

**TEENAGE BRAIN DEVELOPMENT: ITS IMPACT ON CRIMINAL  
ACTIVITY AND TRIAL SENTENCING**

ARTICLE

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**INTRODUCTION**

**T**HE DEVELOPMENT OF A CHILD’S BRAIN AND HOW IT AFFECTS A TEENAGER’S reasoning skills when making tough decisions and acting upon them seems to be a gray area in the legal community. Adolescence is a transitional period during which a child is becoming an adult. While there has been some limitations and restrictions to what children and teenagers can do—such as voting, legal alcohol drinking, enrolling in the military, among other limitations—when it comes to how to prosecute and sentence a minor, there are still circumstances where the legal system could demand to treat them as fully functioning adults. Why is this worrying? Mainly because recent discoveries in neuroscience have shown that “a teenager’s brain does not resemble an adult’s

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fully matured brain until they reach their early [twenties].”<sup>1</sup> Basically, an adolescent brain is different from an adult brain. What this means is that the adolescent brain is constantly developing into an adult brain, and the “risks taken and mistakes made by [teenagers] may be . . . outside of their control . . .”<sup>2</sup> These risks and mistakes come from impulsive actions, poorly measured decisions, and the peer pressure that teenagers suffer from; proving that at that stage the brain is still very malleable.<sup>3</sup> Thus, teenagers and their developing brains, act according to impulses, and lack of thought for the consequences of their actions, similar to acting in the heat of the moment. These scientific discoveries have helped the psychiatric and legal community understand why teenagers have a higher risk of committing crimes such as: shoplifting, assault, and even murder.<sup>4</sup>

According to Michael N. Tennison, minors “start out with little or no capacity for responsibility and gain it gradually but globally as they mature; if they engage in serious or adult-like crime, however, then they must be capable of experiencing adult-like consequences.”<sup>5</sup> We are living in a period of time when people who are between the ages of fourteen and twenty-four—a range where the brain is at the peak of its development—commit many crimes yet most of which are treated as adult-like crimes, with adult-like punishments. While it is true that teenagers know right from wrong, and that they should be held responsible for their behavior when they violate the law, courts should analyze adequate punishments where teenagers are able to reform and rejoin society.

New findings in the field of juvenile developmental neuroscience have contributed in recent United States Supreme Court decisions regarding serious crimes made by teenagers.<sup>6</sup> Below, I will explain in detail, the process of teenage

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1 Fiona Guy, *Teenage Brain Development and Criminal Behavior*, CRIME TRAVELLER, [www.crimetraveller.org/2015/06/teenage-brain-development/](http://www.crimetraveller.org/2015/06/teenage-brain-development/) (last updated July 7, 2018).

2 Emily Kaiser, *6 Facts about Crime and the Adolescent Brain*, MPR NEWS (Nov. 14, 2012), <https://www.mprnews.org/story/2012/11/15/daily-circuit-juvenile-offenders-brain-development> (citing Laurence Steinberg, *Can teen brain development help explain juvenile crime?*, THE DAILY CIRCUIT (Nov. 15 2012)).

3 Anjali Tsui, *How Brain Science Is Changing How Long Teens Spend in Prison*, FRONTLINE (May 2, 2017), <https://www.pbs.org/wgbh/frontline/article/how-brain-science-is-changing-how-long-teens-spend-in-prison/>.

4 Guy, *supra* note 1.

5 Michael N. Tennison & Amanda C. Pustilnik, “*And If Your Friends Jumped Off A Bridge, Would You Do It Too?*”: *How Developmental Neuroscience Can Inform Legal Regimes Governing Adolescents*, 12 IND. HEALTH L. REV. 533, 536 (2015).

6 See Julian G Simmons et al., *Study protocol: Imaging brain development in the Childhood to Adolescence Transition Study (iCATS)*, 14 BMC PEDIATRICS 115 (2014), <https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/1471-2431-14-115>; Ronald E. Dahl, *Adolescent Brain Development: Vulnerabilities and Opportunities*, 1021 ANNALS. N.Y. ACAD. SCIENCES 1 (2004), [https://www.researchgate.net/publication/8457353\\_Adolescent\\_Brain\\_Development\\_A\\_Period\\_of\\_Vulnerabilities\\_and\\_Opportunities\\_Keynote\\_Address](https://www.researchgate.net/publication/8457353_Adolescent_Brain_Development_A_Period_of_Vulnerabilities_and_Opportunities_Keynote_Address); Ronald E. Dahl & Megan R. Gunnar, *Heightened stress responsiveness and emotional reactivity during pubertal maturation: Implications for psychopathology*, 21 DEVELOPMENT AND PSYCHOPATHOLOGY, 1 (2009), [https://www.cambridge.org/core/services/aop-cambridge-core/content/view/627925BD06AD1A9D94AFEED6944882DB/S0954579409000017a.pdf/heightened\\_stress\\_responsiveness\\_and\\_emotional\\_reactivity\\_during\\_pubertal\\_maturation\\_implications\\_for\\_psy](https://www.cambridge.org/core/services/aop-cambridge-core/content/view/627925BD06AD1A9D94AFEED6944882DB/S0954579409000017a.pdf/heightened_stress_responsiveness_and_emotional_reactivity_during_pubertal_maturation_implications_for_psy)

brain development, the different ways this influences a teenager's decision-making and how in many occasions this leads to criminal behavior, followed by how the United States Supreme Court has applied these neurobiological discoveries.

