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Adolescent Decision Making: Reduced Culpability in the Criminal Justice System and Recognition of Capability in Other Legal Contexts

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ADOLESCENT DECISION MAKING: REDUCED CULPABILITY IN THE CRIMINAL JUSTICE SYSTEM AND RECOGNITION OF CAPABILITY IN OTHER LEGAL CONTEXTS

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INTRODUCTION

Adolescence is a confusing and awkward period between childhood and adulthood.[1] Just as adolescence is characterized by irregularity and transition, the rules governing adolescent autonomy and responsibility are likewise inconsistent, varying between different legal realms.[2] Youth advocates often fight for adolescents to be held to a reduced standard of responsibility within the criminal justice system, but for increased autonomy in medical decision making.[3] Others believe the exact opposite: that adolescents should be held to the same standards as adults within the criminal justice system, but have little or no autonomy in medical decision making.[4]

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1. Ronald E. Dahl, *Adolescent Brain Development: A Period of Vulnerabilities and Opportunities*, 1021 ANNALS N.Y. ACAD. SCI. 1, 9–10 (2004).

2. Kimberly M. Mutcherson, *Minor Discrepancies: Forging a Common Understanding of Adolescent Competence in Healthcare Decision-Making and Criminal Responsibility*, 58 JUV. & FAM. CT. J. 1, 1 (2007).

3. *Id.* at 1–2.

4. *Id.* (describing the range of views regarding how much decision making power an adolescent should have); *see also* Kimberly M. Mutcherson, *Whose Body is it Anyway? An Updated Model of Healthcare Decision-Making Rights for Adolescents*, 14 CORNELL J.L. & PUB. POL'Y 251, 252–53 (2005) (explaining that healthcare laws depict protection of young people from themselves by leaving healthcare decision making rights to parents).

This comment proposes that adolescents receive mitigated treatment in the criminal justice system, but be given more autonomy when making medical decisions, specifically end-of-life decisions. This proposal is supported by recent research of experts in the fields of neuroscience and developmental psychology.[5] Recent research suggests that adolescents demonstrate varying decision making capacities depending on the context of the situation.[6] Researchers believe that youth attain mature cognitive skills by middle adolescence.[7] Adolescents can employ these cognitive skills to make important decisions under structured and controlled circumstances.[8] On the other hand, research also indicates that adolescents are psychosocially immature, making it difficult for them to perceive future consequences and increasing their susceptibility to risk-taking and impulsivity.[9] When forced to make quick decisions, psychosocial immaturity can lead to bad decision making.[10] This is especially relevant in the criminal context when most decisions to commit crime happen quickly.[11]

This comment will analyze the deficiencies and capabilities of adolescent decision making in two significant legal contexts: criminal responsibility and end-of-life decision making.[12] The circumstances surrounding decision making in the criminal context breed impulsive and risky decision making.[13] In contrast, the circumstances surrounding end-of-life decision making are more structured and informative; thus, the tendency for adolescent impulsivity is not as much of a concern.[14] Accordingly, because the circumstances between the two types of decisions vary, the law should credit adolescents with greater respect for their decision making capacities in the medical decision making context than in the criminal context.[15]

Part I provides background on current neuroscience and psychology studies and discusses how adolescent brain development relates to risk-taking and impulsivity.[16] Part II discusses the legal implications of impulsivity and rationality for adolescents within the criminal justice

5. *See infra* Part I.A–B.
6. *See infra* Part I.A–B.
7. *See infra* notes 51–64 and accompanying text.
8. *See infra* notes 209–14 and accompanying text.
9. *See infra* notes 58–61 and accompanying text.
10. *See infra* notes 58–62 and accompanying text.
11. *See infra* Part III.
12. *See infra* Parts II–III.
13. *See infra* Part III.
14. *See infra* Part III.
15. *See infra* Part III.
16. *See infra* Part I.

system and in the end-of-life decision making contexts.[17] Part III builds on the work of other scholars who have pointed out that mitigated criminal responsibility and increased health care decision making for adolescents can be rationalized by looking at the very different factual and emotional contexts and the different societal interests involved in these types of decisions by specifically focusing on end-of-life decision making.[18]

I. EFFECT OF BRAIN DEVELOPMENT ON ADOLESCENT DECISION MAKING

A. Current Status of Adolescent Neuroscience and Psychology Studies

Adolescence is the period from ages twelve through seventeen, when a young adult matures into adulthood.[19] Aside from physical maturation during adolescence,[20] the brain also matures.[21] During this time, the adolescent brain undergoes dramatic changes.[22] Professor Laurence Steinberg, a well-known researcher on adolescent cognitive development, proposes that these changes occur in two systems: the socioemotional system and the cognitive control system.[23] According to Steinberg, the socioemotional system "is localized in limbic and paralimbic areas of the brain . . . ."[24] The socioemotional system is responsible for the processing of emotions and balancing of reward versus punishment.[25] The cognitive control system is located in the prefrontal cortex, with further localization in the lateral prefrontal cortex.[26] The cognitive control system has been attributed to higher executive functioning activities such as impulse control, future orientation and deliberation.[27] The interplay between the two systems influences adolescent risk-taking.[28]

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17. *See infra* Part II.

18. *See infra* Part III.

19. Charles Geier & Beatriz Luna, *The Maturation of Incentive Processing and Cognitive Control*, 93 PHARMACOLOGY, BIOCHEMISTRY & BEHAV. 212, 212 (2009).

20. *See* B.J. Casey, Sarah Getz & Adriana Galvan, *The Adolescent Brain*, 28 DEV. REV. 62, 70 (2008) (defining adolescence as a transitional time marked by puberty).

21. Geier & Luna, *supra* note 19, at 215.

22. Laurence Steinberg, *Adolescent Development and Juvenile Justice*, 5 ANN. REV. CLINICAL PSYCHOL. 47, 54 (2009).

23. *Id.*

24. *Id.*

25. *Id.*

26. *Id.*

27. *Id.*

28. Praveen Kambam & Christopher Thompson, *The Development of Decision-Making Capacities in Children and Adolescents: Psychological and Neurological Perspectives and Their Implications for Juvenile Defendants*, 27 BEHAV. SCI. & L. 173, 176 (2009); Laurence Steinberg et al., *Age Differences in Sensation Seeking and Impulsivity as Indexed by Behavior and Self-Report: Evidence for a Dual Systems Model*, 44 DEV. PSYCHOL. 1764, 1764 (2008).

Although everyone is prone to reward seeking, this tendency is especially important for adolescents. [29] This is because adolescents experience increases in reward seeking, which translates into vulnerability for risky behavior.[30] Puberty causes a restructuring of dopamine levels within the brain and "dopamingeric activity in the prefrontal cortex increases significantly in early adolescence."[31] Dopamine is "a key monoamine neurotransmitter modulating reward circuitry" and "has been associated with multiple aspects of reward processing . . ."[32] Dopamine influences reward seeking, strongly motivating individuals to seek rewards or engage in rewarding behavior.[33] By adulthood, cognitive capacity for impulse control fully develops.[34] This self-regulation, in conjunction with memory and experience, makes an adult better equipped to resist impulses towards reward seeking.[35]

The adolescent brain seems particularly sensitive to increases in dopamine.[36] For adolescents the increase of dopamine occurs before the control systems in the prefrontal cortex mature.[37] Furthermore, adolescent youth and lack of experience, makes this group less aware of risks.[38] "Because dopamine plays a critical role in the brain's reward circuitry, the increase, reduction, and redistribution of dopamine receptor concentration during puberty, especially in projections from the limbic system to the prefrontal area, is likely to increase reward seeking behavior and accordingly, sensation seeking."[39] Increased reward seeking occurs prior to the full maturation of the cognitive control system. [40] It also occurs before

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29. Kambam & Thompson, *supra* note 28, at 176.

30. *Id.*

31. Steinberg, *supra* note 22, at 54.

32. Geier & Luna, *supra* note 19, at 216.

33. *See* Steinberg, *supra* note 22, at 54 (describing that "dopamine plays a critical role in the brain's reward circuitry . . . likely to increase reward-seeking behavior and, accordingly, sensation seeking.").

34. Laurence Steinberg, *A Social Neuroscience Perspective on Adolescent Risk-Taking*, 28 DEV. REV. 78, 99 (2008).

35. *See id.* (explaining that an adult with a fully developed cognitive control network is better able to resist emotional arousal). *See also* Geier and Luna, *supra* note 19, at 217 (pointing out that higher-level cognitive skills can be attributed to improvement in working memory and that deficiencies "in working memory would be predicted to limit adolescents' ability" in reward processing). *See also* Abigail A. Baird & Jonathan A. Fugelsang, *The Emergence of Consequential Thought: Evidence from Neuroscience*, 359 PHIL. TRANSACTIONS ROYAL SOC'Y LONDON B. 1797, 1800 (describing that adolescents' reasoning abilities increase with experience, working memory and the ability to draw from past experience to make broader generalizations).

36. Kambam & Thompson, *supra* note 28, at 176–77.

37. Casey, Getz & Galvan, *supra* note 20, at 69–70.

38. Elizabeth S. Scott & Thomas Grisso, *The Evolution of Adolescence: A Developmental Perspective on Juvenile Justice Reform*, 88 J. CRIM. L. & CRIMINOLOGY 137, 163 (1997).

