

The Scientific Shortcomings of *Roper v. Simmons*

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This Article contends that some of the case law and social science research that form the basis for the United States Supreme Court's decision in Roper v. Simmons are insufficient and outdated. The Court also relies heavily upon briefs submitted by the respondent and his amici, in lieu of providing more pertinent citations and analysis that could have enhanced and modernized the Court's arguments. The sparse and sometimes archaic sources for Roper potentially limit the opinion's precedential value. For example, the Court cites Erik Erikson's 1968 book, Identity: Youth and Crisis, to support the view that, relative to adults, juveniles have more undeveloped and unstable identities. While Erikson's influence as a psychologist is indisputable, his work reflects an outmoded psychoanalytic perspective. Furthermore, the Court does not specify which of Erikson's highly complex theories are relevant to Roper's conclusions. The shortcomings of Erikson's book and other sources cited in the opinion would be less apparent but for the Court's overall dearth of social science support. This Article concludes that despite Roper's correct result, the Court's application of interdisciplinary studies was, in part, flawed, thereby detracting from the Court's otherwise progressive direction. Ultimately, the opinion's strength derives more from its traditional legal analysis than from its application of relevant social science, an outcome the Court may not have fully intended.

I. INTRODUCTION

In *Roper v. Simmons*,¹ the United States Supreme Court held that the Eighth and Fourteenth Amendments prohibited the execution of persons younger than age eighteen at the time their crimes were committed.² This Article's concern about *Roper* is not the result, because the holding makes good sense, but how the Court

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¹ *Roper v. Simmons*, 543 U.S. 551 (2005).

² *Id.* at 578 (“The Eighth and Fourteenth Amendments forbid imposition of the death penalty on offenders who were under the age of 18 when their crimes were committed.”).

treats the case law and social science research that *Roper* references. For such a deep and important opinion, *Roper* is far too scanty, vague, and dated in explaining how and why modern science justifies the legal distinction between juveniles and adults. The opinion would have firmer precedential value had the Court provided more explicit guidance and citations to help direct future decision-making on comparable constitutional matters.

According to *Roper*, there are three “general” differences between adults and juveniles under age eighteen that explain why juveniles “cannot with reliability be classified among the worst offenders.”³ Juveniles are relatively more (1) immature and irresponsible, (2) vulnerable to negative pressures from their peers and environment, and (3) fragile and unstable in their identities.⁴ These disparities not only heighten the likelihood that juveniles will engage in impulsive thinking and conduct, but they also strengthen arguments explaining why juveniles may be less culpable. In the *Roper* Court’s eyes, the crimes of juveniles, however heinous, are less likely to be indicative of their character or intent.⁵

The Court uses case law⁶ and research cited by the respondent⁷ and his *amici*⁸ to bolster this three-way categorization, while paying slight homage to the petitioner.⁹ The Court’s supporting material is important to examine because a

³ *Id.* at 569.

⁴ *Id.* at 569–70.

⁵ *Id.*

⁶ *Id.* (citing *Johnson v. Texas*, 509 U.S. 350 (1993); *Eddings v. Oklahoma*, 455 U.S. 104 (1982)).

⁷ See Brief for Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633).

⁸ See Brief of Amici Curiae President James Earl Carter, Jr. et al. in Support of Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief for the American Psychological Ass’n et al. as Amici Curiae Supporting Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief for the Human Rights Committee of the Bar of England and Wales et al. as Amici Curiae in Support of Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief of Amici Curiae former U.S. Diplomats Morton Abramowitz et al. in Support of Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief of Juvenile Law Center et al. as Amici Curiae in Support of Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief of Amicus Curiae Missouri Ban Youth Executions Coalition in Support of Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief of Amici Curiae Murder Victims’ Families for Reconciliation in Support of Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief of New York et al. as Amici Curiae in Support of Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief Amicus Curiae of the American Bar Ass’n in Support of the Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief of the American Medical Ass’n et al. as Amici Curiae in Support of Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief of the Coalition for Juvenile Justice as Amicus Curiae in Support of Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief of the Constitution Project as Amicus Curiae in Support of Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief of Amici Curiae the European Union et al. in Support of Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief of the NAACP Legal Defense & Educational Fund, Inc. et al. as Amici Curiae in Support of Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief of the National Legal Aid & Defender Ass’n as Amicus Curiae in Support of Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief Amici Curiae of the United States Conference of Catholic Bishops et al. in Support of Respondent, *Roper*, 125 S. Ct. 1183 (No. 03-633).

⁹ See Brief for Petitioner, *Roper*, 125 S. Ct. 1183 (No. 03-633).

substantial number of *amici* briefs—eighteen altogether—were submitted in *Roper*, the great majority (sixteen) on behalf of the respondent¹⁰ and only two on behalf of the petitioner.¹¹ Indeed, most of the *Roper* Court’s citations justifying the differences between juveniles and adults, are derived from the respondent’s brief and selected *amici* briefs. For example, the Court readily accepts the numerous “scientific and sociological studies respondent and his *amici* cite.”¹² At the same time, however, the Court leans so heavily on the framework and research of the respondent’s brief that the Court seemingly adds little reflection or insights of its own.¹³

The legal profession does not expect Supreme Court opinions to be original, but it does anticipate that the Court will be evaluative and have a mind of its own, even if the briefs of the respondent or its *amici* are excellent. The Court’s role is to contribute its own stamp for the future, a goal that is not necessarily going to be the focus of the respondents or petitioners who are arguing a particular case. In order to discuss these points more fully, the following sections briefly examine the research the *Roper* Court cites to justify the three distinctions between juveniles and adults. While these three distinctions constitute only one part of *Roper*’s entire analysis, they are one of the more critical and controversial portions of the opinion.

II. *ROPER*’S FIRST PROPOSITION: JUVENILES ARE MORE IMMATURE AND IRRESPONSIBLE THAN ADULTS

The center of the *Roper* Court’s social science discussion is the Court’s first proposition concerning the greater immaturity and irresponsibility of juveniles.¹⁴ The Court approaches justifying this dissimilarity between adults and juveniles in various ways, relying on both case law and research.

¹⁰ See sources cited *supra* note 8.

¹¹ See Brief of Amici Curiae Justice for All Alliance in Support of Petitioner, *Roper*, 125 S. Ct. 1183 (No. 03-633); Brief of the States of Alabama et al. as Amici Curiae in Support of Petitioner, *Roper*, 125 S. Ct. 1183 (No. 03-633).

¹² *Roper*, 543 U.S. at 569; see also sources cited *supra* notes 7–9.

¹³ See discussion *infra* Parts II–IV.