## I. HOW AND WHY A TEENAGER'S BRAIN IS A WORK IN PROGRESS?

The answer to this question will be answered by explaining the adolescent brain, its development, and how this process affects a teenager's behavior and reaction to certain situations.

### A. *The Adolescent Brain*

The adolescent brain mostly ranges from the age of eleven to twenty-four. During the teenage years, the brain is in constant change; it is a time of significant growth and development. This process—also known as puberty—is where a child develops into an adult.<sup>7</sup> At this stage, the adolescent brain and thus, the teenager, “will do very stupid things in a very impulsive way”, which, to paint a picture, means that they are going through a rollercoaster of emotions that affects their decision-making abilities.<sup>8</sup> It is at this stage where a person starts to resemble what professor Laurence Steinberg compares to a “car with a good accelerator but a weak brake.”<sup>9</sup> What professor Steinberg means with this metaphor is that the adolescent brain has strong impulses that the teenager cannot seem to control and, like a car with weak brakes, it is bound to crash.<sup>10</sup> Basically, the adolescent brain, due to “possessing less information” prevents teens from analyzing risks and, instead, “focus[es] on short-term gains rather than possible long-term losses . . . .”<sup>11</sup>

During the adolescence, the teenager is in the process of “developing an integrated sense of self, including individuation, separation from parents, and personal identity.”<sup>12</sup> It is during this process that the risky behavior starts. However, this is an experimentation stage that does not tend to “extend beyond adolescence,” and seems to seize once the personal identity “becomes settled with maturity.”<sup>13</sup>

According to experts in the field, the adolescent brain can emotionally be divided into two competing systems. One system is a thrill seeker, a type of

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chopathology.pdf; Laurence Steinberg, *A Social Neuroscience Perspective on Adolescent Risk-Taking*, 28 *DEVL. REV.* 78 (2008), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2396566/>.

<sup>7</sup> Tennison & Pustilnik, *supra* note 5, at 557-58.

<sup>8</sup> Guy, *supra* note 1 (citing FRANCES E. JENSEN, *THE TEENAGE BRAIN* (2014)).

<sup>9</sup> Malcolm Ritter, *Experts link teen brains' immaturity, juvenile crime*, ABC NEWS (Dec. 4, 2007), <https://abcnews.go.com/Technology/story?id=3943187&page=1>.

<sup>10</sup> *Id.* (comparing a crash to committing a crime).

<sup>11</sup> Barry C. Feld, *The Youth Discount: Old Enough to do the Crime, Young Enough to do the Time*, 11 *OHIO ST. J. CRIM. L.* 107, 116-17 (2013).

<sup>12</sup> RICHARD J. BONNIE ET AL., *REFORMING JUVENILE JUSTICE: A DEVELOPMENTAL APPROACH* 90 (2013).

<sup>13</sup> *Id.*

adrenaline rush that seeks the praise of others and that “craves sensation and excitement” regardless of the risk.<sup>14</sup> The second system is responsible for “put[ting] the breaks on impulses,” and is also known as the analytical risk measuring system.<sup>15</sup> Accordingly, these two systems influence how teenagers and young adults react and behave in certain situations. As previously mentioned, these systems arise from the development of the adolescent brain. Thus, as professor Steinberg has stated, “these systems are changing during the course of adolescence.”<sup>16</sup> This change will eventually bring a balance and proportionality to the brain system where the reward-seeking thrill will hold off until the consequences of such actions or behaviors have been properly analyzed.

The risk-taking and the desire for peer approval tends to be prominent at the ages that range from fifteen to eighteen, ages when most juvenile criminal activity is reported.<sup>17</sup> As mentioned, this process in the adolescent brain may last until the late twenties, which is why even young adults (who are compared with fully grown adults) are still shaping and developing their judgment and impulse control.<sup>18</sup> For these reasons—risk-taking, rewards, and novel exciting situations—adults tend to denominate teenagers and young adults as what Michael N. Tenneson & Amanda C. Pustilnik identify as *dumb*, that is, people who take unreasonable risks and making bad decisions.<sup>19</sup> However, as Dr. David Fassler has stated on adolescent brain development:

[This] doesn't mean adolescents can't make a rational decision or appreciate the difference between right and wrong . . . [i]t . . . mean[s], [that] when confronted with stressful or emotional decisions, they are more likely to act impulsively, on instinct, without fully understanding or analyzing the consequences of their actions.<sup>20</sup>

It can therefore be inferred that teens cannot really control their impulses.<sup>21</sup> Regarding the need to be rewarded and praised, Professor Laurence Steinberg has stated, “this isn't a choice that kids are making to give in to their friends . . . biologically, they're more *vulnerable* to that.”<sup>22</sup> Hence, as maturity sneaks in, people will develop better control over their impulses and use a better reasoning

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<sup>14</sup> *Id.*

<sup>15</sup> Kaiser, *supra* note 2.