39. Steinberg, *supra* note 22, at 54; Steinberg et al., *supra* note 28, at 1765.

40. Kambam & Thompson, *supra* note 28, at 176; Steinberg et al., *supra* note 28, at 1764.

connections between the limbic system and prefrontal cortex are forged.[41] The simultaneous increase in reward seeking, as well as the developmental disparity between the cognitive control system and the limbic and paralimbic regions makes adolescents susceptible to greater risk-taking than adults.[42]

While reward seeking becomes more prevalent during adolescence, the brain also undergoes processes that strengthen the ability to self-regulate and ignore reward seeking impulses.[43] These processes are known as synaptic pruning and myelination and increase connectivity between the limbic and paralimbic regions and the prefrontal cortex of the cognitive control system.[44] Synaptic pruning removes weak or unused synapses and "promotes enhanced information processing capacity, speed and overall efficiency and supports complex computations within regional circuitry."[45] Myelination is the process of insulating brain cell axons with myelin,[46] which "enhances the efficiency of information processing by increasing the speed and fidelity of distal neuronal transmission . . . critical for the emergence of complex cognitive behavior."[47] Synaptic pruning and myelination are important because they enhance adolescent brain processing and cognitive control.[48] Synaptic pruning declines by age sixteen,[49] but the process of myelination continues into adulthood.[50] These processes improve the cognitive control system by linking brain circuitry.[51] Professor Steinberg notes:

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41. Kambam & Thompson, *supra* note 28, at 177; Steinberg et al., *supra* note 28, at 1764.

42. Kambam & Thompson, *supra* note 28, at 176; Steinberg et al., *supra* note 28, at 1764.

43. Steinberg et al., *supra* note 28, at 1765.

44. Geier & Luna, *supra* note 19, at 215–16.

45. *Id.* at 216.

46. Brief for Am. Psychological Ass'n & Mo. Psychological Ass'n as Amici Curiae Supporting Respondent, Roper v. Simmons, 543 U.S. 551 (2005) (No. 03-633), U.S. S. Ct. Briefs LEXIS 437, at *26.

47. Geier & Luna, *supra* note 19, at 216.

48. *See id.* at 215–16 (noting that "[t]hese processes enhance neuronal processing and support mature cognitive control of behavior.").

49. Steinberg, *supra* note 22, at 54–55.

50. *Id.* at 55. *See also* Geier & Luna, *supra* note 19, at 216 (describing that an "under-myelinated brain would be expected to undermine adolescents' ability to have efficient and rapid access to incentive signals as well as limit how rapidly these signals may be integrated and used to inform decision-making and guide behavior.").

51. Laurence Steinberg, *Risk Taking in Adolescence: New Perspectives from Brain and Behavioral Science*, 16 CURRENT DIRECTIONS PSYCHOL. SCI. 55, 57 (2007). *See also* Casey, Getz & Galvan, *supra* note 20, at 66 (noting that "regions subserving primary functions, such as motor and sensory systems, mature earliest; higher-order association areas, which integrate these primary functions, mature later"); Kambam & Thompson, *supra* note 28, at 177 ("This is consistent with findings of age-related structural and functional changes in the prefrontal cortex and improved coordination of emotion and cognition resulting from improved neural connectivity.").

> Because of synaptic pruning and the continued myelination of prefrontal brain regions, resulting in improved connectivity among cortical areas and between cortical and subcortical areas, there are improvements over the course of adolescence in many aspects of executive function, such as response inhibition, planning, weighing risks and rewards, and the simultaneous consideration of multiple sources of information.[52]

Thus, synaptic pruning and myelination are important because for decisions requiring cognitive skills, "and where improvement in adolescence is likely due to synaptic pruning of the frontal lobes, adolescents evince adult levels of competence by age 16."[53]

B. Adolescent Tendency for Risk-Taking and Impulsive Decision Making

"Decision making" is a process that does not have a single definition. It continues to be the subject of research and is not fully understood. For purposes of this comment, I rely on the model set forth by Laurence Steinberg and Elizabeth Scott. According to their research, decision making is influenced by a person's "maturity of judgment" which can be broken down into two facets: cognitive capacity and psychosocial factors.[54] Cognitive capacity "shapes the process of decision making,"[55] and includes: "understanding (i.e., the ability to comprehend information relevant to the decision) and reasoning (i.e., the ability to use this information logically to make a choice)."[56] Furthermore, cognitive capacity involves the processing of information, deliberative thinking, and logical reasoning.[57]

On the other hand, psychosocial factors influence the actual outcome of the decision.[58] Psychosocial factors include acceptance by peers, impulsivity, preference toward short term outcomes over long term

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52. Steinberg, *supra* note 22, at 54.

53. *Id.* at 55.

54. *See* Elizabeth Cauffman & Laurence Steinberg, *(Im)maturity of Judgment in Adolescence: Why Adolescents May Be Less Culpable than Adults*, 18 BEHAV. SCI. & L. 741, 743 (2000) (stating that "cognitive and psychosocial differences are assumed to result in differences in 'maturity of judgment,' a term we use here to refer to the complexity and sophistication of the process of individual decision-making as it is affected by a range of cognitive, emotional, and social factors.").

55. Laurence Steinberg & Elizabeth S. Scott, *Less Guilty by Reason of Adolescence: Developmental Immaturity, Diminished Responsibility, and the Juvenile Death Penalty*, 58 AM. PSYCHOLOGIST 1009, 1012 (2003).

56. Steinberg, *supra* note 22, at 55.

57. *Id.*

58. Steinberg & Scott, *supra* note 55, at 1012.

outcomes and underestimating risks.[59] Often these psychosocial factors affect an adolescent's perspective on a situation, or how he or she may perceive a situation. [60] Consequently, this affects the adolescent's decision making process.[61] Because decision making is affected by these factors, adolescents are often less likely to think about alternative decisions and curtail impulsivity.[62] As noted earlier, an adolescent's cognitive skills are fairly mature by age sixteen,[63] however, because adolescents are more prone to psychosocial immaturity, they tend to be less mature than adults when it comes to their judgment and decision making capacity.[64]

The following simple example demonstrates how cognitive capacity and psychosocial factors affect the decision making process:[65] Imagine that a teenager is at the mall shopping with some of her friends. She wants to buy a new pair of sunglasses, but does not have the money. One friend suggests that she steal the glasses. As her friends begin to leave the store, she impulsively puts the sunglasses in her purse. She exits the store and the alarm goes off. Because adolescent cognitive skills mature before an adolescent becomes psychosocially mature, this teenager had the cognitive skills to know that stealing is against the law. She also had the cognitive capacity to know that it is wrong. However, at the moment she puts the sunglasses in her purse, she is not thinking about the future consequences of her actions. She does not think about going to jail or appearing in front of a judge. She is only thinking about the immediate reward of having the glasses she cannot afford. She is thinking about impressing her friends. She is not considering five minutes from now when she will be sitting in a police car waiting for her parents to pick her up. While she may have the cognitive capacity to make the right decision, her judgment is impaired by the factors of psychosocial immaturity.

The fact that cognitive decision making capacity matures by sixteen reveals why many adolescents have adult-level cognitive decision making

59. Steinberg, *supra* note 22, at 56. *See also* Kambam & Thompson, *supra* note 28, at 175 (describing that psychosocial factors can negatively impact an adolescent's capacity to make decisions).

60. *See* Steinberg, *supra* note 22, at 56 (noting that different psychosocial factors affect the adolescent thought process).

61. *Id.*

62. Brief for Am. Psychological Ass'n & Mo. Psychological Ass'n as Amici Curiae Supporting Respondent, *supra* note 46, at *20.

63. *See supra* notes 49–53 and accompanying text.

64. Steinberg, *supra* note 22, at 56; Steinberg & Scott, *supra* note 55, at 1012 (describing that psychosocial immaturity impairs adolescent decision making capacity). *See also* Cauffman & Steinberg, *supra* note 54, at 743 (noting that social and emotional factors impact decision making outcomes).

65. This hypothetical is modeled after an example presented by Scott & Grisso, *supra* note 38, at 166.

capacity.[66] Contrarily, decision making that requires the interaction of both the cognitive and the limbic systems, does not fully mature until the process of myelination (the connecting of all regions of the brain) is complete.[67] Steinberg asserts that "[r]ecent studies of the neural underpinnings of resistance to peer influence in adolescence indicate that improvements in this capacity may be linked to the development of greater connectivity between cortical and subcortical regions, which likely facilitates the better coordination of affect and cognition."[68] Therefore, because cognitive capacity develops before an adolescent becomes psychosocially mature, "adolescents may be less able to deploy their cognitive capacities as effectively as adults in exercising judgment in their everyday lives when decisions are influenced by emotional and social variables."[69]

Both impulsivity and sensation seeking are psychosocial factors that can affect risk-taking.[70] Impulsivity refers to a low ability to self-regulate and "deficiencies in response inhibition,"[71] whereas sensation seeking is defined as a willingness to take risks and participate in exhilarating experiences.[72] Adolescent impulsivity is attributed to the developing prefrontal cortex.[73] A recent research study focused on adolescent impulsivity found that impulsivity declines throughout adolescence.[74] The study concluded that:

> [t]he first half of the adolescent decade - between 10 and 15 - appears to be a time of growing vulnerability to risky behavior, as this period is characterized by relatively higher sensation seeking in the context of relatively lower impulse

66. *See* Steinberg, *supra* note 22, at 56 (emphasizing that adolescents' capacity for making cognitive reasoning and logic based decisions does not mean they are similar to adults when it comes to decision making that implicates psychosocial factors).

