minimum standards of decency shared by virtually every nation in the world.").

United Nations.”¹⁶⁶ In submitting amicus briefs to the Court for consideration in *Roper*, some countries stressed the scientific research on mental maturity, advocating that it demonstrates that juveniles are less cognitively mature than adults in their early twenties.¹⁶⁷

It is important for the Court to recognize that the United States is the only country in the world that still “legally” executes juveniles, because it is the sole recognized government that has refused to ratify Article 37(a) of the United Nations Convention on the Rights of the Child,¹⁶⁸ which prohibits capital punishment for persons under the age of eighteen.¹⁶⁹ The AMA, lobbying with these nations, submitted an amicus brief to the Supreme Court that specifically cited recent psychological research in support of its condemnation of the practice.¹⁷⁰ This brief echoed the

166. Anne Gearan, *High Court Asked to End Child Executions*, July 19, 2004, available at http://groups.msn.com/GlobalAffairs/deathpenalty.msnw?action=get_message&mview=0&ID_Message=47613&LastModified=4675481530391838234.

167. See British Brief, *supra* note 157, at 11 (pinpointing twenty-one as the most accurate cut-off age to distinguish between adults and juveniles).

168. See United Nations Convention on the Rights of the Child, G.A. Res. 44/25, U.N. GAOR, 44th Sess., Supp. No. 49, art. 37, U.N. Doc. A/44/736 (1989) [hereinafter Article 37(a)] (providing that countries shall ensure that “[n]o child shall be subjected to torture or other cruel, inhuman or degrading treatment or punishment. Neither capital punishment nor life imprisonment without possibility of release shall be imposed for offences committed by persons below eighteen years of age”).

169. See Victor L. Streib, *The Juvenile Death Penalty Today: Death Sentences and Executions for Juvenile Crimes, January 1, 1973—April 30, 2004* 8 (last modified May 4, 2004) (observing that a few juvenile executions have occurred in other countries outside of the United States over the past decade, but that these executions were illegal in those countries at the time that they occurred), available at <http://www.law.onu.edu/faculty/streib/JuvDeathApr302004.pdf>. Streib notes that the practice is not sanctioned by the government in any of the countries that have ratified Article 37(a), nor were those incidents considered to be a rejection of the international agreements. *Id.* See also Gearan, *supra* note 166 (stating that only five countries have executed juveniles in the past four years—Congo, China, Iran, Pakistan, and the United States—but that the United States has executed more juveniles than these four countries combined since 1990); UNICEF, THE CONVENTION ON THE RIGHTS OF THE CHILD: FREQUENTLY ASKED QUESTIONS, at <http://www.unicef.org/crc/faq.htm#009> (last visited Feb. 19, 2004) (on file with the American University Law Review) (mentioning that Somalia is the only other country that has not ratified the United Nation’s Convention on the Rights of the Child, but that they cannot do so because they have no recognized government).

170. See generally AMA Brief, *supra* note 87, at 3-4 (citing fifty-eight scientific authorities that, together, establish the proposition that the adolescent brain does not reach a state of maturity until at least the age of eighteen and that the juvenile brain exhibits deficiencies that the Court, in *Atkins*, has already determined warrant exclusion from the death penalty). “Adolescents as a group, even at the age of 16 or 17, are more impulsive than adults. They underestimate risks and overvalue short-term benefits. They are more susceptible to stress, more emotionally volatile, and less capable of controlling their emotions than adults.” *Id.* at 2. See also AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES, AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES RESOLUTION 10 (A-04) AGAINST JUVENILE DEATH SENTENCES (May 5, 2004) (referring to psychological studies that have shown that adolescents are cognitively and emotionally less mature than adults), available at http://www.phrusa.org/campaigns/juv_justice/lewis_study.html. Specifically, the AMA reports that myelination is not complete until after adolescence, MRIs have indicated that adolescents’ brains function in fundamentally different ways than adults’ brains, and adolescents are more likely to rely on the amygdala than the pre-frontal cortex,

opinions of numerous major medical and scientific organizations in arguing that juvenile execution does not serve either recognized goal of the death penalty—deterrence or retribution.¹⁷¹ Various religious organizations joined this lobby, stressing that there is a strong consensus among religious organizations around the world that the practice of juvenile execution is contrary to any society's standard of decency.¹⁷²

While a survey of international opinion may not be appropriate in every instance,¹⁷³ following *Printz*, *Grutter*, and *Lawrence*, Supreme Court jurisprudence allows for an extension in the scope of the analysis when appropriate. An analysis that considers international opinion is appropriate

resulting in more impulsive behavior. *Id.*

171. See AMA Brief, *supra* note 87, at 22 (arguing that juveniles do not typically act with the “cold calculus” of an adult murderer—for which the most severe societal sanction is reserved—as a result of their immature reasoning capabilities, and that *Atkins* precluded the death penalty where such a “calculus” is not present).