<sup>16</sup> *Id.*

<sup>17</sup> Feld, *supra* note 11, at 117.

<sup>18</sup> *Id.* at 116.

<sup>19</sup> Tenneson & Pustilnik, *supra* note 5, at 556-57. Michael N. Tenneson & Amanda C. Pustilnik use the term *dumb* as in *doing dumb things*, like taking bad risks and making bad bets, and not in the sense that teens have an intelligence deficiency. *Id.*

<sup>20</sup> Ritter, *supra* note 9 (interviewing David Fassler on testifying before legislative committees on Brain Development); also see David Fassler, *Adolescent Brain Development and Life Without Parole*, HUFF POST (Feb. 24, 2012, 4:21 PM), [https://www.huffingtonpost.com/david-fassler-md/adolescent-brain-developm\\_b\\_1300091.html](https://www.huffingtonpost.com/david-fassler-md/adolescent-brain-developm_b_1300091.html). Dr. David Fassler is a psychiatry professor at the University of Vermont College of Medicine.

<sup>21</sup> Ritter, *supra* note 9.

<sup>22</sup> *Id.* (quoting Laurence Steinberg) (emphasis added).

approach to make better judgments, aiding in the need to make careful decisions when stressful situations arise.<sup>23</sup>

### *B. Brain Development*

Thanks to Neuroscience and technology, significant evidence to explain the brain structure and function during the teenage years is now available. First of all, neuroscience confirms that *adulthood* and, thus, brain development, arrives in the late twenties. The differences between adolescent and adult reasoning and behavior can be observed and studied through brain development.<sup>24</sup> Secondly, technology in brain imaging, such as Magnetic Resonance Imaging (hereinafter, “M.R.I.”), has provided “the opportunity to safely track the development of brain structure, brain function, and brain connectivity in humans.”<sup>25</sup> M.R.I. has helped the scientific and sociological field support their findings and conclusions regarding what was previously described about the adolescent brain.<sup>26</sup>

#### i. Structural Brain Development

The human brain has reached approximately ninety percent of the adult size by the time a child is six years old; however, its development is still in the early raw stages of development.<sup>27</sup> Therefore, it is pertinent to say that the teenage years are “a critical period for brain development” and *not* brain growth.<sup>28</sup> With brain imaging, scientists have been able to study the process of brain development. Basically, this development revolves around the brain’s wiring. Beginning with the brain’s axons, which are “long, thin tendrils that extend from the cell and transmit information,” getting wrapped (like insulation) around myelin (the white matter in the brain), which contributes in the growth on brain connectivity.<sup>29</sup> The key to what myelin does during the adolescence is that it doubles its amount in the brain, thus, in the axons. These doubled amounts affect the speed at which messages are sent through the brain, meaning, “impulses or messages can pass at far higher speed along the axon,” thus affecting someone’s

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<sup>23</sup> Hannah Seigel Proff & Michael Stevens Juba, *Evolving the Standard of Decency*, 47 COLO. LAW. 39, 40 (2018).

<sup>24</sup> Feld, *supra* note 11, at 118.

<sup>25</sup> BONNIE ET AL., *supra* note 12, at 96.

<sup>26</sup> *Id.* (“adolescents have poor self-control, are easily influenced by their peers, and do not think through the consequences of some of their actions,” brain imaging suggests, “adolescents lack these abilities because of biological immaturity of the brain”).

<sup>27</sup> *Brain Development: Teenagers*, RAISING CHILDREN, <https://raisingchildren.net.au/pre-teens/development/understanding-your-pre-teen/brain-development-teens> (last updated Nov. 12, 2017).

<sup>28</sup> See Mariam Arain et al., *Maturation of the Adolescent Brain*, 9 NEUROPSYCHIATRIC DISEASE AND TREATMENT 449, 457 (2013); see also Alexandra Sifferlin, *Why Teenage Brains Are So Hard to Understand*, TIME (Sept. 8, 2017), <http://time.com/4929170/inside-teen-teenage-brain/>.