67. *Id.* at 54–55 (noting that this difference in development causes many problems in knowing when an adolescent is capable of decision making).

68. *Id.* at 56.

69. *Id.*

70. Steinberg et al., *supra* note 28, at 1765.

71. *Id.*

72. *Id.*

73. Casey, Getz & Galvan, *supra* note 20, at 72. The authors note that an adolescent's impulsivity gradually declines as he or she matures into adulthood. *Id.*

74. *See* Steinberg et al., *supra* note 28, at 1774. This study was conducted in five different states with participants between the ages of ten through thirty. *Id.* at 1766. Researchers administered The Tower of London task to evaluate impulsivity among the group. *Id.* at 1768. The Tower of London task is administered by providing the participant with stacks of colored balls and empty rods. *Id.* The participant is then shown a picture that illustrates a specific arrangement of colored balls. *Id.* The participant is asked to match their materials to the illustration in the least amount of possible moves. *Id.* Researchers are able to evaluate impulse control because the task involves a certain amount of thinking before completion, because extra moves must be used if a mistake is made. *Id.*

> control; heightened sensation seeking impels adolescents toward risky activity, and immature self regulatory capabilities do not restrain this impulse.[75]

This study explicates that adolescents have a tendency towards impulsivity, and that the under-developed regions of the brain make them vulnerable to risky behavior.

II. LEGAL IMPLICATIONS OF ADOLESCENT RISK-TAKING

The idea that adolescent decision making capacity is influenced by both psychology and neuroscience constructs leads to debate on the amount of autonomy adolescents should be given in different legal contexts.[76] Certainly, many different views exist on how adolescents should be treated within the criminal justice system and the medical decision making context.[77] Some advocates argue adolescents deserve lesser punishment in the criminal justice system because adolescents are less mature than adults.[78] Others advocate that adolescents who commit adult crimes should receive adult-like punishment.[79] Regarding medical decision making, many argue that because adolescents' decision making is deficient compared to that of adults, adolescents should not be given autonomy in medical decision making.[80] Others advocate that adolescents can make rational decisions in the medical arena and should be afforded that autonomy.[81] While there are strong views on all sides, many views overlap, especially

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75. *Id.* at 1776.

76. *See infra* Part II.A–B.

77. *See infra* Part II.A–C.

78. *See infra* Part II.A–B.

79. *See* Brief of the States of Alabama, Delaware, Oklahoma, Texas, Utah, and Virginia as Amici Curiae Supporting Petitioner, Roper v. Simmons, 543 U.S. 551 (2005) (No. 03-633), U.S. S. Ct. Briefs LEXIS 335. The states argue that 16 and 17-year-olds who commit heinous crimes should be placed in adult court and subject to the death penalty. *Id.* at *3–4. The states advocate this by providing examples of heinous crimes committed by teenagers in Alabama and argue that these crimes deserve the death penalty. *Id.* The brief elaborates "[t]here simply is no basis to conclude that 16- and 17-year-olds are categorically incapable of committing heinous (and meticulously planned) murders, and there is no justification for categorically exempting them from the death penalty." *Id.* at *4. *See also* Roper v. Simmons, 543 U.S. 551, 618 (2005) (Scalia, J., dissenting) (disagreeing with the Court's decision and noting that "the studies cited by the Court offer scant support for a categorical prohibition of the death penalty for murderers under 18."); Brief of the Nat'l Dist. Attorneys Ass'n as Amicus Curiae Supporting Respondents, Graham v. Florida, 130 S. Ct. 2011 (2010) (No. 08-7412, 08-7621), 2009 U.S. S. Ct. Briefs LEXIS 952, at *1 (arguing that juvenile life in prison without the possibility of parole does not violate the Eighth amendment because some juveniles are hardened criminals deserving of this sentence).

80. *See infra* notes 144–150 and accompanying text.

81. *See infra* notes 176–182 and accompanying text.

those of juvenile advocates who argue for lessened criminal responsibility, but greater autonomy in other legal contexts.

A. Mitigated Adolescent Criminal Culpability in the Most Recent Supreme Court Decisions

The notion that juveniles deserve different treatment than adults in the criminal justice system has existed for a little over a century.[82] Prior to the creation of a separate juvenile justice system, youth who committed crimes were treated much the same as adults.[83] Early juvenile courts were the product of the 19th century "child-saving movement."[84] Proponents of this movement believed that rehabilitating youth would benefit not only the youth, but also society.[85] As views shifted towards protecting youth, the concept of *parens patriae*, meaning "parent of the country," allowed the state to step in and provide supervision and control over delinquent youth.[86] The separate criminal justice system for juveniles looks out for "the best interests of the child" by focusing on the "protection and treatment of the child and not for punishment."[87]

While the values driving the creation of juvenile courts were primarily rehabilitative, the emphasis on rehabilitation has slowly declined since the late 1970s.[88] The United States experienced an increase in juvenile crime and violence in the late 1970s, and state legislatures responded with tougher laws against juveniles.[89] These laws marked "[t]he movement away from rehabilitation and treatment and toward retribution and just desserts . . . ."[90] Child advocates fought for a separate system in the late 19th century focusing on rehabilitation and compassion for children. Today's child advocates share these same ideals and still fight for mitigated criminal responsibility. Recently, new research in neuroscience and psychology has begun influencing the Supreme Court's treatment of adolescents.

In 2005, advocates for reduced juvenile culpability received a victory in *Roper v. Simmons*,[91] when the Supreme Court announced that it is unconstitutional for juveniles to receive the death penalty.[92] In its *amicus*

82. RICHARD LAWRENCE & MARIO HESSE, JUVENILE JUSTICE: THE ESSENTIALS 13 (2010).
83. *Id.* at 14.
84. *Id.* at 16.
85. *Id.*
86. *Id.* at 12.
87. *Id.* at 16–17, 20.
88. *Id.* at 21.
89. *Id.*
90. *Id.* at 22.
91. 543 U.S. 551 (2005).
92. *Id.* at 578–79.

brief submitted in support of eliminating the death penalty for juveniles, the American Psychological Association (APA) argued that "[d]evelopmentally immature decision-making, paralleled by immature neurological development, diminishes an adolescent's blameworthiness."[93] The APA relied on a study demonstrating that adolescents performed much worse than adults in their decision making competence and indicated that relative to adults adolescents' were less able to consider alternative decisions.[94] The APA stressed that neuroscience research demonstrates that the frontal lobes controlling executive functioning are the last to develop in the adolescent brain.[95] This is significant because the lack of maturity in the frontal lobes impacts how the adolescent views whether a decision is in his or her best interests.[96]

Sixteen years earlier the Court had previously upheld subjecting juveniles to the death penalty in *Stanford v. Kentucky*.[97] In *Stanford*, the Petitioners argued that "socioscientific" evidence demonstrated that juveniles' cognitive skills are less mature than adults, making deterrence less influential.[98] Nevertheless, the *Stanford* Court ultimately rejected using scientific evidence to eliminate the death penalty for juveniles.[99]

Between *Stanford* and *Roper* the Supreme Court declared that executing the mentally disabled was unconstitutional in *Atkins v. Virginia*.[100] The *Roper* Court, like the *Atkins* Court, compared the national disapproval of the juvenile death penalty to the disapproval of executing mentally disabled individuals.[101] The *Roper* Court observed that many states had already abandoned the juvenile death penalty.[102] Furthermore, new developments in neuroscience and psychology influenced the Court's reasoning that clear differences exist between adolescents and adults.[103]

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93. Brief for Am. Psychological Ass'n & Mo. Psychological Ass'n as Amici Curiae Supporting Respondent, *supra* note 46, at *13.

94. *Id.* at *20–21 (citing Bonnie L. Halpern-Felsher & Elizabeth Cauffman, *Costs and Benefits of a Decision: Decision-Making Competence in Adolescents and Adults*, 22 J. APPLIED DEV. PSYCHOL. 257, 268, 271 (2001)) (referencing a study that demonstrates an adolescent's competence to make mature decisions develops during the later stages of adolescence).

95. *Id.* at *24–25.

96. *Id.* at *24.

97. 492 U.S. 361 (1989).

98. *Id.* at 377–78.

99. *Id.* at 378.

100. 536 U.S. 304, 321 (2002).

101. *See* Roper v. Simmons, 543 U.S. 551, 564 (2005) (noting that the *Atkins* Court revisited the issue of executing the mentally disabled following the decision in *Penry v. Lynaugh*, 492 U.S. 302 (1989)).

102. *Roper*, 543 U.S. at 568.