¹⁴ *Roper*, 543 U.S. at 569. The *Roper* Court describes the difference as follows:

First, as any parent knows and as the scientific and sociological studies respondent and his *amici* cite tend to confirm, “[a] lack of maturity and an underdeveloped sense of responsibility are found in youth more often than in adults and are more understandable among the young. These qualities often result in impetuous and ill-considered actions and decisions.” *Johnson, supra*, at 367; see also *Eddings, supra*, at 115–116 (“Even the normal 16-year-old customarily lacks the maturity of an adult.”).

Id. (internal parallel citations omitted).

In terms of case law, the Court quotes from two cases,¹⁵ *Johnson v. Texas*¹⁶ and *Eddings v. Oklahoma*.¹⁷ Yet, both case references are troublesome support for the proposition. *Johnson*, quoted directly by the *Roper* Court, provides no source whatsoever for its statements about juveniles' immaturity and impetuosity.¹⁸ In turn, the sources cited in *Eddings* quote cases and social science materials that go back thirty-to-fifty years.¹⁹ This situation suggests that much of the case law *Roper* cites is based in part on decades-old materials which, no matter how highly respected at the time they were created, are limited and may not always reflect modern concerns.²⁰ Of course, the same accusation could be directed at most state and federal cases. But the *Roper* Court's analysis, in particular, is intended to reflect present-day realities and there is no viable reason why it cannot.

Notably, in one sentence, the Court claims that it primarily relies on "scientific and sociological studies respondent and his *amici* cite," which "tend to confirm" the Court's assertion that juveniles are less mature and developed than adults.²¹ But this statement in itself has enormous significance, as well as being somewhat perplexing. First, the Court does not elaborate beyond this proposal; thus, there is no indication whatsoever, at least explicitly, what particular disciplines, organizations, or studies impressed the Court. Next, because the

¹⁵ *Roper*, 543 U.S. at 569–71.

¹⁶ 509 U.S. 350 (1993).

¹⁷ 455 U.S. 104 (1982).

¹⁸ The statements in *Johnson* do, however, directly follow a popular quote from *Eddings* that the *Roper* Court also uses to support its second difference between adults and juveniles that is discussed next in this Article. See discussion *infra* Part III. According to the *Eddings* phrasings that *Roper* and *Johnson* share, "[Y]outh is more than a chronological fact. It is a time and condition of life when a person may be most susceptible to influence and to psychological damage." *Eddings*, 455 U.S. at 115 (citing PRESIDENT'S COMM. ON LAW ENFORCEMENT AND ADMIN. OF JUSTICE, TASK FORCE REPORT: JUVENILE DELINQUENCY AND YOUTH CRIME 41 (1967); TWENTIETH CENTURY FUND TASK FORCE ON SENTENCING POLICY TOWARD YOUNG OFFENDERS, CONFRONTING YOUTH CRIME 7 (1978)). While the paragraph continues, neither *Johnson* nor *Roper* cites to the rest of it. For the purposes of this Article, however, the remainder of the "youth is more than a chronological fact" paragraph is important because it directly precedes the *Eddings* quote in the block-quoted paragraph from *Roper*, *supra* note 14, concerning the fact that "[e]ven the normal 16-year-old" is less mature than an adult. *Roper*, 543 U.S. at 569 (citing *Eddings*, 455 U.S. at 115–116). As *Eddings* stated, "Our history is replete with laws and judicial recognition that minors, especially in their earlier years, generally are less mature and responsible than adults." 455 U.S. at 115–16 (citing *May v. Anderson*, 345 U.S. 528, 536 (1953) (concurring opinion)); *In re Gault*, 387 U.S. 1, 14 (1967)). The *Eddings* Court continued: "Particularly 'during the formative years of childhood and adolescence, minors often lack the experience, perspective, and judgment' expected of adults." 455 U.S. at 116 (quoting *Bellotti v. Baird*, 443 U.S. 622, 635 (1979)). Notably, the *Bellotti* language quoted by the *Eddings* Court cites for support *Ginsberg v. New York*, 390 U.S. 629, 649 (1968), and no other citation. The *Eddings* Court then stated, "[e]ven the normal 16-year-old customarily lacks the maturity of an adult." 455 U.S. at 116. The *Eddings* Court provided no support for this last sentence.

¹⁹ *Eddings*, 455 U.S. at 116.

²⁰ See *infra* Parts III–IV.

²¹ *Roper*, 543 U.S. at 569.

petitioner's brief²² and its two *amici* briefs²³ reference no social science research, the Court's sentence, however clipped, suggests that the Court accepts the wide range of empirical research that the respondents' sixteen *amici* submitted.

The diversity of fields and studies that the *amici* cover is broad-based and includes the following: (1) a long list of psychological, biological, cognitive, and physiological research offered by the American Psychological Association,²⁴ the Juvenile Law Center,²⁵ the American Bar Association,²⁶ the American Medical Association, the American Psychiatric Association,²⁷ and the Coalition for Juvenile Justice;²⁸ (2) a physiologically oriented analysis of the relevant case law preceding *Roper* offered by the Missouri Ban Youth Executions (BYE) Coalition²⁹ and the Constitution Project;³⁰ (3) international materials offered by President Jimmy Carter,³¹ the Human Rights Committee of the Bar of England and Wales,³² Former U.S. Diplomats,³³ and the European Union;³⁴ (4) victimology research offered by Murder Victims' Families for Reconciliation;³⁵ (5) social science evidence demonstrating the impact of race on capital sentencing decisions for juveniles offered by the NAACP Legal Defense and Educational Fund, Inc.;³⁶ (6) cultural

²² See Brief for Petitioner, *supra* note 9.

²³ See Brief of Amici Curiae Justice for All Alliance in Support of Petitioner, *supra* note 11; Brief of the States of Alabama et al. as Amici Curiae in Support of Petitioner, *supra* note 11.

²⁴ See Brief for the American Psychological Ass'n et al. as Amici Curiae Supporting Respondent, *supra* note 8.

²⁵ See Brief of Juvenile Law Center et al. as Amici Curiae in Support of Respondent, *supra* note 8.

²⁶ See Brief Amicus Curiae of the American Bar Ass'n in Support of the Respondent, *supra* note 8.

²⁷ See Brief of the American Medical Ass'n et al. as Amici Curiae in Support of Respondent, *supra* note 8.

²⁸ See Brief of the Coalition for Juvenile Justice as Amicus Curiae in Support of Respondent, *supra* note 8.

²⁹ See Brief of Amicus Curiae Missouri Ban Youth Executions Coalition in Support of Respondent, *supra* note 8.