<sup>29</sup> See Angela Griffin, *Adolescent Neurological Development and Implications for Health and Well-Being*, 5 HEALTHCARE 62 (2017); see also Sifferlin, *supra* note 28.

primary learning abilities.<sup>30</sup> The myelination process begins from the back of the brain all the way through the front, which is the area involved in “decision-making, planning and self-control,” ending with a matured brain and person.<sup>31</sup> While the myelination process is happening, the dendrites, which the axons send information to, grow branches all across the brain, allowing for better communication throughout the brain.<sup>32</sup> Then, “[t]he synapses, the chemical junctions at which messages are passed on, grow stronger if they are used often.”<sup>33</sup> What it is meant by *if they are used often* is that if some synapses are not used, they will eventually disappear, causing pruning. The pruning “causes the brain’s cortex—the outer layer of ‘grey matter’ which does much of our complex, conscious thinking—to become thinner and more efficient.”<sup>34</sup> While that is happening, the corpus callosum (responsible for joining the two hemispheres, left and right), “thickens, improving the efficiency of communication both between and within the brain’s hemispheres.”<sup>35</sup> With this, stronger links develop connecting different regions in the brain.<sup>36</sup>

It is important to remember that brain development begins on the back of the brain and moves all the way to the front. Why is it important? Mainly because “regions that involve primary functions, such as motor and sensory systems, mature earliest compared with brain regions that integrate these primary functions for goal-directed behavior.”<sup>37</sup> The motor and sensory system development, as mentioned, is the first thing to develop in the brain, and it is also located in the back of the brain, which is why this is the first thing our brains work on. The last thing we develop is, the constantly evolving, pre-frontal cortex. The pre-frontal cortex is the “defining feature of our human brain;” this is the part of the brain that is responsible for the risky behavior, poor decision-making, and social-rewarding activities teenagers engage in.<sup>38</sup> Brain development, specifically the pre-frontal cortex, will not fully be developed until late twenties or even later, which is why “risk-taking, [peer pressure] and impulsive behavior are more common among teens and young adults,” because teenagers don’t fully have the capacity to weigh pros and cons.<sup>39</sup>

## ii. Brain Development and a Teenager’s Day-to-Day Life

The previously described brain developments, which take place during the teenage years, can be noticeable in a teenager through “*behavioral, cognitive* and

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<sup>30</sup> See Griffin, *supra* note 29; see also Sifferlin, *supra* note 28.

<sup>31</sup> Sifferlin, *supra* note 28.

<sup>32</sup> Griffin, *supra* note 29.

<sup>33</sup> *Id.*

<sup>34</sup> *Id.* at 62-63 (suggesting that synapses depend on experiences someone goes through in order to survive and grow stronger, or disappear).

<sup>35</sup> *Id.* at 63.

<sup>36</sup> *Id.*

<sup>37</sup> BONNIE ET AL., *supra* note 12, at 96.

<sup>38</sup> Griffin, *supra* note 29, at 63.

<sup>39</sup> See Sifferlin, *supra* note 28; see also Griffin, *supra* note 29, at 63.

*emotional changes,*” which reciprocate to poor judgment, quick reactions, and long journeys to find themselves.<sup>40</sup> The timing of these changes, which arise from puberty and maturing, “underlie many aspects of a [risky] behavior.”<sup>41</sup> It is therefore imperative to discuss these changes on their own, in order to have a better understanding of why brain development influences in a teenager’s behavior.

Thanks to brain imaging technology, such as M.R.I., researchers have been able to study the maturation of the pre-frontal cortex and its relation to cognitive behavior in teenagers. Throughout their teenage years, adolescents: (1) “lack mature capacity for self-regulation in emotionally charged contexts, relative to adults and children;” (2) “have a heightened sensitivity to proximal external influences, such as peer pressure and immediate incentives, relative to adults,” and (3) “show less ability to make judgments and decisions that require future orientation.”<sup>42</sup> Basically, this pattern is what makes a teenager prone to risky behavior that results in some sort of reward, even if it is detrimental to others or him/herself.<sup>43</sup> The maturation of these cognitive patterns will mold the teenager into an adult capable of processing new information, knowing the difference from right and wrong, and improving their decision-making skills.<sup>44</sup>

As stated, decision-making is part of the brain development related to cognitive behavior, however, it is also “highly influenced by emotion.”<sup>45</sup> The aforementioned rewards that adolescents highly search and desire, although being part of a cognitive system, are also derived from an “emotional regulation” that result in risk taking situations.<sup>46</sup> During brain development, many structures are—at the same time—involved in processing emotions (such as: fear, anger, excitement), controlling impulses (such as: motivation and survival), and “feelings of pleasure that reward behavior” (such as: food, money, and signs of appreciation).<sup>47</sup> These structures are located in the limbic system, which is located in the cerebrum.<sup>48</sup> For example, the nucleus accumbens is associated with the need to be rewarded and praised by others; it acts by providing some sort of goal-oriented thirst, whether favorable or harmful to the acting teenager. At the same time, the amygdala and hippocampus are linked together to control how someone reacts to fear, thus, having an effect on emotional response. That reaction, then, remains in the hippocampus, creating an emotional memory.<sup>49</sup> Nonetheless, even

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<sup>40</sup> Griffin, *supra* note 29, at 64 (emphasis added); see also BONNIE ET AL., *supra* note 12, at 97.