103. *Id.* at 569 (noting that "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 undeveloped sense of

Focusing on scientific studies, as well as the *amicus* briefs submitted in support of abolishing the juvenile death penalty, the Court held that executing juveniles is cruel and unusual punishment.[104]

In differentiating between adolescents and adults, the Court noted that adolescents are often perceived as immature and irresponsible,[105] susceptible to peer pressure, [106] and have not yet attained the attributes of a fully developed character. [107] "Their own vulnerability and comparative lack of control over their immediate surroundings mean juveniles have a greater claim than adults to be forgiven for failing to escape negative influences."[108] The *Roper* Court further reasoned that the purposes of retribution and deterrence behind the death penalty are not as compelling when applied to juveniles.[109] In its conclusion, the Court remarked that "[t]he differences between juvenile and adult offenders are too marked and well understood to risk allowing a youthful person to receive the death penalty despite insufficient culpability."[110]

Five years after *Roper*, juvenile advocates received another victory in *Graham v. Florida*.[111] In *Graham*, the Supreme Court held that imposing juvenile life sentences without parole for non-homicide crimes is cruel and unusual punishment and therefore violates the Eighth Amendment.[112] The *Graham* Court began with the same analysis put forth in *Roper*, by observing the nation's attitude towards juvenile life sentences without the possibility of parole.[113] Although hesitant to rely completely on the national consensus, the Court noted that six states forbid life sentences without the possibility parole for juvenile offenders.[114] The Court declared, however, that despite the lack of legislation prohibiting this sentencing practice, national disapproval is showcased by only 123 juveniles serving life sentences without the possibility of parole for committing crimes other than homicide.[115]

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responsibility are found in youth more often than in adults and more understandable among the young.'").

104. *Id.* at 568–70.

105. *Id.* at 569.

106. *Id.*

107. *Id.* at 570.

108. *Id.*

109. *Id.* at 571.

110. *Id.* at 572–73.

111. 130 S. Ct. 2011 (2010). The decision was decided by a 6–3 vote, with Justices Scalia, Thomas, and Alito dissenting. *Id.* at 2017. Although similar to the outcome in *Roper*, the *Roper* decision was more contentious with a 5–4 vote. *Roper*, 543 U.S. at 554.

112. *Graham*, 130 S. Ct. at 2034.

113. *Id.* at 2023.

114. *Id.*

115. *Id.* at 2023–24.

Counsel for Graham, in both its brief and oral argument, focused on the scientific studies demonstrating adolescent immaturity and susceptibility to peer pressure.[116] Using these arguments as a foundation, the *Graham* Court looked to the *Roper* Court's reasoning that adolescents typically lack maturity and do not fully understand the consequences of their actions.[117] During oral argument, Chief Judge Roberts conceded that, "[w]e know that juveniles are not the worst of the worst, for the reasons you have articulated, that they are not fully developed, [and] don't have moral sense to the same extent as an adult."[118] The *Graham* Court relied heavily on the *amicus* briefs submitted in support of abolishing juvenile life sentences without the possibility of parole.[119] The Court noted that "developments in psychology and brain science continue to show fundamental differences between juvenile and adult minds."[120] The Court reasoned further that juvenile life sentences without the possibility of parole are unconstitutional because the penological justifications of deterrence and retribution are not met in the case of juvenile offenders.[121] This conclusion was informed by *Roper* and also acknowledged that not only are juveniles less culpable but "'the same characteristics that render juveniles less culpable than adults suggest . . . that juveniles will be less susceptible to deterrence.'"[122]

Roper v. Simmons marked an enormous milestone for mitigating the culpability of juveniles within the criminal justice system.[123] *Roper* is an important decision because it struck down the death penalty for crimes committed by juveniles, but is also noteworthy for its reliance on

116. *See generally* Brief for Petitioner, Graham v. Florida, 130 S. Ct. 2011 (2010) (No. 08-7412), 2009 U.S. S. Ct. Briefs Lexis 549. This argument was premised on the *Roper* Court's findings and first argued that "juveniles possess less maturity and an underdeveloped sense of responsibility, which often results in impetuous and ill-considered actions and decisions. Second, juveniles are more vulnerable and susceptible to negative influences and outside pressures, including peer pressure. Third, the personality and character traits of juveniles are less well-formed and more transitory." *Id.* at *42. Petitioner further argued that juveniles have psychosocial immaturity, are prone to risk-taking, and have difficulty controlling impulses. *Id.* at *58–60. *See also* Transcript of Oral Argument, Graham v. Florida, 130 S. Ct. 2011 (2010) (No. 08-7412), 2009 U.S. Trans. LEXIS 62, at *12 (noting that "adolescents are different").

117. *Graham*, 130 S. Ct. at 2026.

118. Transcript of Oral Argument, *supra* note 116, at *18.

119. *Graham*, 130 S. Ct. at 2026. The Court cited the American Medical Association and American Psychological Association *amicus* briefs submitted in support of the ban on juvenile life sentences without parole. *Id.*

120. *Id.*

121. *Id.* at 2028–30.

122. *Id.* at 2028 (citing *Roper v. Simmons*, 543 U.S. 551, 571 (2005)).

123. Laurence Steinberg et al., *Are Adolescents Less Mature than Adults? Minors' Access to Abortion, the Juvenile Death Penalty, and the Alleged APA "Flip-Flop"*, 64 AM. PSYCHOLOGIST 583, 583 (2009).

psychology and neuroscience studies.[124] The Supreme Court again relied on psychology and neuroscience studies when it declared life sentences without the possibility of parole unconstitutional in *Graham v. Florida*, and similarly recognized the lessened culpability of adolescents.[125] Following *Roper*, commentary debated whether science would inform the Court's future decision making in cases involving adolescents.[126] The Court's decision in *Graham* and continued reliance on adolescent brain development demonstrated that the use of neuroscience in *Roper* was not merely accidental. In the future, support for neuroscience and psychology will most likely continue to influence the Court's reasoning regarding juvenile punishment, and may also begin to affect other areas of juvenile law.[127]

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124. Terry A. Maroney, *The False Promise of Adolescent Brain Science in Juvenile Justice*, 85 NOTRE DAME L. REV. 89, 108 (2009). Although *Roper* was the first time the Supreme Court applied psychological studies to the area of juvenile law, the Court relied on psychology in the landmark decision Brown v. Board of Education, 347 U.S. 483, 494–95 (1953). The *Brown* Court focused on the psychological impact and social stigma that would affect segregated children. *Id.* The Court relied on several psychological studies submitted in support of this assertion. *Id.* at n. 11.

125. *Graham*, 130 S. Ct. at 2026.

126. *See generally* Maroney, *supra* note 124, at 93, 108, 176 (arguing that developmental science will have a minimal impact on juvenile justice).

127. On January 25, 2011, the Superior Court of Pennsylvania heard oral arguments in *Commonwealth v. Brown*. Sadie Gurman, *Lack of Remorse Key Factor in Case; Superior Court Reviewing Decision to Try Boy as Adult in Fatal Shooting*, PITTSBURG POST-GAZETTE, Jan. 26, 2011, at B1. Jordan Brown was eleven when he was automatically charged as an adult in the double homicide of his future stepmother and her unborn child. Commonwealth v. Brown, No. 320 of 2009, CR., slip op. at 2 (Pa. Ct. Com. Pl. Mar. 29, 2010), *available at* http://www.jlc.org/images/uploads/Decision_re_pre-adjudicatory_motion.pdf. Common Pleas Court President Judge Motto denied Jordan Brown's petition for transfer to juvenile court on March 29, 2010. Commonwealth v. Brown, No. 320 of 2009, CR. (Pa. Ct. Com. Pl. Mar. 29, 2010) (order denying petition for transfer). Following a motion to amend this order to allow for an interlocutory appeal to the Superior Court of Pennsylvania, Judge Motto amended the order. Brief for Appellant at 6–7, Commonwealth v. Brown, No. 1159 WDA 2010 (Pa. Super. Ct.), *available at* http://www.jlc.org/images/uploads/Decision_re_pre-adjudicatory_motion.pdf. Surprisingly, the interlocutory appeal brief does not mention developmental science or the recent Supreme Court's decision in *Graham v. Florida*, but instead argues that the trial court misinterpreted and misapplied the juvenile transfer statute in violation of Jordan Brown's constitutional rights. *Id.* at 8. The *amicus* brief written in support of Jordan Brown, however, focuses on the neurological and psychological deficiencies of juveniles relative to adults and argues that these same deficiencies make juveniles amendable to rehabilitation. *See generally* Brief of the Campaign for Youth Justice et al. as *Amici Curiae* Supporting Appellant at 12–18, No. 1159 WDA 2010 (Pa. Super. Ct.), *available at* http://www.jlc.org/images/uploads/Jordan_Brown_amicus_brief.pdf. The lower court's order was issued before the Supreme Court issued the *Graham v. Florida* decision. On March 11, 2011, the Superior Court of Pennsylvania vacated the lower court's decision that refused to decertify Jordan Brown's case to juvenile court finding that his Fifth Amendment rights against self-incrimination had been violated. Commonwealth v. Brown, 2011 Pa Super 47 (Pa. Super. Ct.), *available at* http://www.jlc.org/images/uploads/opinion_of_superior_court_-_brown_-_3-11-11.pdf. The Court noted that although an "informative and enlightening" *amicus* brief focused on neurological and psychological studies was submitted in support of Jordan Brown, the

B. An Argument that Impulsivity and Sensation Seeking Cannot Be Deterred

The American criminal justice system recognizes that individuals who commit crimes have varying levels of blameworthiness.[128] Although there are some situations where "culpability is mitigated when the actor's decision-making capacity is diminished, when the criminal act was coerced, or when the act was out of character[,]"[129] there is hesitation to reduce culpability based on mental differences.[130] In *Roper v. Simmons*, the Supreme Court articulated that juveniles and adults are very different.[131] These differences include increased risk-taking and deficient impulse control which result in an adolescent's diminished culpability in the criminal justice system.[132]

Some utilitarians would argue against diminished adolescent culpability in the criminal justice system based on an adolescent's inability to control impulses.[133] The crux of this argument is that the social cost caused by crime outweighs any potential differences exhibited between adolescents and adults.[134] Proponents of lessened criminal culpability for juveniles argue the opposite.[135] For example, the APA's *amicus* brief in

brief was not considered because the trial court did not have an opportunity to review it. *Id.* at 7, n. 3. It will be interesting whether or not the trial court will consider the studies outlined in the *amicus* brief. Otherwise, Jordan Brown, if convicted in Pennsylvania adult court, will become the youngest individual to receive a sentence of life without parole. Press Release, Pennsylvania Superior Court Says Judge Infringed on Fifth Amendment Rights of 11 Year Old Jordan Brown (March 14, 2011), *available at* http://www.jlc.org/images/uploads/Juvenile_Law_Center_Press_Release_Jordan_Brown_Superior_Court_opinion.pdf.