³⁰ See Brief of the Constitution Project as Amicus Curiae in Support of Respondent, *supra* note 8.

³¹ See Brief of Amici Curiae President James Earl Carter, Jr. et al. in Support of Respondent, *supra* note 8.

³² See Brief for the Human Rights Committee of the Bar of England and Wales et al. as Amici Curiae in Support of Respondent, *supra* note 8.

³³ See Brief of Amici Curiae former U.S. Diplomats Morton Abramowitz et al. in Support of Respondent, *supra* note 8.

³⁴ See Brief of Amici Curiae the European Union et al. in Support of Respondent, *supra* note 8.

³⁵ See Brief of Amici Curiae Murder Victims' Families for Reconciliation in Support of Respondent, *supra* note 8.

³⁶ See Brief of the NAACP Legal Defense & Educational Fund, Inc. et al. as Amici Curiae in Support of Respondent, *supra* note 8.

evidence on where society draws the line between adults and juveniles offered by the National Legal Aid and Defender Association;³⁷ (7) an analysis of legislative trends offered by the state of New York;³⁸ and (8) the views of religious organizations offered by the United States Conference of Catholic Bishops and Other Religious Organizations.³⁹

The *Roper* Court makes a strong move toward accepting the reliability and validity of social science research, including studies conducted by the “harder” sciences, such as biology and physiology. However, the Court never adequately explains how any of the research illuminates its conclusions. Likewise, the Court does not differentiate among the studies discussed in the sixteen *amicus* briefs to clarify which had the most impact on its decision making. Was it the American Psychological Association’s impressively detailed examination of behavioral and neuropsychological research?⁴⁰ Or the American Medical Association’s offer of studies indicating scientific distinctions among the brains, minds, and emotions of juveniles when compared with adults?⁴¹ Perhaps it was the relatively more sociological comparison between society’s attitudes toward juveniles and mentally retarded individuals put forward by the Juvenile Law Center.⁴² The Juvenile Law Center attempted to demonstrate the strong parallels between juveniles and mentally retarded persons in light of the Court’s recent holding in *Atkins v. Virginia*,⁴³ which prohibited the execution of mentally retarded criminals under the Eighth Amendment.⁴⁴

As it stands, by accepting the broad range of briefs proffered by the respondent and his *amici*, without explicitly distinguishing among them, the Court has broken new ground in a scientific venture to decipher the young minds of those who disobey the law. The Court’s broadness could also suggest that these different kinds of research studies are comparably eligible for later use in case law. Presumably, the Court felt no need to get into yet another line-drawing matter, this time drawing lines between which study was strong and which was weak, which was most applicable, which was not. On the other hand, there is some frustration in not knowing how *Roper* can be used more precisely as precedent since the Court

³⁷ See Brief of the National Legal Aid & Defender Ass’n as Amicus Curiae in Support of Respondent, *supra* note 8.

³⁸ See Brief of New York et al. as Amici Curiae in Support of Respondent, *supra* note 8.

³⁹ See Brief Amici Curiae of the United States Conference of Catholic Bishops et al. in Support of Respondent, *supra* note 8.

⁴⁰ See Brief for the American Psychological Ass’n et al. as Amici Curiae Supporting Respondent, *supra* note 8.

⁴¹ See Brief of the American Medical Ass’n et al. as Amici Curiae in Support of Respondent, *supra* note 8, at 4–5.

⁴² See Brief of Juvenile Law Center et al. as Amici Curiae in Support of Respondent, *supra* note 8, at 12.

⁴³ 536 U.S. 304 (2002).

⁴⁴ *Id.* at 321.

is coy about these important details. It appears that because the overwhelming amount of evidence supported the *Roper* Court's result, the Court did not think it necessary to push the matter further despite the potential repercussions for other courts.

Beyond the discussion of the respondent's and *amici*'s "scientific and sociological studies," the *Roper* Court continued its explanation of its first of three differences between adults and juveniles. Eventually, the Court did focus on specific research. "It has been noted that 'adolescents are overrepresented statistically in virtually every category of reckless behavior.'"⁴⁵ For this proposition, the Court cited only one source, an article authored by Jeffrey Arnett, a psychologist and research associate professor at the University of Maryland. Arnett has published prolifically in the area of adolescent development.⁴⁶ Arnett's article was also referenced in the Brief for Respondent⁴⁷ and the American Psychological Association's *amicus* brief.⁴⁸ The *Roper* Court's quote is the same one that the American Psychological Association's brief uses to introduce a key point—that "[a]dolescence is a period in which character is forming and often involves heightened risk-taking and even criminal conduct which are moderated or eliminated by the individual in adulthood."⁴⁹ At least in terms of this reference to Arnett's article, the *Roper* Court relies heavily on the American Psychological Association's brief.

According to Arnett, "adolescence" is the time between people's puberty and their early twenties.⁵⁰ This definition is, of course, a substantial expansion in years over the legal presumption that adolescence concludes at age eighteen. Arnett acknowledges that his delineation of adolescence is unusually broad, but explains that "it is an appropriate range for our culture" since adolescence typically does not cease until an individual has established an independent household.⁵¹ Arnett notes that "[t]he demarcation of the end of adolescence must always be somewhat arbitrary" but suggests that the stopping point could occur as late as age twenty-four, or even older.⁵²

⁴⁵ *Roper*, 543 U.S. at 569 (quoting Jeffrey Arnett, *Reckless Behavior in Adolescence: A Developmental Perspective*, 12 DEVELOPMENTAL REV. 339 (1992)).

⁴⁶ See Jeffrey Jensen Arnett, Ph.D. Homepage (providing a description and overview of Professor Arnett's background and publications), at <http://www.jeffreyarnett.com> (last visited Nov. 10, 2005).

⁴⁷ See Brief for Respondent, *supra* note 7, at x, 16–18, 25.

⁴⁸ See Brief for the American Psychological Ass'n et al. as Amici Curiae Supporting Respondent, *supra* note 8, at iv, 5.

⁴⁹ See Brief for Respondent, *supra* note 7, at 5.

⁵⁰ Jeffrey Arnett, *Reckless Behavior in Adolescence: A Developmental Perspective*, 12 DEVELOPMENTAL REV. 339, 340 (1992).

⁵¹ *Id.* at 340–41.

⁵² *Id.* at 341.