<sup>41</sup> Arain et al., *supra* note 28, at 452.

<sup>42</sup> BONNIE ET AL., *supra* note 12, at 91.

<sup>43</sup> *Id.*

<sup>44</sup> Griffin, *supra* note 29, at 64.

<sup>45</sup> *Id.*

<sup>46</sup> *Id.* at 64-65.

<sup>47</sup> *Id.* at 63 (explaining that some of the structures in brain development that are involved in processing emotions and controlling impulses, include the “hippocampus, the amygdala, the nucleus accumbens and the prefrontal cortex”); Arain et al., *supra* note 28, at 453.

<sup>48</sup> Arain et al., *supra* note 28, at 453.

<sup>49</sup> Griffin, *supra* note 29, at 63.

though those brain structures influence the emotional behavior of a teenager, neurotransmitters, such as dopamine, have a high involvement in the regulation of emotions and behavior during adolescence. Researchers have stated that dopamine has “been found to be involved in the brain’s response to novelty and rewards in the environment as well as risk-taking behavior.”<sup>50</sup> Based on this, experts have been able to understand and explain the adolescent brain and its involvement with adolescent behavior, “such as quickness to anger, intense mood swings, and making decisions [based on] ‘gut’ feelings,” among others.<sup>51</sup>

## II. BRAIN DEVELOPMENT AND CRIMINAL ACTIVITY

As described above, the study of brain development has helped understand why teenagers engage in risky and, somewhat, delinquent behavior. M.R.I. studies have led researchers, from a biological perspective, to believe that depending on the stage of brain development, teenagers will not think properly before taking a risk and will rather act on impulses. When teenagers face situations where they have the time to process what is happening and their surroundings, they will probably be able to “distinguish right from wrong” and react like an adult would; however, when faced with an emotionally stressful situation and with incomplete information, basic emotional sensations will drive an adolescent to react irrationally and impulsively.<sup>52</sup> For example, Dr. Fassler explains this impulse by explaining the likelihood of an adolescent to commit a crime: “an anxious adolescent with a gun in a gas station or a convenience store,” he then adds that the teenager “is significantly more likely to pull the trigger than an adult . . . under the exact same circumstance.”<sup>53</sup> Essentially, it can be said that, depending on the situation, teens are “capable of reasoning about the possible harm or benefits of different courses of action”, and are therefore able to pull the brakes. However, sometimes the situation prevents them from weighing the risks involved.<sup>54</sup> It is pertinent then to consider the circumstances the teenager was going through, in order to get a better understanding of what he was feeling and thinking prior to making a decision.<sup>55</sup>

In order to have a better understanding of why adolescents make irrational decisions that lead to delinquency, researchers have come up with two types of cognitions: hot and cold.<sup>56</sup> Basically, these are categories for what was previously explained on teenagers measuring and taking risks based on the situation they are facing and how much time or information they have. Researchers describe *hot cognition* as conditions where teenagers face “high arousal and intense emotion”

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50 *Id.*

51 Arain et al., *supra* note 28, at 453.

52 See BONNIE ET AL., *supra* note 12, at 99; also see Feld, *supra* note 11, at 114-15.

53 Fassler, *supra* note 20.

54 Arain et al., *supra* note 28, at 455; also see Guy, *supra* note 1.

55 Arain et al., *supra* note 28, at 455.

56 *Id.*

that leads to poor decisions.<sup>57</sup> On the other hand, *cold cognition* relates to mellow situations where teens go in the right direction of the law.<sup>58</sup> Therefore, based on brain development research, “we should expect some irrational, emotion-driven [and possibly delinquent] behavior from [teenagers, since] it is not until their late twenties that it is reasonable to expect them to have the brain development necessary to behave like fully rational adults.”<sup>59</sup>

Below, there are several factors which, together with the development of the brain, can contribute to teenage delinquency.

#### A. Peer Pressure

Why does the presence of peers interfere with self-control? Why do teenagers feel the need to be praised by their peers, thus engaging in risky situations? As I explained before, the pre-frontal cortex and the limbic system are the last structures to develop in the brain. They regulate emotions and decision-making, resulting in the process of self-control. Therefore, during the adolescence, teenagers are less likely to control impulses, plan ahead, or weigh the pros and cons of different courses of action. Thanks to M.R.I., researchers have “discovered that the peer [pressure] effect was . . . due to the impact that peers have on adolescents’ reward sensitivity.”<sup>60</sup>