128. Steinberg, *supra* note 22, at 59; Steinberg & Scott, *supra* note 55, at 1010.

129. Steinberg & Scott, *supra* note 55, at 1009.

130. *See id.* at 1010 (noting that debate on the mitigation of juvenile culpability results from the mistaken belief that the only two alternatives are increased punishment or no punishment at all). *See also* Atkins v. Virginia, 536 U.S. 304, 306–07 (2002) (describing the difficulty of making mentally disabled persons accountable for their actions, but at the same time recognizing their deficiencies).

131. Roper v. Simmons, 543 U.S. 551, 569–70 (2005).

132. *Id.*

133. *See generally* Mutcherson, *supra* note 2, at 10 (noting that despite the relative differences between adolescents and adults, utilitarians argue for harsh sanctions against juvenile offenders because of the social harm juvenile crime causes); *see also* Scott & Grisso, *supra* note 38, at 139 (critiquing utilitarian views of all juvenile offenders as career criminals).

134. Scott & Grisso, *supra* note 38, at 139.

135. Brief for Juvenile Law Ctr. et al. as Amici Curiae Supporting Petitioners, Graham v. Florida, 130 S. Ct. 2011 (2010) (No. 08-7412, 08-7621), 2009 U.S. S. Ct. Briefs LEXIS 659, at *44–45; *see also* Scott & Grisso, *supra* note 38, at 139, 179 (suggesting that greater social harm will result from treating juveniles punitively).

Roper questioned the deterrent value that the death penalty has on juveniles due to their impulsivity and failure to recognize long-term consequences.[136]

The *Atkins v. Virginia* decision also supports the belief that harsh punishment has no deterrent effect on deficient impulse control.[137] In *Atkins*, the Supreme Court struck down the death penalty as unconstitutional for mentally disabled people.[138] The Court reasoned that because the mentally disabled "have diminished capacities to understand and process information, to communicate, to abstract from mistakes and learn from experience, to engage in logical reasoning, to control impulses, and to understand the reactions of others" they should be treated differently than the average criminal.[139] Further, the Court recognized that the death penalty would serve no deterrent effect because the cognitive and behavioral deficiencies that mitigate culpability for the mentally disabled are the same deficiencies that make it unlikely that this type of punishment will have any impact on them when they engage in crime.[140]

Relying on *Atkins*' articulation of mitigated culpability, the *Roper* Court recognized that "the same characteristics that render juveniles less culpable than adults suggest as well that juveniles will be less susceptible to deterrence."[141] Research demonstrates that adolescents tend to act impulsively, engage in risk-taking, and do not fully consider the consequences of their actions.[142] These psychosocial factors are virtually the same characteristics the Supreme Court found compelling in *Atkins*.[143] Therefore, because adolescents are deficient at controlling impulses, and often do not think about the long-term consequences of their actions, harsh punishment will likewise have little to no deterrent effect on this group of people.

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136. Brief for Am. Psychological Ass'n & Mo. Psychological Ass'n as Amici Curiae Supporting Respondent, *supra* note 46, at *31. *See also* Brief for Juvenile Law Ctr. et al. as Amici Curiae Supporting Petitioners, *supra* note 135, at *42–43 (citing *Roper v. Simmons*, 543 U.S. 551, 571 (2005)). The brief points out that harsh punishment does not have a deterrent effect on juveniles because, due to their heightened risk-taking, juveniles do not weigh the alternatives to their decisions before acting. *Id.*

137. *See* Atkins v. Virginia, 536 U.S. 304, 321 (2002) (holding that executing the mentally disabled serves no deterrent or retributive purpose and that it exceeded the Eighth Amendment).

138. *Id.*

139. *Id.* at 318.

140. *Id.* at 320.

141. Roper v. Simmons, 543 U.S. 551, 571 (2005).

142. *See supra* notes 58–62 and accompanying text.

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

C. Medical Decision Making: Adolescent Autonomy and Decision Making Capacity

Typically, adolescents are not considered capable of making medical decisions under United States law.[144] One reason for this alleged incapability results from *parens patriae*; as described earlier, this paternalistic doctrine is premised on looking out for the "best interests of the child."[145]

In contrast, an international consensus exists under Article 12 of the Convention on the Rights of the Child stating that a child should have the opportunity to express his or her views in all matters affecting the child.[146] Although the international community believes that children should be given deference by appropriately balancing the child's age and maturity, the United States maintains a paternalistic approach regarding medical decision making and has yet to ratify the treaty.[147]

In the U.S., the relatively few exceptions to this paternalistic rule are: emancipation,[148] emergency,[149] and the mature minor doctrine, which often applies to abortions.[150] Emancipated minors are able to make medical decisions because their legal status demonstrates the capability to make decisions without parental consent.[151] While emancipation recognizes adolescent autonomy, the emergency exception was instituted to protect doctors from legal liability, not in recognition of adolescents' decision making capacity.[152]

The mature minor doctrine allows adolescents who demonstrate an adult-level of maturity to make decisions that are traditionally reserved

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144. Rhonda Gay Hartman, *Adolescent Decisional Autonomy for Medical Care: Physician Perceptions and Practices*, 8 U. CHI. L. SCH. ROUNDTABLE 87, 91 (2001).

145. *See* Ann Eileen Driggs, Note, *The Mature Minor Doctrine: Do Adolescents Have the Right to Die?*, 11 HEALTH MATRIX 687, 690 (2001) (describing how the law characterizes children as lacking maturity, and that the love a parent has for his or her child will cause the parent to choose the medical decision that is in the best interests of the child); *see also* Hartman, *supra* note 144, at 91 (noting that at the core of "this paternalistic approach to adolescence is the idea that juveniles lack decisional capability and hence responsibility and accountability attendant for their acts . . . .").

146. Convention on the Rights of the Child art. 12, Nov. 20, 1989, 1577 U.N.T.S 48.

147. *Id.*; Press Release, United Nations, Somalia and US Should Ratify UN Child's Rights Treaty – Official, (Oct. 13, 2010),
available at http://www.un.org/apps/news/story.asp?NewsID=36428&CR=children&CR1.

148. Andrew Newman, *Adolescent Consent to Routine Medical and Surgical Treatment, A Proposal to Simplify the Law of Teenage Medical Decision-Making*, 22 J. LEGAL MED. 501, 504 (2001).

149. *Id.*

150. Driggs, *supra* note 145, at 690.

151. *Id.* at 691.

152. *Id.* at 690–91.

exclusively for adults.[153] Most often the mature minor doctrine is applied only after an adolescent has engaged in typical adult-like behavior, such as pregnancy or marriage.[154] For example, following the decision in *Bellotti v. Baird*,[155] courts began applying this doctrine to adolescents seeking an abortion.[156] The mature minor doctrine also applies when the adolescent's conduct may have a public health impact.[157] For example, adolescents are able to obtain contraception and medical treatment for sexually transmitted diseases without parental consent.[158] Notably, this exception results from concerns over public health, rather than a conclusion that adolescents possess unusual maturity relative to sexual matters.[159] This exception "promotes adolescent access to treatment, preventing spread of the disease by eliminating the deterrent of having to inform a parent or guardian of sexual activity."[160]

While the mature minor doctrine accounts for an adolescent's ability to seek medical treatment for reproductive rights, it has rarely been applied to allow adolescents to consent or refuse life-sustaining treatment.[161] Life-sustaining treatment is medical care rendered for a terminally ill patient or any situation in which an individual requires medical care to sustain viability.[162]

1. Legal Background of End-of-Life Decision Making and the Role of the Adolescent

The case law regarding end-of-life decision making is limited. In 1990, the Supreme Court was faced with a right to die case.[163] In *Cruzan v.*

153. *Id.* at 696–97.

154. Elisa Poncz, *Rethinking Child Advocacy After* Roper v. Simmons*: "Kids are Just Different" and "Kids are Like Adults" Advocacy Strategies*, 6 CARDOZO PUB. L. POL'Y & ETHICS J. 273, 292–93 (2008).

155. 443 U.S. 622, 643–44 (1979) (holding that where a state requires an adolescent to obtain parental consent prior to an abortion, that adolescent may bypass parental consent with a hearing before a judge by demonstrating that she is fully aware of the consequences and that the abortion is truly in her best interests).