It is perplexing why the *Roper* Court chose to quote from Arnett's article because the article defines adolescence so loosely, possibly extending the age cutoff to the early-to-mid twenties.⁵³ The Court also selected only a portion of Arnett's sentence to quote, leaving out the rest and somewhat altering the meaning as a result. In other words, the full unedited sentence of Arnett's quote has a somewhat different connotation than the *Roper* Court's edited version. In Arnett's full quote that follows, only the italicized portion is cited by *Roper*:

Contemporary theory and research on adolescence have emphasized that the storm and stress popularly thought to be characteristic of adolescence have been exaggerated and that adolescence is not necessarily a tumultuous period of development, but it remains true that *adolescents are overrepresented statistically in virtually every category of reckless behavior.*⁵⁴

It appears the phrase the Court selected does not fully portray the meaning that Arnett intended, even though there is considerable research that would support the proposition the Court was seeking. Regardless, Arnett spends the remainder of his article discussing the factors that might explain the statistics, but does not comment further upon his contradictory theory and research. As Arnett emphasizes, "[o]ne of the clearest findings in the area is that reckless behavior does decline after adolescence";⁵⁵ yet, he repeatedly notes the lack of research on the factors explaining this decline.⁵⁶ The *Roper* Court's somewhat altered depiction of Arnett's article does not necessarily negate the purpose for which Arnett's article was cited. At the same time, the misapplication of Arnett's intended meaning does seem to indicate gaps in the Court's research that would have been far less apparent if not for the scarcity of social science literature cited in this section of the *Roper* opinion.

The *Roper* Court concludes its overview of the first difference between adults and juveniles by focusing on research discussed in the *amicus* brief by the National Legal Aid and Defender Association⁵⁷ concerning activities typically carried out only as an adult, such as voting.⁵⁸ This type of research is compelling and presents a far more objective, bright-line measure of difference than the other kinds of

⁵³ *Id.*

⁵⁴ *Id.* at 339 (emphasis added); *see also Roper*, 543 U.S. at 569 (quoting a paraphrase from Arnett's article).

⁵⁵ Arnett, *supra* note 50, at 367.

⁵⁶ *Id.* at 365–67.

⁵⁷ *See* Brief of the National Legal Aid & Defender Ass'n as Amicus Curiae in Support of Respondent, *supra* note 8, at 7–10.

⁵⁸ *Roper*, 543 U.S. at 569. As the Court explained, "In recognition of the comparative immaturity and irresponsibility of juveniles, almost every State prohibits those under 18 years of age from voting, serving on juries, or marrying without parental consent. *See* Appendixes B–D, *infra.*" *Id.* [The Appendixes list this statewide breakdown.]

multidisciplinary research pertaining more to the physiological or sociological attributes of culpability. The Court wisely capitalizes on such moments of apparent division by providing appendixes of all of the states that have information on juvenile and adult distributions,⁵⁹ perhaps hoping to balance out the murkier aspects of the opinion.

III. *ROPER*'S SECOND PROPOSITION: JUVENILES ARE MORE VULNERABLE TO NEGATIVE PRESSURES FROM THEIR PEERS AND THEIR ENVIRONMENT

The *Roper* Court's discussion of the second difference concentrates on evidence that juveniles are more susceptible to negative influences from their environment and peers.⁶⁰ Like the first difference, the Court introduces its presentation using case law as support, again citing *Eddings v. Oklahoma*.⁶¹ For its other sources of reinforcement, however, the Court does not cite directly to the respondent's and *amici*'s briefs, but rather references individual articles that are also mentioned in the briefs. This approach suggests, then, that the ideas for the Court's supporting authorities still appeared to originate with the briefs.⁶²

There are a number of examples of how the *Roper* Court relied on the respondent's briefs indirectly. For instance, in its explanation of the environmental and peer influences on juveniles,⁶³ the Court highlights an *American Psychologist* article written by Laurence Steinberg⁶⁴ and Elizabeth Scott,⁶⁵ professors in

⁵⁹ *Id.* at 579–86.

⁶⁰ *Id.* at 569.

⁶¹ *Id.* (citing *Eddings v. Oklahoma*, 455 U.S. 104 (1982)).

⁶² *Roper*, 543 U.S. at 569. As the Court explains:

The second area of difference is that juveniles are more vulnerable or susceptible to negative influences and outside pressures, including peer pressure. *Eddings, supra*, at 115 (“[Y]outh is more than a chronological fact. It is a time and condition of life when a person may be most susceptible to influence and to psychological damage”). This is explained in part by the prevailing circumstance that juveniles have less control, or less experience with control, over their own environment. See Steinberg & Scott, Less Guilty by Reason of Adolescence: Developmental Immaturity, Diminished Responsibility, and the Juvenile Death Penalty, 58 *Am. Psychologist* 1009, 1014 (2003) (hereinafter Steinberg & Scott) (“[A]s legal minors, [juveniles] lack the freedom that adults have to extricate themselves from a criminogenic setting”).

Id. (internal parallel citations omitted) (brackets in original).

⁶³ See *Roper*, 543 U.S. at 569.

⁶⁴ Laurence Steinberg is the Distinguished University Professor and Laura H. Carnell Professor of Psychology at Temple University. For an overview of Professor Steinberg's credentials and expertise, see Temple University Department of Psychology, Laurence Steinberg Homepage, at <http://astro.temple.edu/~lds/> (last visited Nov. 12, 2005).

⁶⁵ Elizabeth S. Scott is University Professor and Class of 1962 Professor of Law at the University of Virginia School of Law. For an overview of Professor Scott's credentials and expertise, see University of Virginia School of Law, Elizabeth S. Scott Homepage, at <http://www.law.virginia.edu/lawweb/faculty.nsf/FHPbI/5417> (last visited Nov. 12, 2005).

psychology and law, respectively, who are both renowned in their fields. But the Steinberg and Scott article is also cited in three other *Roper* briefs on behalf of the respondent: (1) the Brief for Respondent,⁶⁶ (2) the *amicus* brief of the American Psychological Association⁶⁷ (a link that is not too surprising since both Steinberg and Scott, along with others, assisted with the creation of the American Psychological Association's brief),⁶⁸ and (3) the Brief of the American Medical Association.⁶⁹ While none of these briefs references the exact Steinberg and Scott quote that the *Roper* Court applies, their discussions focus on the pages surrounding the Steinberg and Scott quote. The Steinberg and Scott quote also represents the propositions that the brief writers are making. In turn, additional articles published by Steinberg and Scott, either together or in association with other authors, are cited in other *Roper* briefs on behalf of the respondent.⁷⁰

Of course, it is expected that the Court would turn to some materials cited in the briefs that are submitted. But, this Article's concern is that the Court's analysis appears to be confined to only a few of these source materials, and no additional research beyond the briefs. The Steinberg and Scott piece shares this Article's criticisms in that it emphasizes the limited amount of scientific research underlying previous Supreme Court decisions cited by *Roper*. After quoting *Thompson v. Oklahoma*,⁷¹ for example, a decision in which the Court prohibited the execution of individuals under age sixteen at the time of the crime,⁷² Steinberg and Scott state that "[t]he Supreme Court decision in *Thompson* does not speak explicitly in the language of adolescent development or support its arguments with scientific research on adolescents' capacities."⁷³ Indeed, the *Thompson* Court's relative lack of research thwarts Steinberg and Scott's interpretations of the Court's principles in the same way that the *Roper* Court's limitations hinder this Article's analysis. As Steinberg and Scott finally conclude, however, despite the *Thompson* Court's oversights, "the Court's pronouncement can best be understood as a recognition

⁶⁶ See Brief for Respondent, *supra* note 7, at xiv, 17, 18, 19 n.26.