Because the Court found, in *Atkins v. Virginia*, that deterrence and retribution are the two intended social purposes served by the death penalty, capital punishment for juveniles must measurably contribute to one of these goals. With regard to the first goal, there is no evidence that executing juveniles deters youth from committing crime because there is little certainty that a capital offense committed by a juvenile will be punished by execution. See Lawrence A. Vanore, *The Decency of Capital Punishment for Minors: Contemporary Standards and the Dignity of Juveniles*, 61 IND. L.J. 757, 790 (1986) (explaining that prosecutors are unlikely to seek the death penalty, juries are reluctant to impose the punishment on youth, and courts often overturn death penalty sentences, contributing to the uncertainty of the consequence). *But see* Warren M. Kato, *The Juvenile Death Penalty*, 18 J. JUV. L. 112, 137 (1997) (claiming that the *Thompson* Court majority failed to objectively inquire into whether the death penalty served the goals of retribution and deterrence, instead relying on their own subjective beliefs about the punishment).

Further, even if adolescents are aware that the death penalty is a consequence of committing first-degree murder, their lack of skill at evaluating consequences and planning for the future indicate that capital punishment is still unlikely to adequately deter youth from criminal behavior. See *supra* notes 86-89 and accompanying text (describing diminished decision-making capacity of adolescents, when compared to adults).

The second purpose of the death penalty is retribution—a channel for society to express its moral outrage at crime and the criminal. Vanore, *supra*, at 787. Since *Gregg v. Georgia*, 428 U.S. 153 (1976), Supreme Court death penalty jurisprudence has consistently confined this punishment to the most serious crimes and the most depraved criminals. Vanore, *supra*, at 787. According to recent empirical evidence, legislative intent, and social and professional consensus, it appears as if the overwhelming consensus is that juveniles are not as legally or morally culpable as adults in most cases, and therefore do not warrant the most extreme sanction available. See *id.* at 788 (“[J]uvenile murderers are always less responsible for their actions, and are less morally blameworthy, than adult murderers”). In the case of diminished moral blameworthiness, the second goal of punishment is thus also not achieved, leading to the disproportional nature of the punishment.

172. See Cooperman, *supra* note 165 (citing Mark Chopko, general counsel to the U.S. Conference of Catholic Bishops, as asserting that all major religions accept that juveniles have less moral culpability than adults).

173. See Transcript of Oral Argument, *Roper v. Simmons*, No. 03-633, at 27 (U.S. Oct. 13, 2004) (questioning whether the Supreme Court should adopt a new rule that the United States should follow world governments on all constitutional questions, specifically asking if the trial by jury requirement should cease because other world governments do not institute the practice), available at http://www.supremecourtus.gov/oral_arguments/argument_transcripts/03-633.pdf.

in *Roper* because this issue is one of “human dignity,”¹⁷⁴ which is different from other issues of consensus, such as trial by jury.¹⁷⁵ Accordingly, the trend toward looking to the world on constitutional issues of individual rights is gaining support from the Court and should play a role in shaping death penalty jurisprudence.¹⁷⁶ Consequently, while Justice Scalia defines “society” as a national concept, scientific studies of cognitive development provide tangible evidence that is appreciated across cultural and geographic boundaries.¹⁷⁷ Scientific studies examining the adolescent brain should therefore serve to bridge national and international opinion that capital punishment for juveniles is inhumane by centering the discussion, not around ideological and political norms, but instead around a common human biology.

C. *Re-evaluating the State Legislative Response: What Has Changed Since Stanford and Why?*

Stanford determined that when assessing “evolving standards of decency,” state statutes passed by society’s democratically elected representatives should be the primary objective indicia to which the Court turns.¹⁷⁸ In 1989, the Court noted that, of the thirty-seven states that allowed for capital punishment, *fifteen* did not permit the execution of juveniles aged sixteen years and younger, and *twelve* did not permit the punishment for seventeen-year-old offenders.¹⁷⁹

It appears that much has changed since *Stanford*, as the threshold at

174. See *supra* note 145 and accompanying text (discussing the factors that make up the death penalty analysis).

175. See Transcript of Oral Argument, *Roper v. Simmons*, No. 03-633, at 27 (U.S. Oct. 13, 2004) (advocating that the *Roper* Court consider the international community’s disapproval of the juvenile death penalty when determining the constitutionality of the practice), available at http://www.supremecourtus.gov/oral_arguments/argument_transcripts/03-633.pdf; see also *supra* note 173.