156. Newman, *supra* note 148, at 507.

157. Poncz, *supra* note 154, at 293.

158. Newman, *supra* note 148, at 507.

159. Hartman, *supra* note 144, at 88.

160. *Id.*

161. Driggs, *supra* note 145, at 696.

162. Robert F. Weir & Charles Peters, *Affirming the Decisions Adolescents Make About Life and Death*, 27 HASTINGS CENTER REP., Nov–Dec. 1997, at 29, 30 (illustrating cases of patients prolonging life with life-sustaining treatment).

163. Cruzan v. Dir., Mo. Dep't of Health, 497 U.S. 261 (1990). Prior to *Cruzan*, the New Jersey Supreme Court dealt with the right to refuse life-sustaining treatment in the case of *In re Quinlan*, 355 A.2d 647 (N.J. 1976). The New Jersey Supreme Court acknowledged that the right to privacy granted an incompetent person the right to refuse life-sustaining treatment through a

Director, Missouri Department of Health, the Court held the Due Process Clause allows for competent adults who are able to fully express their wishes to end life-sustaining medical treatment.[164] Courts have been reluctant to grant a similar right to minors believing that adolescents are not competent to make end-of-life decisions.[165] Doctors and parents may involve the minor in discussions about end-of-life decisions, but in most cases the minor's preferences are honored only when the parents agree.[166]

Some jurisdictions acknowledge the importance of the mature minor doctrine, and have allowed mature adolescents to refuse life-sustaining treatment. For example, the Illinois Supreme Court's holding in *In re E.G.*[167] held that minors may decide to discontinue life-sustaining treatment if clear and convincing evidence establishes the minor is fully cognizant of the consequences surrounding the decision.[168] The Court did not rely on scientific studies, but reasoned that the state's *parens patriae* interest is greater when the minor is younger and presumptively more immature, but the *parens patriae* interest gradually diminishes as the minor gets older.[169] Similar to the general trend of case law, most state statutory provisions do not directly vest minors with the right to consent to or terminate life-sustaining treatment.[170] Although not referencing life-sustaining treatment

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guardian. *Id.* at 664. Although the Court did not grant removal of Quinlan's respirator, the Court did grant a new guardian and authorized this person to find new physicians who would not be prohibited from withdrawing life-sustaining treatment. *Id.* at 671.

164. *Cruzan*, 497 U.S. at 286–87.

165. Driggs, *supra* note 145, at 694. End of life decisions allow a person the right to control choices about their own life and death. Charmaine D. Caldwell & Stephen Freedman, *End-of-Life Decision Making: A Slippery Slope*, 37 J. PROF. COUNSELING, PRAC., THEORY & RES. 21, 21 (2009).

166. COMM. ON PALLIATIVE & END-OF-LIFE CARE FOR CHILDREN & THEIR FAMILIES, INST. OF MED., WHEN CHILDREN DIE: IMPROVING PALLIATIVE AND END-OF-LIFE CARE FOR CHILDREN AND THEIR FAMILIES 130–31 (Marilyn J. Field & Richard E. Behrman eds., 2003) (explaining that little information is available to advise doctors dealing with families whose children are facing life threatening conditions).

167. 549 N.E.2d 322, 327–28 (Ill. 1989).

168. *See id.* at 328 (noting that the right granted to the adolescent must be evaluated in light of the "State's interests: (1) the preservation of life; (2) protecting the interests of third parties; (3) prevention of suicide; and (4) maintaining the ethical integrity of the medical profession.").

169. *Id.* at 327.

170. *See generally* HAW. REV. STAT. ANN § 577A-2 (LexisNexis 2010) (stating that no parental consent is needed for treatment for pregnancy or venereal disease); 410 ILL. COMP. STAT. ANN. 210/1 (West 2011) (stating that no parental consent is needed for pregnant minors, married minors, or minors who are parents); MD. CODE ANN., HEALTH–GEN. § 20-102 (LexisNexis 2009) (stating that an adolescent can have the same decision making power as an adult in the medical area when the adolescent is married or a parent); N.J. STAT. ANN. §9:17A–1 (West 2002) (stating that unmarried pregnant minor does not need parental consent for medical procedures relating to the pregnancy, but needs parental consent for all other medical procedures); 35 PA. CONS. STAT. ANN. § 10101 (West 2003) (stating that minors can pursue their own medical treatment if they have graduated high school, have married, or have been pregnant).

specifically, many states allow minors to consent to medical treatment absent parental consent where the adolescent is emancipated, pregnant, or a parent.[171] In contrast, New York's Public Health Statute § 2994-e provides not only that an emancipated minor has the ability to make their own decisions regarding life-sustaining treatment, but where a minor demonstrates the decision making capacity to choose to withhold or withdraw life-sustaining treatment, the parent's choice to the contrary cannot be implemented without the consent of the adolescent.[172]

171. *See supra* notes 148–52 and accompanying text.

172. N.Y. PUB. HEALTH LAW § 2994-e (McKinney Supp. 2011) provides:

> 1. Authority of parent or guardian. The parent or guardian of a minor patient shall have the authority to make decisions about life-sustaining treatment, including decisions to withhold or withdraw such treatment . . . .
>
> 2. Decision-making standards and procedures for minor patient.
>
> (a) The parent or guardian of a minor patient shall make decisions in accordance with the minor's best interests . . . taking into account the minor's wishes as appropriate under the circumstances.
>
> (b) An attending physician, in consultation with a minor's parent or guardian, shall determine whether a minor patient has decision-making capacity for a decision to withhold or withdraw life-sustaining treatment. If the minor has such capacity, a parent's or guardian's decision to withhold or withdraw life-sustaining treatment for the minor may not be implemented without the minor's consent.
>
> (c) Where a parent or guardian of a minor patient has made a decision to withhold or withdraw life-sustaining treatment and an attending physician has reason to believe that the minor patient has a parent or guardian who has not been informed of the decision, including a non-custodial parent or guardian, an attending physician or someone acting on his or her behalf, shall make reasonable efforts to determine if the uninformed parent or guardian has maintained substantial and continuous contact with the minor and, if so, shall make diligent efforts to notify that parent or guardian prior to implementing the decision.
>
> 3. Decision-making standards and procedures for emancipated minor patient.
>
> (a) If an attending physician determines that a patient is an emancipated minor patient with decision-making capacity, the patient shall have the authority to decide about life-sustaining treatment. Such authority shall include a decision to withhold or withdraw life-sustaining treatment if an attending physician and the ethics review committee determine that the decision accords with the standards for surrogate decisions for adults, and the ethics review committee approves the decision.
>
> (b) If the hospital can with reasonable efforts ascertain the identity of the parents or guardian of an emancipated minor patient, the hospital shall notify such persons prior to withholding or withdrawing life-sustaining treatment pursuant to this subdivision.

2. Informed Consent Can Lead to Rational Decisions in Medical Decision Making

Informed consent in the medical decision making context is defined as the ability to consent to treatment knowingly and voluntarily, after receiving sufficient information regarding the treatment.[173] The following attributes are important for a decision maker to have when making a medical decision: 1) understanding the circumstances surrounding the decision, 2) the ability to think about alternatives to the decision, and 3) ability to communicate his or her decision to others.[174] Researchers suggest that an adolescent's capacity for medical decision making is based on the ability to perceive the consequences of the decision, the understanding of medical disclosure, ability to make a decision in his or her best interests, and the ability to understand the importance attached to the decision.[175]

Medical literature suggests that adolescents at the age of fourteen are capable of making rational decisions about their medical treatment.[176] One author notes that an adolescent in need of palliative care will often times already have gained a rapport with his or her doctor.[177] Because of this relationship, the adolescent will likely be competent to discuss medical treatment decisions with the doctor.[178] Physicians can "play an active role in cultivating decision-making capacity in seriously ill adolescents through listening, addressing concerns, and providing counsel as they are helped to understand their options."[179]

Further research suggests that most adolescents want to participate in end-of-life decision making.[180]

> Most adolescents who want to participate in the decisionmaking process . . . especially in regard to decisions about life-sustaining medical interventions . . .

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173. Timothy J. Paterick et al., *Medical Informed Consent: General Considerations for Physicians*, 83 MAYO CLINIC PROCS. 313, 313 (2008).

174. THE HASTINGS CTR., GUIDELINES ON THE TERMINATION OF LIFE-SUSTAINING TREATMENT AND THE CARE OF THE DYING 7 (1987).

175. David R. Freyer, *Care of the Dying Adolescent: Special Considerations*, 113 PEDIATRICS 381, 383 (2004).

176. *See generally* Mutcherson, *supra* note 4, at 287–88 (acknowledging that by the age of fourteen some adolescents demonstrate adult-like competence); Debbie Schachter et al., *Informed Consent and Adolescents*, 50 CAN. J. PSYCHIATRY 534, 538 (2005) (noting that some adolescents are capable of medical decision making by age fourteen).

177. Freyer, *supra* note 175, at 384.

178. *Id.*

179. *Id.*

180. Maureen E. Lyon et al., *What Do Adolescents Want? An Exploratory Study Regarding End-of-Life Decision-making*, 35 J. ADOLESCENT HEALTH 529.e1, 529.e5 (2004). Researchers created a twenty-five question self reporting survey and subsequently administered it to twenty-five chronically ill teenagers and twenty-five healthy teenagers. *Id.* at 529.e2.