⁶⁷ See Brief for the American Psychological Ass'n et al. as Amici Curiae Supporting Respondent, *supra* note 8, at xi, 4, 19.

⁶⁸ *Id.* at 1 ("Amici acknowledge the assistance of . . . Laurence Steinberg . . . [and] Elizabeth Scott.").

⁶⁹ See Brief of the American Medical Ass'n et al. as Amici Curiae in Support of Respondent, *supra* note 8, at xii, 6 n.6, 8, 9.

⁷⁰ See Brief of Juvenile Law Center et al. as Amici Curiae in Support of Respondent, *supra* note 8, at viii, ix, x, 6, 7, 23, 24, 26; Brief Amicus Curiae of the American Bar Ass'n in Support of the Respondent, *supra* note 8, at v, 9 n.4, 10 n.5.

⁷¹ 487 U.S. 815 (1987).

⁷² *Id.*

⁷³ Laurence Steinberg & Elizabeth S. Scott, *Less Guilty by Reason of Adolescence: Developmental Immaturity, Diminished Responsibility, and the Juvenile Death Penalty*, 58 AM. PSYCHOL. 1009, 1013 (2003).

that psychosocial immaturity compromises adolescents' decision making in ways that mitigate criminal blameworthiness."⁷⁴

Notably, the *Thompson* Court cited substantially more social science research than *Roper*. Likewise, comparable kinds of challenges exist when the *Roper* Court discusses the third difference between juveniles and adults.

IV. *ROPER*'S THIRD PROPOSITION: JUVENILES HAVE MORE FRAGILE AND UNSTABLE IDENTITIES

The third difference the *Roper* Court lists is somewhat more puzzling than the other two differences, not because of the substance of the argument about identity, but because of what the Court uses for support. The Court references a "see generally" to just one source—Erik Erikson's classic 1968 book on identity—for the proposition that "the character of a juvenile is not as well formed as that of an adult. The personality traits of juveniles are more transitory, less fixed."⁷⁵

As before, the Court appears to derive this particular source from the Brief for Respondent, because no other brief mentions Erikson's work, much less this specific book.⁷⁶ The Brief for Respondent⁷⁷ and one other brief refer to the identity issue only in passing in the context of other literature;⁷⁸ an additional brief mentions the matter of identity in only one sentence without any citations.⁷⁹

The Court should be congratulated for promoting the identity/transitional issue and branching out more conceptually in its take on juvenile offenders. Yet, it is confusing why the Court relied on Erikson's 1968 book, apart from the fact that the Brief for Respondent cites it. Also, why did the Court cite Erikson as a "see generally" when Erikson's book deals with a series of very complicated issues, many of which are of questionable relevance to *Roper*? Alternatively, it is unclear why the Court cited Erikson at all. Why not cite Sigmund Freud or other influential psychologists who contributed important theories about child development? Inexplicably, the Court never states its reasons for choosing only Erikson's 1968 book and the Court neglects to discuss the selection further.

The citation to Erikson, while dated, does make sense in the context in which the *Roper* Court uses it, however. Erik Erikson, a renowned German-born

⁷⁴ *Id.*

⁷⁵ *Roper*, 543 U.S. at 570 ("See generally E. Erikson, *Identity: Youth and Crisis* (1968)").

⁷⁶ See Brief for Respondent, *supra* note 7, at xi, 26 n.54.

⁷⁷ *Id.* at 26 n.55.

⁷⁸ See Brief of Juvenile Law Center et al. as Amici Curiae in Support of Respondent, *supra* note 8, at 24.

⁷⁹ See Brief Amici Curiae of the United States Conference of Catholic Bishops et al. in Support of Respondent, *supra* note 8, at 15.

American psychoanalyst⁸⁰ who died in 1994,⁸¹ has been described as “identity’s architect.”⁸² According to some commentators, the term “identity . . . became synonymous” with Erikson,⁸³ along with the concept of “identity crisis,” which Erikson created and popularized.⁸⁴ Deemed “one of the last great synthesizers” in part because he worked to link psychoanalysis to the social sciences, Erikson also “significantly revised and extended Sigmund Freud’s psychoanalytic theory and practice.”⁸⁵ Indeed, according to one biographer, “[i]t can be said that through [Erikson’s] writings on the subject of ‘identity’ [Erikson] accomplished the single most important shift in direction that psychoanalysis required if it was to become at all useful for other disciplines.”⁸⁶

Erikson’s specialty was his model of the human life cycle. This cycle consisted of eight stages that every individual traversed, each stage with its own circumstances of particular sensitivity, identity crisis, and potential, with each stage building upon the other.⁸⁷ According to Erikson, identity was the central focus of these stages.⁸⁸ Erikson also set the most significant period for normative

⁸⁰ Robert A. Nisbet, *A Sense of Personal Sameness*, N.Y. TIMES, Mar. 31, 1968, at BR1 (reviewing ERIK H. ERIKSON, *YOUTH AND CRISIS* (1968)) (describing Erikson as a “Frankfurt-born, European-educated psychoanalyst” who, since coming to the United States, “has been one of the key figures in the American fields of depth psychology and the study of human development”).

While Erikson garnered no greater education than a high school diploma during his predominantly European upbringing, within a decade after arriving in the United States at age thirty-two, he was holding prestigious posts at some of the top universities in the country, including Harvard, Yale, and the University of California at Berkeley. J. Roy Hopkins, *Erik Homburger Erikson (1902–1994)*, 50 AM. PSYCHOL. 796, 796 (1995).

⁸¹ Hopkins, *supra* note 80, at 796.

⁸² LAWRENCE J. FRIEDMAN, *IDENTITY’S ARCHITECT: A BIOGRAPHY OF ERIK H. ERIKSON* 24, 478 (1999).