176. See *supra* notes 157-162 and accompanying text (explaining that in three recent cases, Justices have filed opinions that include some reference to international norms).

177. See Letter from Human Rights Watch, to New Hampshire Governor, Craig Benson (April 28, 2004) (noting that customary international law prohibits juvenile executions and explaining that this standard reflects the understanding that “children are different from adults; that they lack the experience, judgment, maturity, and restraint of an adult. . .”), available at <http://www.hrw.org/english/docs/2004/04/28/usdom8508.htm>.

178. 492 U.S. 361, 370 (1989).

179. *Id.* The Court concluded that because a majority of the states that allow for capital punishment do permit the execution of juveniles, the level of national consensus necessary to label the practice of executing juveniles cruel and unusual was not met. *Id.* at 371. In support, the Court cited the following cases, among others: *Coker v. Georgia*, 433 U.S. 584 (1977), abolishing the death penalty for cases of rape when Georgia was the *only* state that continued to permit such a punishment; *Enmund v. Florida*, 458 U.S. 782 (1982), striking down the use of the death penalty for offenders who participate in a robbery where an accomplice kills someone, when only eight states authorized such a punishment; *Tison v. Arizona*, 481 U.S. 137 (1987), upholding the execution of offenders involved in a felony where the person exhibited reckless indifference to human life when only eleven jurisdictions that permitted capital punishment rejected its use in such a case.

which the Court finds a national consensus sufficient to declare a practice cruel and unusual has shifted over the past two years.¹⁸⁰ Even if the standard had still remained the same as it was presented in *Stanford*, however, there has been a decisive legislative shift away from permitting juvenile capital punishment. Since *Stanford*, eight states have implemented legislation banning the execution of juveniles or have construed their capital punishment statutes to prohibit this practice.¹⁸¹ No states have implemented legislation that would lower the acceptable age for imposing execution from eighteen to sixteen or seventeen.¹⁸² Further, the New Hampshire legislature overwhelmingly passed a bill to raise the minimum age for capital punishment to eighteen, only to have it vetoed by the governor.¹⁸³ Similar bills are pending in Alabama and Florida.¹⁸⁴ Therefore, of the thirty-seven states that permitted the death penalty in the age of *Stanford*, only twelve explicitly banned juvenile executions for sixteen- and seventeen-year olds, whereas today, nineteen of those states expressly prohibit the practice.¹⁸⁵ The *Atkins* Court found that eighteen state legislatures had expressly prohibited the practice of executing the mentally retarded and determined that this number was a sufficient basis to indicate a national consensus against this practice and strike it down as cruel and unusual.¹⁸⁶ Taking the twelve states that oppose the death penalty for all persons (not including the District of Columbia, and federal and civilian military courts),¹⁸⁷ and the nineteen states that prohibit juvenile executions while retaining the punishment for adults, there are a total of

180. Compare *Atkins v. Virginia*, 536 U.S. 304, 315 (2002) (“It is not so much the number of these States that is significant, but the consistency of the direction of change”), with *Stanford*, 492 U.S. at 370 (determining that there is not the national consensus necessary to label the death penalty cruel and unusual where, of thirty-seven states that permit capital punishment, fifteen decline to impose it on sixteen-year-old offenders and twelve decline to impose it on seventeen-year-old offenders).

181. Indiana (IND. CODE ANN. § 35-50-2-3(b)(2) (Michie 2002)); Kansas (KAN. STAT. ANN. § 21-4622) (1995); Missouri (*Simmons v. Roper*, 112 S.W.3d 397 (Mo. 2003) (en banc)); Montana (MONT. CODE ANN. § 45-5-102(2) (2001)); New York (N.Y. PENAL LAW § 125.27(1)(b) (McKinney Supp. 2002)); South Dakota (S.D. CODIFIED LAWS § 23A-27A-42 (Michie 2004); Washington (*Washington v. Furman*, 858 P.2d 1092 (1993)); Wyoming (WYO. STAT. ANN. § 6-2-101(b) (Michie 2004)).

182. *Simmons*, 112 S.W.3d at 408 (citations omitted).

183. HUMAN RIGHTS WATCH, US: NEW HAMPSHIRE GOVERNOR VETOES ANTI-DEATH PENALTY MEASURE, at <http://www.hrw.org/campaigns/deathpenalty/docs/update051104.htm> (last updated May 11, 2004) (on file with the American University Law Review).