Professor Steinberg has created a process that monitors brain activity by putting people through a simulation involving a series of risk-taking scenarios. It consisted on teenagers playing a game. First, without their friends, to which Steinberg noticed that “they [didn’t] play it any differently than adults do.”<sup>61</sup> Then, with their friends present in the room without interacting with the teenager being monitored, Steinberg noticed that in the M.R.I. “[t]here was much greater activation of reward centers in the brain when the adolescent was playing the game being watched by his friends.”<sup>62</sup> He explained this stating that when a teenager has their peers as spectators, the risks will double.<sup>63</sup> This M.R.I. analysis led Professor Steinberg and his fellow researchers “to think that something is going on when teenagers are with their peers that makes them especially sensitive to reward.”<sup>64</sup>

Consequently, jurisprudence has shown that teenagers will commit a crime in a group because the presence of peers stimulates the “reward centers of the brain

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<sup>57</sup> *Id.*

<sup>58</sup> *Id.*

<sup>59</sup> David Pimentel, *The Widening Maturity Gap: Trying to Punish Juveniles as Adults in an Era of Extended Adolescence*, 46 TEX. TECH. L. REV. 71, 84 (2013).

<sup>60</sup> Laurence Steinberg, *Should the Science of Adolescent Brain Development Inform Public Policy?*, 28 ISSUES IN SCI. & TECH. (Spring 2012), <https://issues.org/steinberg/> (last visited May 13, 2019).

<sup>61</sup> Kaiser, *supra* note 2 (citing Laurence Steinberg, *Can teen brain development help explain juvenile crime?*, THE DAILY CIRCUIT (Nov. 15 2012)).

<sup>62</sup> *Id.*

<sup>63</sup> *Id.*

<sup>64</sup> *Id.*

which may increase risk-taking.<sup>65</sup> But, how do violence, peer pressure, and teenagers all fit into the equation? Simply put, teenagers by themselves rarely resort to violence in order to resolve a conflict; however, when peers are present, “adolescents are [prone] to resort to violence to resolve the conflict.”<sup>66</sup> Thus, the equation seems to be that teenage violence results from the combination of the need to be accepted and rewarded by peers. Doctor Alice Sterling Honig explains this as a type of “triumph of physical power [that is] glorified and held up” by their peers.<sup>67</sup> This is, therefore, *more* proof that peer pressure highly influences a teenager at times of applying common sense and in acting impulsively. The adolescent’s perspective of right and wrong depends on what their peers think.<sup>68</sup>

### B. Parental Guidance

Why is parental guidance so important during brain development? Because during the maturation of the pre-frontal cortex, the cognitive functions are in full development mode, and therefore, are very involved in behavioral control. During this adolescent stage, parents should not overprotect their children, but “help [them] through this period by listening and offering support and guidance.”<sup>69</sup> According to prison guards, many teenagers at juvenile detention centers end in prison because of lack of restrictions from their parents.<sup>70</sup> Steinberg agrees with this, and he specifically stated that when “a child who is at a stage of development where his own self-control is still immature and still developing, one thing that can help [the child] is to have self-control imposed on him [or her] by other people.”<sup>71</sup> By this, he meant that parents have roles that, when taken seriously, will result in the guidance of their children and in the prevention of risky and reckless behavior.

There is extensive research regarding parental support and teenage delinquency. Scholars of this subject have stated that “[p]arental behavior can affect the occurrence of delinquent behavior in three main ways: *hostile and coercive family processes, parenting styles and practices, and family modeling and socialization about risky behaviors.*”<sup>72</sup> However, these are not the only family related factors that influence teenage delinquency.<sup>73</sup> Ultimately, it all comes down

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<sup>65</sup> Feld, *supra* note 11, at 120-21.

<sup>66</sup> Susie L. Morris, *Peer Pressure, Media Fuel Youth Violence*, ABC NEWS (June 13, 2018), <https://abcnews.go.com/Health/story?id=116734&page=1>.

<sup>67</sup> *Id.* (quoting Doctor Alice Sterling Honig, a Child Development professor at Syracuse University in New York).

<sup>68</sup> *Id.* (quoting Jay Reeve, a psychologist at Bradley Hospital at Brown University in Providence).

<sup>69</sup> Arain et al., *supra* note 28, at 456.

<sup>70</sup> *Lack of parental guidance cause of surge in juvenile crime*, GHANA WEB (Mar. 23, 2016), <https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Lack-of-parental-guidance-cause-of-surge-in-juvenile-crime-425513>.

<sup>71</sup> Kaiser, *supra* note 2 (citing Laurence Steinberg, *Can teen brain development help explain juvenile crime?* THE DAILY CIRCUIT (Nov. 15 2012)).

<sup>72</sup> BONNIE ET AL., *supra* note 12, at 102-03 (emphasis added).