⁸³ Robert Coles, *Foreword* to LAWRENCE J. FRIEDMAN, *IDENTITY’S ARCHITECT: A BIOGRAPHY OF ERIK H. ERIKSON* 15 (1999).

⁸⁴ Nisbet, *supra* note 80, at BR1 (asserting that Erik Erikson “is chiefly responsible for the popularity of the words ‘identity’ and ‘identity crisis’”).

⁸⁵ Hopkins, *supra* note 80, at 796; *see also* Marie Jahoda, *Book Review*, 379 ANNALS AM. ACAD. POL. & SOC. SCI. 192, 192 (1968) (reviewing ERIK H. ERIKSON, *IDENTITY: YOUTH AND CRISIS* (1968)) (noting that Erikson “went beyond Freud”); Kenneth Keniston, *Psychoanalysis and Theories of Man*, 161 SCI. 257, 257 (1968) (reviewing ERIK H. ERIKSON, *IDENTITY: YOUTH AND CRISIS* (1968)) (acknowledging the limitations of psychoanalysis but noting that “the continuing vitality of psychoanalytic theory is witnessed by the most recent work of Erik Erikson . . . perhaps the most original of those who sought to continue the spirit of Freud’s pioneering inquiry into the human psyche”).

⁸⁶ ROBERT COLES, *ERIK H. ERIKSON: THE GROWTH OF HIS WORK* 165 (1970); *see also* Nisbet, *supra* note 80, at BR1 (noting Erikson’s arrival in this country at age thirty-two).

⁸⁷ *See* ERIK H. ERIKSON, *IDENTITY: YOUTH AND CRISIS* 91–141 (1968) (detailing the different stages of the human life cycle); *see also* Arnett, *supra* note 50, at 365 (mentioning Erikson’s “intimacy stage” in a discussion of a decline of reckless behavior).

⁸⁸ *See* ERIKSON, *supra* note 87, at 91–141.

crisis in adolescence, in contrast to Freud's emphasis on early childhood as the most critical time for development.⁸⁹

It is beyond this Article's scope to probe further into Erikson's life, scholarship, and contributions, which have been detailed extensively in two biographies⁹⁰ and numerous articles.⁹¹ Without question, Erikson's impact has been widespread and he has left a substantial legacy, ranging from the Erikson Institute,⁹² a graduate program in child development that is inspired by Erikson's theories and writings, to the recently inaugurated journal based on his work and entitled, *Identity: An International Journal of Theory and Research* [hereinafter *Identity*].⁹³

At the same time, Erikson's legacy has been continuously criticized, and its psychoanalytic perspective considered outmoded, even when reviewers were examining his newly published book, *Identity: Youth and Crisis*, in 1968.⁹⁴ The Erikson Institute⁹⁵ acknowledges on its website that "much of [Erikson's] theoretical work has . . . been challenged" since Erikson first presented his ideas.⁹⁶

Reviews of *Identity: Youth and Crisis* acknowledge the book's firm psychoanalytic perspective⁹⁷ and the varying ways Erikson tries to go beyond it.

⁸⁹ Keniston, *supra* note 85, at 257.

⁹⁰ COLES, *supra* note 86; FRIEDMAN, *supra* note 82.

⁹¹ See, e.g., THE ERIKSON READER (Robert Coles ed., 2000) (listing and editing some of the major articles of Erik Erikson).

⁹² See Erikson Institute, History, <http://www.erikson.edu/erikson.asp?file=history> (last visited Nov. 12, 2005).

⁹³ See James E. Côté, *Editor's Note: The New Hope and Promise of Identity Theory and Research*, 1 IDENTITY: AN INT'L J. OF THEORY AND RES. 1, 1 (2001); see also *infra* text accompanying note 108.

⁹⁴ COLES, *supra* note 86, at xix (recognizing in the context of Erik Erikson's work in 1970 that "psychoanalysis is no longer of great interest to large numbers of young people"). Even in the late 1960s, Erikson's views were already considered outmoded. As Kenneth Keniston, Professor of Human Development at the Massachusetts Institute of Technology, stated in his 1968 review of Erikson's IDENTITY: YOUTH AND CRISIS:

[T]o those devoted to other concepts of science, Erikson often seems inexact, elusive, rhetorical, and even mystical. Erikson is a clinician, not a behavioral scientist. And clinical empiricism, which seeks understanding through intensive studies of a few individuals, seems maddeningly 'unscientific' to those committed to a methodology of exact measurement and statistical significance. Erikson deliberately eschews the operational definitions, precise formulations, and testable hypotheses that define most scientific work today. Collecting 20 years of writing on the subject of identity, he provides no definition of the concept, preferring illustration, the case histories of gifted men, example and allusion.

Keniston, *supra* note 85, at 258.

⁹⁵ See Erikson Institute, History, *supra* note 92.

⁹⁶ See Erikson Institute, Erikson Bio, <http://www.erikson.edu/erikson.asp?file=eriksonbio> (last visited Nov. 12, 2005).

⁹⁷ See, e.g., Keniston, *supra* note 85, at 257. For discussions of the extent to which American criminal law is embedded in a psychoanalytic framework, see generally Deborah W. Denno, *Crime*

In general, Erikson is considered “steeped in the classical tradition of Freud”⁹⁸ and, similarly, “very much a part of the psychoanalytic tradition” even though he “is in many respects highly critical of certain of Freud’s basic assumptions.”⁹⁹ As one viewer put it more directly, “Erik Erikson’s reputation as a psychoanalyst who went beyond Freud without having to reject the father figure is solidly established.”¹⁰⁰

In addition to the datedness of psychoanalytic theory in a legal context,¹⁰¹ however, there are other factors that make *Identity: Youth and Crisis* a questionable source for the *Roper* opinion. According to one reviewer, for example, the book provided “no advance in psychological thought—the concept of identity remains as slippery as it always was—and no enlightenment on contemporary issues of the day.”¹⁰² Another reviewer noted that “Erikson deliberately eschews the operational definitions, precise formulations, and testable hypotheses that define most scientific work today . . . on the subject of identity, he provides no definition of the concept.”¹⁰³ Likewise, “as a social commentator and as a psychologist,” Erikson registers “concern with the important issues” but “fails in helping us to deal with them.”¹⁰⁴ The *Roper* Court correctly cites Erikson for the premise that adolescents’ personality traits are transitory; yet, Erikson’s emphasis on the continuing development of identity even into adulthood is seemingly inconsistent with the *Roper* Court’s position. Acknowledging “[t]he reality that juveniles still struggle to define their identity,”¹⁰⁵ the *Roper* Court later quotes Steinberg & Scott’s observation that “most” teenagers’ impetuous behaviors “are fleeting; they cease with maturity as individual identity becomes settled.”¹⁰⁶

and Consciousness: Science and Involuntary Acts, 87 MINN. L. REV. 269 (2002); Deborah W. Denno, *Criminal Law in a Post-Freudian World*, 2005 U. ILL. L. REV. 602.