184. Streib, *supra* note 169, at 7.

185. California, Colorado, Connecticut, Illinois, Indiana, Kansas, Maryland, Missouri, Montana, Nebraska, New Jersey, New Mexico, New York, Ohio, Oregon, South Dakota, Tennessee, Washington, and Wyoming. See *supra* note 58 (listing the fifteen state statutes and one state supreme court decision that prohibited the juvenile death penalty at the time of the *Simmons* decision); see also *supra* note 181 (listing states that have recently banned the practice).

186. *Atkins*, 536 U.S. at 314-16.

187. See *supra* note 59 (listing the twelve states that do not permit the death penalty).

thirty-one states that do not permit the death penalty for juveniles. Again, the *Atkins* Court found that where thirty states opposed a practice, there was a sufficient national consensus to declare the practice unconstitutional.

When analyzing this considerable shift in legislative treatment regarding juvenile capital punishment, the analysis must necessarily include a discussion of scientific research on brain maturity because states have considered such psychological data when determining whether to change their juvenile execution laws.¹⁸⁸ The significant legislative response indicates that despite the definition of “society” that the current Court chooses to adopt with respect to capital punishment, the practice should nevertheless be void because a clear national consensus, based on state legislation, has developed against executing juveniles. The Court would therefore be remiss if it omitted from its constitutional analysis the considerable scientific evidence that signals that juveniles have diminished mental capacity in comparison to adults because this evidence played an important role in changing the perspective of state legislatures.

*D. Problems With Stanford’s Predominantly Legislative Approach:
History Indicates that State Counting is Not Always an Appropriate
Response to Human Rights Issues*

The Supreme Court is responsible for protecting fundamental rights, despite the status of public opinion and the tally of state statutes,¹⁸⁹ and has embraced that role where necessary to protect such rights.¹⁹⁰ Justice Scalia’s point in *Stanford* is well taken—that the democratic process is designed to effectuate the will of the people so that the people shall

188. See, e.g., Dan Tuohy, *Juvenile Death Penalty Under Scrutiny*, EAGLE TRIB. ONLINE, Feb. 10, 2004, at http://www.eagletribune.com/news/stories/20040210/NH_006.htm (on file with the American University Law Review) (mentioning that Dr. David Fassler, an associate professor of clinical psychiatry, testified in support of the change in the New Hampshire death penalty statute that adolescents have a much more limited understanding of the rational world than adults).

189. See *West Virginia State Bd. of Educ. v. Barnette*, 319 U.S. 624, 638 (1943) (“The very purpose of a Bill of Rights was to withdraw certain subjects from the vicissitudes of political controversy, to place them beyond the reach of majorities and officials and to establish them as legal principles to be applied by the courts. One’s right to life, liberty, and property . . . and other fundamental rights may not be submitted to vote; they depend on the outcome of no elections.”); see also *id.* at 640 (“[Despite] expanded and strengthened governmental controls, we cannot, because of modest estimates of our competence . . . withhold the judgment that history authenticates as the function of this Court when liberty is infringed.”).

190. See, e.g., *Loving v. Virginia*, 388 U.S. 1, 12 (1967) (holding that antimiscegenation statutes are in violation of the Fourteenth Amendment because they abridge the freedom to marry, one of the “basic civil rights of man”); *Brown v. Bd. of Educ.*, 347 U.S. 483, 493 (1954) (overturning “separate but equal” jurisprudence on account of the fact each person has an absolute right to equal treatment under the law, regardless of race, and that education must therefore be made available to all people on equal terms). Despite popular opinion, the Court announced that segregation was therefore no longer permissible under the Fourteenth Amendment. *Id.*

determine their particular state's policy through their individual state's legislature.¹⁹¹ The Court in *Gregg v. Georgia*, however, held that the Eighth Amendment is a "restraint on the exercise of legislative power."¹⁹² More importantly, the Supremacy Clause precludes state legislatures from completely branching out on their own and independently determining the full scope of the legislation that their states will enact.¹⁹³ Such laws still must comport with the Constitution, and it is within the jurisdiction of the United States Supreme Court to determine if a law is constitutional.¹⁹⁴ Therefore, the Constitution was not designed to reflect public opinion in every instance; rather, the Framers of the Constitution implemented a checks-and-balances system, whereby the Supreme Court could sidestep a "tyrannical majority."¹⁹⁵

The right to life is a *fundamental* right that may not be abridged by the will of the people.¹⁹⁶ As a result, the government may not take a person's life without due process of law.¹⁹⁷ The Supreme Court held that due process of law is present for juvenile capital punishment when there is a national consensus accepting the sanction¹⁹⁸ and when the punishment is proportional to the severity of the crime.¹⁹⁹ Under *Stanford*, and the "evolving standards of decency" test, such a national consensus is determined primarily by the count of state legislatures that approve of the practice.²⁰⁰ The second factor, proportionality, requires that, for a

191. 492 U.S. 361, 370-73 (1989).