<sup>73</sup> *Id.* at 103 (other factors include, but are not limited to: socioeconomic status, ethnicity, family size, and mother’s age at the birth of the child).

to the type of caregiving the child receives before and during the adolescence. Homes with involved, authoritative, and nurturing parenting will most likely raise a teenager who will not engage in delinquent behavior. However, “[d]isengaged parenting raises the risk for adolescent [behavioral problems] due to the absence of emotional bonding.”<sup>74</sup> The risk of parents not being present (in this context, *not being present* means being disengaged) in a teenager’s life could lead to antisocial behavior or a group of peers with deviant views that will result in the commission of a crime.<sup>75</sup>

A research on parenting and delinquency found significant links between “all parenting dimensions and delinquency but the magnitude of the related on the particular parenting dimension.”<sup>76</sup> Their research consisted on gathering information of different parenting perspectives and analyzing its impact on teenage delinquency.<sup>77</sup> As it turns out, their findings “revealed that negative aspects of support including rejection, hostility and neglect and psychological control had the strongest links to delinquency.”<sup>78</sup> But what caught my attention—and which I believe to be pertinent to this article—was that “[a] lack of support had a relatively strong link to delinquency if that parent and child were the same sex.”<sup>79</sup> If we take this as true, it could be said that children are prone to identify and have a better relationship with the same sex parent; thus, abandonment by the same sex parent will probably cause the teenager to rebel.<sup>80</sup> Following that line of thought, lack of *paternal* support in a boy’s growth, for example, will probably result in the boy growing up without a father figure, causing him to resort to an outside male figure that might lead him to a negative, delinquent life. According to Walter R. Schumm, “[w]ith respect to conduct problems, as reported by parents on the [Strengths and Difficulties Questionnaire] scale [recent research has] not [found] significant differences between the children of same-sex and heterosexual parents.”<sup>81</sup> However, because of sampling limitations, very little is known about same-sex families and its links to delinquency and there is a need for high-quality research in this area.

### III. CRIMINAL PUNISHMENT & JUVENILE DELINQUENCY

It has long been established that a punishment should be proportional to the crime. According to this, how people are punished should be equivalent to their

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<sup>74</sup> *Id.*

<sup>75</sup> *Id.* at 105-06.

<sup>76</sup> Machteld Hoeve et al., *The Relationship Between Parenting and Delinquency: A Meta-analysis*, 37 J. ABNORM. CHILD PSYCHOL. 749, 762 (2009).

<sup>77</sup> *Id.*

<sup>78</sup> *Id.* at 765.

<sup>79</sup> *Id.*

<sup>80</sup> *Id.* at 763.

<sup>81</sup> Walter R. Schumm, *A Review and Critique of Research on Same-Sex Parenting and Adoption*, 119 PSYCHOL. REPORTS 34 (2016),

[https://www.researchgate.net/publication/308043861\\_A\\_Review\\_and\\_Critique\\_of\\_Research\\_on\\_Same-Sex\\_Parenting\\_and\\_Adoption](https://www.researchgate.net/publication/308043861_A_Review_and_Critique_of_Research_on_Same-Sex_Parenting_and_Adoption).

involvement during the commission of the crime, thus harsher punishments tend to be applied for the most serious crimes.<sup>82</sup> The Puerto Rico Penal Code (hereinafter, “Penal Code”) establishes that punishment may not “attempt against human dignity” and will be “in proportion to the seriousness of the crime.”<sup>83</sup> The Penal Code also states that the punishment should be imposed to: (1) protect society; (2) deter future crime; (3) rehabilitate the offender, and (4) punish according to the personal culpability of the criminal offender (retribution).<sup>84</sup> However, regarding juvenile delinquency and punishment, adolescents are driven by peer pressure and impulsivity, so they are “less deserving of harsh punishment.”<sup>85</sup>

There has been an ongoing debate on whether teenagers should be prosecuted in juvenile courts or as adults in the criminal justice system. The way a teenager is tried and prosecuted will have serious life changing repercussions in the course of their future. The process will have a huge negative impact because the adolescent brain is at a developmental stage where it is vulnerable and susceptible to be easily influenced by hardened criminals at adult prisons, which will prevent the adolescent from reforming.<sup>86</sup> However, legislators in the United States have made policies that facilitate the prosecution of teenagers in the adult system. Such is the case that young offenders under the age of eighteen that have been charged as adults spiked between the years 1990 and 2010, where “the number of juveniles serving time in adult prisons . . . increased by almost 230%.”<sup>87</sup> Charging *kids* as adults will make them think that the justice system has given up on them and their “stupid adolescent behavior.”<sup>88</sup> The courts’ determination to prosecute a teenager in the adult system is based on the harm caused, and not the teenager’s age, therefore leaving aside their degree of maturity into account. Their reasoning is that “if a [teenager] causes serious harm, then he or she is not truly a child but rather an adult-like criminal in a child’s body.”<sup>89</sup> This flawed reasoning promotes biased and unfair judging and sentencing. Because of this, courts should analyze which punishment makes for turning a delinquent kid into a responsible citizen. However, at times when courts are at a crossroad between certain policies that requires them to act in a certain way and decide on objective and proportional punishments, there tends to be no room for discretion. At this pivotal point, it is up to policy makers to focus on a criminal justice reform in order to deal with

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<sup>82</sup> Laurence Steinberg, *Sentences Should Acknowledge Juveniles’ Maturity, and Immaturity*, N. Y. TIMES (Feb. 6, 2015), <https://www.nytimes.com/roomfordebate/2012/06/05/when-to-punish-a-young-offender-and-when-to-rehabilitate/sentences-should-acknowledge-juveniles-maturity-and-immaturity> [hereinafter Steinberg, *Sentences*].