⁹⁸ Nisbet, *supra* note 80.

⁹⁹ Keniston, *supra* note 85, at 258.

¹⁰⁰ Jahoda, *supra* note 85, at 192.

¹⁰¹ See generally Denno, *Crime and Consciousness: Science and Involuntary Acts*, *supra* note 97 (questioning two of criminal law’s traditional dichotomies, conscious versus unconscious thought processes, and voluntary versus involuntary acts); Denno, *Criminal Law in a Post-Freudian World*, *supra* note 97 (arguing that the degree to which Freudian psychoanalytic theory has impacted the modern criminal law is troubling).

¹⁰² Jahoda, *supra* note 85, at 192.

¹⁰³ Keniston, *supra* note 85, at 258.

¹⁰⁴ Jahoda, *supra* note 85, at 193.

¹⁰⁵ *Roper*, 543 U.S. at 570.

¹⁰⁶ *Id.* (quoting Steinberg & Scott, *supra* note 73, at 1014); see also James E. Marcia, *Identity and Psychological Development in Adulthood*, 2 IDENTITY: AN INT’L J. OF THEORY AND RES. 7, 7 (2002) (noting that “Erikson proposed that each psychosocial period, or stage, has both precursors as well as successors, so there is an identity issue at each life cycle period following late adolescence, in addition to the main issues of those periods”).

The amorphous nature of the identity debate invites these kinds of potential conflicts, some more subtle than others. Even those who academically endorse many of Erikson's views continually disagree with one another. This disagreement is particularly striking when reading articles in *Identity*, which originated from discussions with the Society for Research on Identity Formation.¹⁰⁷ First published in 2001, *Identity* was developed around the identity paradigm and Erik Erikson's work, which are supported and criticized accordingly by the journal's contributors.¹⁰⁸

It appears that the most heated exchanges among modern identity researchers concern the extent to which the researchers remain committed to Erikson's psychoanalytic approach because substantial numbers of them primarily embrace other disciplines or doctrines.¹⁰⁹ Such debate was particularly detectable in a 2005 special issue of *Identity* that focused on a series of articles exploring and questioning the applicability of Erikson's and other identity theorists' paradigms in light of modern developments in psychology and the social sciences.¹¹⁰ Regardless of the journal contributors' perspectives, the topic itself indicated the extent to which Erikson's theories were doubted. As *Identity*'s editor for the past four years noted, in reading Erikson's work "[t]here is much wisdom to be found; there is much ambiguity; there is much to take issue with; and there are a multitude of ways to interpret the intended meaning of key passages."¹¹¹

Nonetheless, the *Roper* Court relies on Erikson's theories of identity, either directly or indirectly (it is not clear), to conclude that identity transition for juveniles justifies treating them separately from adults.¹¹² In the next passage from the opinion, following the discussion of Erikson, the Court uses *Thompson v. Oklahoma*¹¹³ to further bolster its conclusions: "These differences [between juveniles and adults] render suspect any conclusion that a juvenile falls among the worst offenders. . . . [Juveniles'] irresponsible conduct is not as morally reprehensible as that of an adult."¹¹⁴

¹⁰⁷ Côté, *supra* note 93, at 1.

¹⁰⁸ *Id.* at 5.

¹⁰⁹ See generally, Alan S. Waterman, *Finding Someone To Be: Studies on the Role of Intrinsic Motivation in Identity Formation*, 4 *IDENTITY: AN INT'L J. OF THEORY AND RES.* 209, 210 (2004) (noting that some "identity status researchers have moved to distance themselves to varying degrees from the psychoanalytic framework [of Erikson]"); James E. Côté, *Editor's Introduction*, 5 *IDENTITY: AN INT'L J. OF THEORY AND RES.* 95, 95–96 (2005).

¹¹⁰ Côté, *supra* note 109, at 95–96 (introducing a special issue of *IDENTITY: AN INT'L J. OF THEORY AND RES.* on the postmodern critique of developmental perspectives).

¹¹¹ James E. Côté, *Commentary on "Feminist Perspectives on Erikson's Theory: Their Relevance for Contemporary Identity Development Research,"* 2 *IDENTITY: AN INT'L J. OF THEORY AND RES.* 277, 277 (2002).

¹¹² See *Roper*, 543 U.S. at 570.

¹¹³ 487 U.S. 815 (1987).

¹¹⁴ *Roper*, 543 U.S. at 570 (quoting *Thompson*, 487 U.S. at 835).

In terms of continuity among the Court's opinions, the *Roper* Court wisely chose this passage from *Thompson* because *Thompson* in turn mentions a wide range of sources, starting with two citations to two different Erikson books: *Childhood and Society*, which was published in 1985, and *Identity: Youth and Crisis*.¹¹⁵ The remaining references are books and articles on adolescence.¹¹⁶ While the *Thompson* Court does not explain why it cites to Erikson's books, the *Thompson* Court's references are so vast and varied that the Erikson books do not assume the level of impact that they do in *Roper*. Again, it is the utter scarcity of social science support in *Roper*, apart from the Court's generic citations to *amici*, that puts so much attention on the handful of references the *Roper* Court appears to highlight. Further, even if the *Roper* Court wanted to continue to cite to Erikson, *Roper* would gain more credibility if the Court acknowledged Erikson's limitations and referenced more of his work.

In the *Roper* Court's passageway, following its cite to Erikson, the Court references as support Justice Brennan's dissent in *Stanford v. Kentucky*.¹¹⁷ "[Juveniles'] own vulnerability and comparative lack of control over their immediate surroundings mean juveniles have a greater claim than adults to be forgiven for their failing to escape negative influences in their whole environment."¹¹⁸ While it is commendable and expected that the *Roper* Court would want to cite a wide range of cases, particularly *Stanford*, this kind of authority again accentuates the dearth of modern social science in *Roper*. *Stanford* merely recycles the same types of case law and citations that have been offered previously and discussed in this Article.¹¹⁹ In other words, *Roper* adds few new social science insights with its citations to legal precedent that substitute as support for scientific conceptions.