192. 428 U.S. 153, 174 (1976). The Court explained the role of the judiciary as a backstop to protect against unconstitutional punishments, even if approved by elected legislatures. *Id.* at 174-75.

193. U.S. CONST. art. VI, cl. 2 ("Laws of the United States . . . shall be the Supreme Law of the Land; and . . . any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.")

194. *Marbury v. Madison*, 5 U.S. 137, 177-78 (1803).

195. See Marshall, *supra* note 5, at 2924-25 ("Without an independent [judicial] analysis by an independent body, exclusive reliance on state counting leads to an 'empty constitutional standard,' as it effectively 'hands back to the very majorities the Framers distrusted the power to define the precise scope of protection afforded by the Bill of Rights.") (quoting *Stanford v. Kentucky*, 492 U.S. 361, 391-92 (1989) (Brennan, J., dissenting)).

196. See *West Virginia State Bd. of Educ. v. Barnette*, 319 U.S. 624, 638 (establishing that the right to life, liberty, property, free speech, free press, freedom of worship and assembly are fundamental human rights and are thus placed beyond the reach of majorities, in striking down a state requirement for school children to salute the American flag).

197. U.S. CONST. amend. V. See generally Steven H. Jupiter, Comment, *Constitution Notwithstanding: The Political Illegitimacy of the Death Penalty in American Democracy*, 23 FORDHAM URB. L.J. 437 (1996) (reviewing the constitutional limitations of the government's right to take a life under the due process clause of the Fifth and Fourteenth Amendments and examining Eighth Amendment jurisprudence).

198. *Stanford v. Kentucky*, 492 U.S. 361, 370-71 (1989).

199. *Gregg v. Georgia*, 428 U.S. 153, 173 (1976) (holding that a punishment cannot be excessive under the Eighth Amendment). The excessiveness inquiry requires that the punishment be proportional to the severity of the crime, and that no unnecessary and wanton pain be inflicted on the person. *Id.*

200. 492 U.S. at 370-71 (stating that courts consider statutes passed by society's elected

punishment to comport with the Eighth Amendment, it be measured not only by the amount of harm caused by the offender, but also by the offender's blameworthiness.²⁰¹ Science is vital to an understanding of what is proportional because culpability is reduced when an offender can negate the assumption that the offense is derived from bad character²⁰² by demonstrating that the offense resulted, at least in part, from diminished cognitive maturity.²⁰³

In the event that the current Court determines that state counting has still not met the level of a "national consensus" that was prescribed in *Stanford*, the Court should nevertheless find the practice of executing juveniles unconstitutional because "the People" may not always be entrusted to singularly determine the meaning of "due process of law."²⁰⁴ In *Brown v. Bd. of Educ.*²⁰⁵ and *Loving v. Virginia*,²⁰⁶ the Court protected the fundamental rights of equality and marriage, respectively, despite public opinion on the matter.²⁰⁷

Like the right to marry and the right to equality under the law, the right to life must be protected by the Court. Even if the Court determines that legislative behavior regarding capital punishment for juveniles has not reached the level of a national consensus, it should ensure that the punishment does not deny the fundamental right to life. Because the

representatives as the primary objective indicia that determine the public's view of any given sanction).

201. See Scott & Steinberg, *supra* note 15, at 800 (addressing whether the immaturity of adolescents is relevant to a determination of blame-worthiness by examining research on juvenile cognitive and psycho-social development).

202. *Id.* at 801.

203. This is not to suggest that juveniles should be excused from severe criminal sanctions as a result of their diminished culpability, only that the most severe criminal punishment available throughout the world should be reserved for the offenders that are the "worst of the worst," Adam Thurschwell, *After Ring*, 15 FED. SENTENCING REP. 1, 9 (Dec. 2002), and not those that may have less developed logic and reasoning capabilities than adults. By definition, if a juvenile is not quite as mentally *capable*, and therefore not as morally or criminally culpable as an adult, that person cannot be considered among the worst of the worst.

204. See, e.g., *Loving v. Virginia*, 388 U.S. 1 (1967) (declaring that antimiscegenation statutes are unconstitutional under the Due Process Clause and the Equal Protection Clause despite the fact that sixteen states—virtually all of the southern states—still outlawed interracial marriage). The Court adds that of the states that did repeal their statutes, at least one did so because the state court deemed the statute unconstitutional as opposed to the legislature voting to repeal. *Id.* at 6 n.5.