> [have] experienced years of physical and psychological suffering . . . probably observed the suffering and dying of several hospitalized friends with similar medical problems, these adolescent patients are frequently mature beyond chronological years. They have had, at the very least, multiple opportunities to think about the inescapable suffering that characterizes their lives, the features of life that make it worth continuing, the benefit and burdens that accompany medical treatment, and the prospect of death.[181]

Some scholars suggest that incorporating advanced directives into the informed consent process for adolescents facing end-of-life decisions would not only recognize adolescent autonomy but would also provide legal protection for the treating doctor.[182]

3. Formalized Process and Procedure in End-of-Life Decision Making Eliminates the Risk of Impulsivity or Risk-Taking.

End-of-life decision making is a very structured and formalized process.[183] Different treatment care plans arise from the diagnosis of a life-threatening condition.[184] Some care plans will include curative or life-prolonging treatments, while other plans will focus on palliative care.[185] The Institute of Medicine of the National Academies advocates for care plans that integrate both life-prolonging treatments and palliative care.[186] Crucial to all care plans is re-evaluation of goals and the treatment plan itself.[187] Adolescents in the midst of end-of-life decisions have numerous people to turn to for advice and guidance.[188] "Depending on the situation, physicians, nurses, social workers, psychologists, child-life specialists, chaplains, and others will have roles to play" in advising and assessing the minor's end-of-life goals.[189] These individuals are directed by practice

181. Weir & Peters, *supra* note 162, at 34.

182. *Id.* at 36 (noting that three different goals would be enhanced through incorporating advanced directives into the informed consent process with adolescents: 1) providing adolescent autonomy and empowerment; 2) indicating to physicians what the patient wants regarding end of life care and providing proof of patient's wishes; and 3) enabling the parent to see what the child truly wants).

183. *See generally* COMM. ON PALLIATIVE & END-OF-LIFE CARE FOR CHILDREN & THEIR FAMILIES, *supra* note 166, at 8, 129 (describing the individualized care plans focused on palliative versus life-prolonging care and the continuous re-evaluation of these plans by the numerous professionals present during end-of-life decision making).

184. *Id.* at 85.

185. *Id.*

186. *Id.* at 85–87.

187. *Id.* at 87.

188. *Id.* at 129.

189. *Id.*

guidelines and protocols that define their advising roles to adolescents during end-of-life decision making.[190] Additionally, almost all hospitals have an ethics committee that can provide further guidance with end-of-life decisions.[191]

When the decision is made to move towards an inpatient palliative care program, an individual care plan and regular care team (consisting of the people listed above) are formed.[192] The team may include a palliative care consultant.[193] The palliative care consultant assists the family and adolescent patient understand their available options (e.g., transitioning to hospice care, "starting or not starting mechanical ventilation").[194] The consultant also assists with evaluating the goals for end-of-life care, aids the patient with re-evaluating the care plan, and helps with transitions to hospice care if necessary.[195]

III. HARMONIZING IMPLICATIONS OF JUVENILE AUTONOMY WITHIN THE DIFFERENT LEGAL REALMS

Is it possible to rationalize reduced adolescent responsibility in the criminal justice system while having increased responsibility in other aspects of the legal system? As noted earlier, ample debate surrounds adolescent treatment in the criminal justice system, and many strongly advocate for adult-like treatment.[196] For those who advocate for mitigated treatment within the criminal justice system, the question becomes what level of treatment should the adolescent be given when it comes to medical decision making?[197] Recent studies on adolescent risk-taking and impulsivity conducted by experts in adolescent cognitive development inform the view that juveniles can be afforded differing levels of responsibility in different legal situations.[198] These different levels of

190. *Id.* at 229.

191. *Id.* at 208 n.9.

192. *Id.* at 209.

193. *Id.*

194. *Id.*

195. *Id.*

196. Newman, *supra* note 148, at 501.

197. *Id.*

198. *See generally* Donald L. Beschle, *Cognitive Dissonance Revisited:* Roper v. Simmons *and the Issue of Adolescent Decision-Making Competence*, 52 WAYNE L. REV. 1, 40 (2006) (discussing adolescent decision making competence post-*Roper* and exploring the idea of assigning adolescents different levels of decision making authority based on the situation); Mutcherson, *supra* note 2, at 18 (examining the competence of adolescents in health care decision making and criminal responsibility); Mutcherson, *supra* note 4, at 288, 302–03 (recognizing adolescent decision making competence in some areas and not others, and arguing for adolescent autonomy in the health care decision making context); Steinberg et al., *supra* note 123, at 592–93 (exploring the differences in the American Psychological Association's *amicus* briefs in *Hodgson*

responsibility are based on the type of decision, and more importantly, on the circumstances of each situation.[199] Research conducted by Steinberg et al., asserts that adolescents demonstrate cognitive abilities similar to adults in some situations, but lack maturity relative to adults in other situations.[200]

The abilities to engage in logical reasoning and comprehend information are important to cognitive decision making.[201] With respect to these aspects, by sixteen an adolescent's ability to engage in cognitive decision making is comparable to an adult.[202] Some studies even suggest that adolescents are capable of engaging in cognitive decision making as early as fourteen.[203] Despite cognitive maturity, scholars assert that an adolescent's judgment when making decisions is influenced by the delayed maturation of their psychosocial abilities.[204]

For an adolescent, the decision to commit a crime and the decision of whether to consent to or refuse life-sustaining treatment are very different.[205] An adolescent's decision making capacity is decision and context specific.[206] Because of the circumstances surrounding criminal activity, decisions to engage in criminal activity are often spontaneous,

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and *Roper* and arguing that the arguments in both briefs are accurate because adolescents are capable of making abortion decisions, but that low psychosocial maturity mitigates criminal culpability).

199. Steinberg et al., *supra* note 123, at 592.

200. *Id.* at 586. The researchers analyzed the alleged differences in the American Psychological Association's *amicus* briefs on adolescent abortion in *Hodgson v. Minnesota* and the juvenile death penalty in *Roper v. Simmons*. *Id.* To reconcile this problem, the authors examined both cognitive and psychosocial factors relating to executive functioning and intellectual abilities in a research sample. *Id.* at 585–87. The results of the study demonstrated that "the question of whether adolescents are as mature as adults depends on the aspects of maturity under consideration." *Id.* at 592. Researchers concluded that the situations involving abortion and criminal conduct are different, as are the circumstances surrounding these situations. *Id.* This comment relies on the research study conducted by Steinberg et al., to argue that the exceedingly structured environment surrounding end-of-life decision making provides adolescents the opportunity to use their cognitive capabilities. Similarities exist between end-of-life decision making and the decision to obtain an abortion in that both involve adult supervision and some deliberation. There are however, some situations where the decision to obtain an abortion can occur in an impulsive manner. *Id.* at 586. End-of-life decision making, on the other hand, involves a very long, formalized process where adolescents have the benefit to consult with numerous experts, the oversight of ethics committees and often first-hand experience with life-sustaining treatment. COMM. ON PALLIATIVE & END-OF-LIFE CARE FOR CHILDREN & THEIR FAMILIES, *supra* note 166, at 129.

201. Steinberg, *supra* note 22, at 55.

202. Steinberg et al., *supra* note 123, at 592.

203. Freyer, *supra* note 175, at 383.

204. Steinberg et al., *supra* note 123, at 592.

205. *Id.* at 586 (explaining that "the legal issues [of abortion vs. engaging in criminal behavior are different] . . . but so are the circumstances surrounding abortion decisions and criminal behavior, and therefore, the relevant dimensions along which adolescents and adults should be compared differ as well.").

206. Schachter et al., *supra* note 176, at 534.

impulsive, and only take into account the short-term positives.[207] In contrast, end-of-life decision making, specifically consenting to or refusing life-sustaining treatment, involves first-hand experience of using life-sustaining treatment.[208] Adolescents with life-threatening illnesses will often have a realistic view of death because of their personal experiences.[209] Most importantly, the circumstances surrounding these decisions are structured and involve informed consent.[210] Additionally, these decisions are made in consultation with a team of experts, and in most cases these professionals have been involved in the decision making process from the time of the life-threatening diagnosis.[211] Informed consent and the active participation of the health care professional team prevent impulsive action by ensuring the decision maker is fully aware of both the consequences of the decision and the possible alternatives.[212] Informed consent and the structured environment provided by health care professionals points to a crucial difference between a situation involving criminal activity and the very important decision of consenting to or discontinuing life-sustaining treatment.[213]

As previously discussed, research demonstrates that adolescents in situations involving social and emotional arousal deficiently consider the long-term consequences of an action and lack the ability to consider the alternatives to a decision.[214] Hence, because criminal situations require hasty responses, adolescents are at risk for making poor decisions.[215] These circumstances make adolescents most vulnerable to the psychosocial factors of peer pressure, risk-taking, impulsivity and difficulty with future goal orientation.[216] Informed consent and the controlled circumstances

207. Steinberg et al., *supra* note 123, at 586.

208. *See* Weir & Peters, *supra* note 162, at 34.

209. Freyer, *supra* note 175, at 382.

210. *Id.* at 384 (discussing the physician's role in communicating, listening, responding to concerns and explaining different treatment options).

211. *See* COMM. ON PALLIATIVE & END-OF-LIFE CARE FOR CHILDREN & THEIR FAMILIES, *supra* note 166, at 104 (noting that doctors, nurses, social workers and other health care professionals have prominent roles following a child's diagnosis with a life threatening condition).