¹¹⁵ The material in *Thompson* that the *Roper* Court quotes is supported by *Thompson*, 487 U.S. at 835 n.43. Footnote 43 in turn cites to the following sources, parentheticals excluded and reprinted exactly how the *Thompson* Court cites the materials: E. Erikson, *Childhood and Society* 261–263 (1985); E. Erikson, *Identity: Youth and Crisis* 128–135 (1968); Gordon, *The Tattered Cloak of Immortality*, in *Adolescence and Death* 16, 27 (C. Corr & J. McNeil eds. 1986); Kastenbaum, *Time and Death in Adolescence*, in *The Meaning of Death* 99, 104 (H. Feifel ed. 1959); Kohlberg, *The Development of Children's Orientations Toward a Moral Order*, 6 *Vita Humana* 11, 30 (1963); Miller, *Adolescent Suicide: Etiology and Treatment*, 9 *Adolescent Psychiatry* 327, 329 (S. Feinstein, J. Looney, A. Schwartzberg, & A. Sorosky eds. 1981); V. Streib, *Death Penalty for Juveniles* at 3–20, 184–189 (1987) (The Streib cite is referenced as a "supra" in footnote 43 but is provided in full for the purposes of this footnote.).

¹¹⁶ See sources cited *supra* note 115.

¹¹⁷ 492 U.S. 361 (1989).

¹¹⁸ *Roper*, 543 U.S. at 570 (citing *Stanford*, 492 U.S. at 395 (Brennan, J., dissenting)).

¹¹⁹ *Stanford*, 492 U.S. at 395 (citing *Thompson*, 487 U.S. at 835; TWENTIETH CENTURY FUND TASK FORCE ON SENTENCING POLICY TOWARD YOUNG OFFENDERS, *CONFRONTING YOUTH CRIME* 7 (1978); *Eddings v. Oklahoma*, 455 U.S. 104, 115 (1982); *Bellotti v. Baird*, 443 U.S. 622, 635 (1979); Brief of the American Society for Adolescent Psychiatry et al. as Amici Curiae in Support of Petitioner, *Thompson*, 487 U.S. 815 (No. 86-6169) (reviewing scientific evidence and social scientific studies); G. MANASTER, *ADOLESCENT DEVELOPMENT AND THE LIFE TASKS* (1977)).

Preferably, the Court would reference both case law and modern social science but that seems not to be the situation. Indeed, the *Roper* Court ends its discussion of the three differences between adults and juveniles with a wrap-up paragraph that has little by way of citation, but emphasizes what the Court considers to be the primary differences. “From a moral standpoint it would be misguided to equate the failings of a minor with those of an adult, for a greater possibility exists that a minor’s character deficiencies will be reformed.”¹²⁰

In general, then, *Roper*’s section on identity is both enlightening and flawed. It is enlightening because the Court recognizes that identity is an appropriately critical factor separating adults from juveniles for the purposes of punishment. Yet, the section is flawed in terms of the Court’s shallow effort to provide support for its reasoning by citing one psychoanalytically oriented, decades-old book that some considered already dated when it was published.

Of course, it could be argued that the Court could be criticized for any of the research it cites and that the Court would be better off providing no references whatsoever. Yet, as this Article has stated, mere references alone are not the *Roper* Court’s problem. *Roper* fails in both quantity and quality of citations because the shortage of the Court’s references render the few citations it does provide more critical. Further, the Court shows the potential to offer sound support by way of its reference to Steinberg and Scott’s article, one of a series of modern publications that has been highly regarded and appears relevant to *Roper*’s concerns. Lastly, if the Court acknowledged the strengths and weaknesses of the research it used, its arguments would not only be more credible but also more acceptable as precedent.

It is beyond the bounds of this Article to investigate why the Court shows varying levels of erudition in its application of social science research. At the

¹²⁰ *Roper*, 543 U.S. at 570. According to the *Roper* Court:

The reality that juveniles still struggle to define their identity means it is less supportable to conclude that even a heinous crime committed by a juvenile is evidence of irretrievably depraved character. From a moral standpoint it would be misguided to equate the failings of a minor with those of an adult, for a greater possibility exists that a minor’s character deficiencies will be reformed. Indeed, “[t]he relevance of youth as a mitigating factor derives from the fact that the signature qualities of youth are transient; as individuals mature, the impetuosity and recklessness that may dominate in younger years can subside.” *Johnson*, *supra* at 368; see also Steinberg & Scott [*supra* note 73, at] 1014 (“For most teens, [risky or antisocial] behaviors are fleeting; they cease with maturity as individual identity becomes settled. Only a relatively small proportion of adolescents who experiment in risky or illegal activities develop entrenched patterns of problem behavior that persist into adulthood.”).

Id. (internal parallel citations omitted). Notably, *Johnson v. Texas*, 509 U.S. 350, 368 (1993), does not cite any outside source for the quote above. In contrast, Steinberg and Scott cite modern and highly reputable sources that bolster their arguments in light of contemporary thinking. See Steinberg & Scott, *supra* note 73, at 1014 (citing David Farrington, *Age and Crime*, in 7 CRIME AND JUSTICE: AN ANNUAL REVIEW OF RESEARCH 189, 189–217 (Michael Tonry & Norval Morris eds., 1986); Terrie E. Moffitt, *Adolescence-Limited and Life-Course-Persistent Antisocial Behavior: A Developmental Taxonomy*, 100 PSYCHOL. REV. 674, 674–701 (1993)).

same time, because of rapid advances in the social sciences, it has become increasingly noticeable when the Court does not treat the research well, either by neglect or misuse.

Over the years, the Court has shown skill at incorporating and judging social science research in ways that allow the Court's opinions to become firmer as precedent.¹²¹ These kinds of progressive opinions stand as social science models so that analyses of interdisciplinary research are on par in sophistication with analyses of case law.

V. CONCLUSION

This Article briefly discussed some of the strengths and weaknesses of *Roper v. Simmons* in terms of the Court's threefold differences between adults and juveniles that justify the prohibition against execution for juveniles under age eighteen. The analysis concluded that although *Roper* was correct in its result, the Court's use of social science research was, at times, limited and flawed. Even when the Court attempts to examine research that is widely accepted and highly regarded, the Court does not always appear to have the tools necessary to provide a sufficiently firm social sciences foundation.

It is unclear how effective or wide-ranging *Roper* will be as precedent. Regardless, the opinion's strength derives more from its traditional legal analysis than from its application of relevant social science research, an outcome the Court may not have fully expected.

¹²¹ See generally Scott Brewer, *Scientific Expert Testimony and Intellectual Due Process*, 107 YALE L.J. 1535 (1998) (providing examples of cases with sound social science research).