205. 347 U.S. 483 (1959).

206. 388 U.S. 1 (1967).

207. See *id.* at 12 (holding that although Virginia's state legislature and a majority of the legislatures of the southern states prohibited interracial marriages, "the freedom to marry or not marry, a person of another race resides with the individual and cannot be infringed by the State"); *Brown*, 347 U.S. at 495 (illustrating that the Court did not defer to the state legislatures to determine whether segregation was appropriate, but rather made a constitutional determination, based on science, that "segregation is a denial of the equal protection of the laws").

punishment must be proportional to survive constitutional review,²⁰⁸ the Court should apply empirical evidence on cognitive development because it adds a necessary piece of the puzzle—it provides the facts needed to determine the level of culpability of the offender. As the average juvenile criminal is not as mentally culpable as an adult offender, juveniles should not be subjected to the same sanction, because this sanction is reserved for only the worst of the worst. The incorporation of science into the proportionality analysis reveals that executing juveniles results in the state taking a life without due process of law because the punishment is disproportionate.²⁰⁹ Thus, regardless of the outcome of a state court, the Supreme Court should incorporate psychological data into its independent analysis of the constitutionality of executing juveniles in order to protect the right to life and should subsequently restrict states' ability to take the life of a juvenile.

CONCLUSION

Although juveniles and the mentally retarded are categorically distinct, the inclusive standard introduced by the *Atkins* Court should guide the United States Supreme Court in *Roper*. In *Atkins*, the Court found that “standards of decency” had evolved, making the death penalty for the mentally retarded no longer acceptable under the Eighth Amendment’s Cruel and Unusual Clause.²¹⁰ The court explicitly held that there was strong evidence that society viewed mentally retarded offenders as less criminally culpable than an average criminal.²¹¹ Consequently, the Court proposed that punishment can no longer be deemed “proportional” under prevailing standards of decency when: (1) there is sufficient legislative consensus against the practice (defined not as a specific number of states prohibiting the activity, but by the “consistency of the direction of change”); (2) death sentences for mentally retarded offenders have become extremely unusual; and (3) the “social and professional consensus” opposes

208. See *supra* note 199 and accompanying text.

209. The Court’s most recent analysis of proportionality of the death penalty in *Atkins* suggested that diminished mental capacity does not warrant an exemption from punishment, rather it diminishes personal culpability, and diminished culpability “places a substantive restriction on the State’s power to take [a] life.” 536 U.S. 304, 318, 321 (2002) (quoting *Ford v. Wainwright*, 477 U.S. 399, 405 (1986)).

210. 536 U.S. 304, 321 (2002).

211. See *id.* at 316 (“[T]he large number of States prohibiting the execution of mentally retarded persons (and the complete absence of States passing legislation reinstating the power to conduct such executions) provides powerful evidence that today our society views mentally retarded offenders as categorically less culpable than the average criminal.”); see also *id.* at 320 (“[I]t is the same cognitive and behavioral impairments that make [mentally retarded] defendants less morally culpable . . . that also make it less likely that they can process the information . . . and, as a result, control their conduct based upon that information.”).

the practice.²¹² The Court found that “[b]ecause of their disabilities in areas of reasoning, judgment, and control of their impulses,” the mentally retarded do not “act with the level of moral culpability that characterizes the most serious *adult* criminal conduct.”²¹³

Focusing on the use of a “social and professional consensus” to determine how standards of decency have evolved is a controversial practice, once rejected by the Court in *Stanford*.²¹⁴ The *Atkins* Court’s willingness to look to the views of experts and respected organizations when analyzing mentally retarded persons’ cognitive deficiencies, however, suggests that the Court considers these views, while not “dispositive,”²¹⁵ certainly relevant to making a well-informed decision on the issue of the death penalty. Because the opinions of well-respected scientific and medical organizations are not dispositive to a conclusion that the death penalty is unconstitutional for juveniles, such support need not be unequivocal, but must be dependable. While the research on brain maturation is still developing, it has come a long way since *Stanford*.²¹⁶ There is widespread accord among the psychological and neurobiological professional communities that juvenile cortical development is typically somewhat deficient until the early twenties, thus indicating that adolescent brains do not function as effectively as those of adults with regard to decision making.²¹⁷ Scientific research further reinforces the assertion that the twin penal goals of deterrence and retribution are less effective with respect to juveniles.²¹⁸

The use of psychological and scientific research is unquestionably relevant to determining if the imposition of the death penalty on juveniles is “excessive,” because current research indicates that juveniles may not have the capacity for making the reasoned decisions that adults can.²¹⁹ This science should be applied by the *Roper* Court to the overall calculus introduced in *Atkins* because it addresses vital issues such as criminal culpability and the requisite proportionality of the punishment, has contributed to the evolution of society’s standards of decency since *Stanford*, as exemplified through minimum age statutes, public opinion polls, and international and professional opinion, and has been employed

212. *Id.* at 313-16.