212. Schachter et al., *supra* note 176, at 535.

213. *See* Steinberg et al., *supra* note 123, at 592 (explaining the difference between decisions made where "emotional and social influences on judgment are minimized" and where the adolescent has the opportunity to confer with a responsible authority figure versus a situation where "characterized by high levels of emotional arousal and social coercion, or that do not encourage or permit consultation with an expert . . . .").

214. *See supra* notes 58–62 and accompanying text.

215. *See* Steinberg et al., *supra* note 123, at 592 (noting that with reference to decisions involving abortion and engaging in criminal activity "it seems reasonable to distinguish between two very different decision-making contexts in this regard: those that allow for unhurried, logical reflection and those that do not.").

216. *Id.*

surrounding end-of-life decision making make up for the inadequacies in the psychosocial maturity of adolescents.

The decision to maintain or cease life-sustaining treatment is a deliberate decision requiring logical reasoning and comprehension abilities.[217] Research has demonstrated that adolescents who are at least sixteen are capable of these abilities and some studies suggest adolescents who are fourteen are capable of these abilities as well.[218] End-of-life decision making requires extensive thought and is a decision that is not made spur of the moment.[219] The context for end-of-life decision making is significantly different than the context for criminal activity. The most obvious actors involved in end-of-life decision making are parents, but even if parents are minimally involved in the decision, the adolescent's doctor is required to obtain the informed consent of the adolescent.[220] Additionally, as described earlier, aside from parents and doctors, adolescents have numerous other professionals available to advise and assess the minor's end-of-life goals.[221] Also discussed earlier, adolescents with life-threatening illnesses typically establish a relationship with their treating physician, which further assists the adolescent to obtain an intelligent perspective on the situation.[222] "As patients mature during adolescence, they become capable of more abstract thinking and can comprehend more complex aspects of their situations."[223] Scholars advocate the importance of enhancing autonomy and making adolescents feel involved in the decision making process.[224] Scholars also argue that "[o]lder adolescents having greater functional competence should be given a more central role in their decisions from the beginning."[225]

End-of-life decision making varies incredibly from the types of decisions that adolescents Simmons and Graham engaged in when each of them chose to commit criminal acts. Decisions to commit a crime almost

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217. *See* Freyer, *supra* note 175, at 383 (describing that the cognitive abilities necessary to engage in competent decision making are reasoning, making choices without the influence of parents and understanding the importance and seriousness of the decision).

218. *See supra* notes 202–03 and accompanying text.

219. *See generally* COMM. ON PALLIATIVE & END-OF-LIFE CARE FOR CHILDREN & THEIR FAMILIES, *supra* note 166, at 321 (discussing that end-of-life decision making involves extensive guidance from numerous professionals, and at times conflicts on the correct course of treatment can arise between parents, children and health care professionals).

220. *See* Freyer, *supra* note 175, at 384 (expressing the important and influential role the doctor plays in the decision making of the adolescent).

221. COMM. ON PALLIATIVE & END-OF-LIFE CARE FOR CHILDREN & THEIR FAMILIES, supra note 166, at 129.

222. *See supra* notes 177–79 and accompanying text.

223. Freyer, *supra* note 175, at 385.

224. Mutcherson, *supra* note 4, at 300–01.

225. Freyer, *supra* note 175, at 386.

always occur "in situations that elicit impulsivity, that are typically characterized by high levels of emotional arousal or social coercion, or that do not encourage or permit consultation with an expert who is more knowledgeable or experienced."[226] All of these factors render adolescents, who are already vulnerable to risk-taking and impulsive behavior, more vulnerable to engaging in antisocial behavior.[227] Because juvenile crime usually occurs without adults present, situations where adolescents can consult with a responsible adult and become informed of the consequences of engaging in criminal activity are rare.[228] Adolescents, who are already emotionally and socially immature, become more vulnerable in these situations, accounting in part for the separate juvenile justice system.[229] Although in recent years, more adolescents have been automatically placed in the adult criminal justice system[230] current case law supports the once held belief that adolescents are different than adults.[231] It is important to note that low psychosocial maturity is the distinction that renders juveniles less culpable in the criminal justice system.

In contrast, cognitive maturity and its relation to the structured circumstances of the medical decision make adolescents more responsible in this decision making context.[232] The Supreme Court's reliance on scientific studies in analyzing adolescent psychosocial maturity in *Roper* and *Graham* is particularly telling.[233] The Supreme Court used these studies to mitigate adolescent culpability in *Roper v. Simmons* and then most recently relied on these studies again in *Graham v. Florida*, indicating

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226. Steinberg et al., *supra* note 123, at 592.

227. *See* Brief for Juvenile Law Ctr. et al. as Amici Curiae Supporting Petitioners, *supra* note 135, at *46 (quoting ELIZABETH S. SCOTT & LAURENCE STEINBERG, RETHINKING JUVENILE JUSTICE 49 (2008)) (explaining that "adolescents' executive functions are not mature, their capacities for planning, for anticipating future consequences, and for impulse control are deficient - - as compared with those of adults - - at a time when their inclination to engage in risk-taking behavior in the company of peers is greater than it will be in a few years.").

228. See Steinberg, *supra* note 22, at 56 (describing that adolescents are "oriented toward peers"); *see also* Steinberg et al., *supra* note 123, at 592 (describing an adolescent's vulnerability in criminal situations because these situations are characterized by peer pressure and emotional arousal).

229. Steinberg, *supra* note 22, at 50 (explaining that proponents of a separate juvenile justice system were fueled by the belief that adolescents are developmentally different from adults).

230. Scott & Grisso, *supra* note 38, at 150.

231. *See supra* notes 92, 103–8, 120-21 and accompanying text.

232. *See supra* Part II.C.2.

233. Johanna Cooper Jennings, Note, *Juvenile Justice,* Sullivan *and* Graham*: How the Supreme Court's Decision Will Change the Neuroscience Debate*, DUKE L. & TECH. REV., May 18, 2010, at ¶ 22, *available at* http://www.law.duke.edu/journals/dltr/articles/pdf/2010dltr006.pdf (stating that if the *Graham* court "does choose to implement a categorical ban, the door for neuroscience research opened in *Roper* will remain open for juvenile advocates to further reform the system in the future.").

that the Court is starting to believe that juveniles are deserving of different treatment in the criminal context.[234]

CONCLUSION

This article analyzed the inconsistencies involved in adolescent decision making autonomy.[235] First, this article focused on the new developments in neuroscience and psychology that reveal a scientific justification for the typical "reckless teenager."[236] Support for using science as the decisive factor in determining how much responsibility an adolescent should have has not escaped criticism.[237] The best approach for determining adolescent responsibility in any given legal realm is to consider developmental science.[238] New research indicating adolescent tendency for impulsive behavior should be viewed in conjunction with the circumstances surrounding the legal decision being made.[239]

Adolescents should be give decision making autonomy in end-of-life decision making because these decisions are structured, do not require immediate response and allow the adolescent time and resources to become informed of all possible consequences and alternatives.[240] Like most health care decisions, this type of decision involves informed consent.[241] Thus, the adolescent's decision making will be structured and guided by formalized processes and extensive consultation with informed professionals over time.[242] Therefore, the adolescent will become aware of all possible consequences to make a knowledgeable, reflective decision.[243] Contrarily, scenarios involving criminal activity lend themselves to impulsive and reckless behavior.[244] Adolescents in these situations need to think fast, and do not have the benefit of an authority figure weighing the costs and

234. *Id.*

235. *See supra* notes 77–81 and accompanying text (outlining the various views that exist regarding the autonomy that adolescents should be accorded in criminal and medical decision making contexts).

236. *See supra* Part I.

237. *See* Maroney, *supra* note 124, at 93 (writing that neuroscience on adolescent brain development should be used as only one factor when determining the culpability and legal responsibility of an adolescent). *See also* William J. Katt, *Roper and the Scientific Amicus* 49 JURIMETRICS J. 253, 254–55, 274 (2009) (questioning the Supreme Court's reliance on science presented through advocacy in *amicus* briefs not subject to cross-examination).

238. *See supra* Part I (detailing the neurological make-up that both increases and decreases adolescents' abilities to make reasoned decisions).

239. *See supra* notes 70–75 & 173–75 and accompanying text.

240. *See supra* notes 173–81 and accompanying text.

241. *See supra* notes 173–75 and accompanying text.

242. *See supra* notes 179–81 and accompanying text.

243. *See supra* notes 179–83 and accompanying text.

244. *See supra* note 207 and accompanying text.

benefits for them.[245] Because of this reality, adolescents should have reduced culpability in the criminal justice system.[246] In recent cases the Supreme Court has looked to studies in neuroscience and psychology to mitigate adolescent responsibility in the justice system.[247] As more advances in scientific studies become available, it is likely that science will continue to inform the Supreme Court and policy makers.

When determining adolescent responsibility, the circumstances of crime and susceptibility of adolescents to engage in crime renders them less culpable than adults. The circumstances surrounding end-of-life decision making are much more forgiving of adolescent psychosocial immaturity and provide circumstances where adolescents can use their cognitive capabilities.

245. *See supra* notes 207–08 and accompanying text.

246. *See supra* Part III.

247. *See supra* Part II.A.