213. *Id.* at 306 (emphasis added).

214. 492 U.S. 361, 374 (1989).

215. 536 U.S. at 317 n.21.

216. Sowell, *supra* note 65.

217. See *supra* Part II.A (detailing the numerous scientific studies that indicate that juvenile brains’ frontal regions are not as developmentally mature as those of adult brains).

218. See *supra* note 171 and accompanying text (discussing the ramifications of cognitive scientific research on the ability of the courts to justify the use of the death penalty on juveniles).

219. *Supra* Part II.A.

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by the courts in lieu of legislative behavior to champion human rights. Moreover, in deconstructing the Court's language in *Atkins*, it is clear that incorporating current research on juvenile cognitive development into the "evolving standards of decency" framework results in an even more persuasive case for abolishing the "shameful practice" of juvenile capital punishment.

POSTSCRIPT

On March 1, 2005, the United States Supreme Court decided *Roper v. Simmons*. In a 5-4 decision written by Justice Kennedy, the Court set aside the death penalty for Christopher Simmons in holding that the Eighth Amendment forbids capital punishment for offenders who were under the age of eighteen when they committed their crimes.²²⁰

The Court began by gauging the change in state legislative response with respect to the juvenile death penalty that had occurred since *Stanford v. Kentucky*, determining that a significant national consensus had developed in favor of abolishing the death penalty for juveniles where five states²²¹ had abolished the practice since 1989.²²² As in *Atkins v. Virginia*, where thirty states excluded the mentally retarded from the reach of the death penalty, today thirty states also prohibit this punishment for juveniles.²²³

Notably, the second factor the Court addressed in its analysis was the existence of scientific and sociological studies to support the conclusion that juvenile offenders cannot be classified as the “worst of the worst,” a classification required under the Eighth Amendment before the death penalty may be imposed.²²⁴ The Court supplemented this scientific evidence with various appendices that documented the existence of

220. *Roper v. Simmons*, No. 03-633, slip op. at 25 (U.S. Mar. 1, 2005).

221. Indiana, Kansas, Montana, and New York enacted legislation prohibiting the imposition of the death penalty on juveniles, and Washington did so through judicial decision. *Id.* at 10 (citing Victor L. Streib, *The Juvenile Death Penalty Today: Death Sentences and Executions for Juvenile Crimes, January 1, 1973-December 31, 2004*, No. 76 (2005), available at <http://www.law.onu.edu/faculty/streib/documents/JuvDeathDec2004.pdf> (last updated Jan. 31, 2005)).

It should be noted that the number of states abolishing the death penalty for juveniles since *Stanford* is actually six, as the Missouri Supreme Court abolished the practice in 2003 through judicial decision in *State ex rel Simmons v. Roper*, which led to the Supreme Court granting certiorari on this case. 112 S.W.3d 397 (2003).

222. *Roper*, No. 03-633, slip op. at 10-12. Noting the parallel to *Atkins v. Virginia*, the Court held that this was compelling evidence to demonstrate a sufficient national consensus against the death penalty for offenders who were under the age of eighteen at the time of their crime. *Id.* at 10. The one striking difference that the majority noted between the two death penalty cases, however, was that the rate at which states adopted legislation barring the death penalty for these two groups. *Id.* The rate of legislative enactment prohibiting the punishment for the mentally retarded, beginning after the Court upheld the punishment for this group in *Penry v. Lynaugh*, was much more pronounced than the rate of prohibition for the juvenile death penalty since *Stanford*. *Id.* at 11. The Court reasoned that this slower trend was not dispositive, however, because only two states had legislation protecting the mentally retarded before *Penry*, whereas twelve states had already barred the death penalty for all juveniles at the time of *Stanford*, and fifteen already did so for youths who were under the age of seventeen at the time of their crime. *Id.* at 12. The Court thus concluded that it would be “the ultimate irony” if it were to deny juveniles relief from capital punishment simply because states recognized the impropriety of the juvenile death penalty earlier than they did for the mentally retarded. *Id.* at 13 (citing *Simmons*, 112 S.W.3d at 408 n.10).

223. *Id.* at 10.

224. *Id.* at 15.

minimum age statutes for juveniles, demonstrating that state legislatures clearly recognize the comparative immaturity of juveniles as compared with adults.²²⁵ Justice Kennedy concluded that the death penalty should be prohibited for juvenile offenders under the Cruel and Unusual Clause because juveniles are overrepresented as a group in almost every category of reckless behavior,²²⁶ are considerably more vulnerable to outside influences, such as peer pressure,²²⁷ and have a mental character that is less well-formed from that of an adult, rendering their conduct less morally reprehensible.²²⁸ In turn, the majority concluded that the required penological justifications of deterrence and retribution are not met with juvenile capital punishment.²²⁹

The *Roper* Court then turned the focus of its analysis to the relevance of international opinion when interpreting the Cruel and Unusual Clause.²³⁰ Justice Kennedy conducted a similar analysis to the one set forth in Part III.C of this Comment by citing to Article 37(a) of the United Nations Convention on the Rights of the Child and stating that the United States is virtually alone in the world in the use of juvenile execution.²³¹ In citing international law, the Court made particular note of the fact that the weight of international opinion was premised in large part on the acceptance of the immature cognitive capacity of juveniles.²³²

In dissent, Justice O'Connor expressed concern over the creation of a categorical exemption for all juveniles and instead advocated a case-by-case analysis of individual offenders—one that she concluded could introduce age and therefore, evidence of lessened culpability as a mitigating factor.²³³ Justice Scalia, joined by Justices Thomas and

225. *See id.* (referencing Appendices B-D that list state statutes establishing a minimum voting age, a minimum age to serve on a jury, and a minimum age a minor can marry without parental or judicial consent); *see also id.* at 19-21 (discussing the similar distinction made by psychiatrists between persons under eighteen years of age and adults, as exemplified by industry standards forbidding psychiatrists from diagnosing certain personality disorders for persons under the age of eighteen because the brain is not considered fully mature before this age).

226. *Id.* at 15.

227. *Id.*

228. *Id.* at 16.

229. *See id.* at 17 (acknowledging the deterrent effect the death penalty may have on juveniles, Justice Kennedy spoke to the lessened culpability that attaches to juvenile crime and reasoned that as a result, adolescents are likely not able to conduct an adequate cost-benefit analysis about the realistic possibility of execution as a penalty for their behavior).

230. *See id.* at 21 (justifying their consideration of international law by mentioning that the Court has looked to the law of other countries for Eighth Amendment guidance since 1958, when they decided *Trop v. Dulles*, 356 U.S. 86 (1958)).

231. *Id.* at 22-23; *see also* discussion *infra* Part III.C.

232. *Id.* at 24; *see also supra* note 157 and accompanying text.

233. *Roper v. Simmons*, No. 03-633, slip op. at 1 (U.S. Mar. 1, 2005) (O'Connor, J., dissenting).

It is worth noting that Justice O'Connor's language was not nearly as decisive as that of Justice Scalia's in his dissent. For example, Justice O'Connor mentioned the "undeniable"

Rehnquist, responded with a scathing dissent, primarily criticizing the majority's refusal to follow the strictures of *Stanford* and other preceding Eighth Amendment jurisprudence.²³⁴ The dissenting Justices censured the majority for imposing its own independent judgment on the constitutionality of the death penalty for juveniles.²³⁵ Justice Scalia further concluded that the majority had overstepped its bounds by determining that a national consensus had developed against the juvenile death penalty, mentioning that only eighteen of the states that permit capital punishment (or forty-seven percent) have statutes prohibiting the execution of juvenile offenders, and questioning the majority's assumption that executions of juveniles have decreased since *Stanford*.²³⁶

similarities between *Atkins*, a decision for which she joined the majority in finding execution of the mentally retarded unconstitutional, and *Roper*, finding the evidence of a national consensus in this case only "marginally weaker" than in *Atkins*. *Id.* at 9. Justice O'Connor also mentioned that this nation's understanding of human dignity should not be considered independent from the values of other countries. *Id.* at 19. Instead, Justice O'Connor took greater issue with the majority's decision to deem the age of eighteen as the line for mental maturity. According to O'Connor, mental maturity is a "matter of degree, rather than of kind." *Id.* at 14.

234. *Id.* at 4 (Scalia, J., dissenting).

235. *See id.* at 10 ("[T]he Court having pronounced that the Eighth Amendment is an ever-changing reflection of 'the evolving standards of decency' of our society, it makes no sense for the Justices then to *prescribe* those standards rather than discern them from the practices of our people By what conceivable warrant can nine lawyers presume to be the authoritative conscience of the Nation?").

236. *Id.* at 3-9.