<sup>83</sup> P.R. PEN. COD. art. 11, 33 P.R. LAWS ANN. Tit. 33, § 5011 (2015) (translation by the author).

<sup>84</sup> *Id.* (translation by the author).

<sup>85</sup> Steinberg, *Sentences*, *supra* note 82.

<sup>86</sup> Guy, *supra* note 1.

<sup>87</sup> *Id.*

<sup>88</sup> Kaiser, *supra* note 2 (citing Laurence Steinberg, *Can teen brain development help explain juvenile crime?*, THE DAILY CIRCUIT (Nov. 15 2012)).

<sup>89</sup> Tennison & Pustilnik, *supra* note 5, at 554.

juvenile delinquency and, thus, determine adequate punishments to minors who commit illegal activities.

#### *A. Retribution*

Believers of this punishment see it as a way to proportionally punish the wrongdoer, even if it doesn't "result in a reduction [of the] crime."<sup>90</sup> Retribution stays focused on the commission of the crime and justifies the punishment based on the magnitude of the crime at the time it was committed.<sup>91</sup> Juvenile cases with serious crimes are usually seen in regular adult courts, which result in adult-like punishments. As previously discussed, teenagers do not think, nor react, like adults. However, courts have, on occasions, given harsh punishments to criminal offenders for actions done during their teenage years. Retribution's main goal is to deter the crime for which they are punishing. The thing is, this punishment is expensive, and there is no guarantee that it will deter future crimes. To get a better understanding of this, increasing a sentence of ten years to twenty years seems rational, however, "the cost of administering the more severe penalty is very high."<sup>92</sup>

It is then fair to say that when it comes to criminally punishing a teenager who acted with an irrational impulse because of the reward he/she might get for committing a crime, or who simply did not conduct a cost-benefit analysis, retribution will not necessarily deter others from committing the exact same crime or another far worse.<sup>93</sup> Thus, imposing these harsh penalties on teenagers will cost the state a lot more, and it is not likely that the expected deterrence effect will, in fact, deter the adolescent whose brain is still not developed and will likely be "more impulsive and less reflective in their behavior."<sup>94</sup>

#### *B. Rehabilitation*

People who strongly support retribution criticize rehabilitation because the theory removes the analysis of punishing based on what the criminal deserves and "consider[s] only what will cure him," thus makes him/her a good citizen.<sup>95</sup> Rehabilitation consists of the reformation of the wrongdoer instead of imposing a sense of fear and a will to hurt the criminal because it is equal to the crime committed.<sup>96</sup>

When applied to juvenile situations, we already know that "the brains of adolescents are biologically and developmentally different from the brains of

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<sup>90</sup> JOSHUA DRESSLER, UNDERSTANDING CRIMINAL LAW 18 (2018).

<sup>91</sup> *Id.*

<sup>92</sup> Pimentel, *supra* note 59, at 94.

<sup>93</sup> *Id.* at 95; also see Tennison & Pustilnik, *supra* note 5, at 545 n.51.

<sup>94</sup> Pimentel, *supra* note 59, at 95.

<sup>95</sup> DRESSLER, *supra* note 90, at 23.

<sup>96</sup> *Id.*

adults.<sup>97</sup> It is mainly because of this that it can be implied that teenagers “are more likely to mature and change over time, enhancing the possibility of rehabilitation.”<sup>98</sup> Because of this reasoning, experts in child development consider “that rehabilitation works better for juveniles than for adult offenders.”<sup>99</sup> For example, a guilty fourteen-year-old murderer will have matured by the end of his teenage years, and during those maturing years he could be responsive to rehabilitation; it is different with an adult murderer who is set in his own *matured* ways.<sup>100</sup>

### C. Retribution vs. Rehabilitation in Juvenile Punishment

It is conflicting to embrace the fact that “juvenile court proceedings are aimed very much at rehabilitating [adolescents], while the adult system has become increasingly focused on retribution.”<sup>101</sup> This being so, it is pertinent to reform the way the adult system, and thus, the justice system, punishes teenagers. Kids at the time of the commission of the crime, as explained above, act by impulse and without analyzing its consequences of their possible actions and risks this makes deterrence likely to fail. It will fail because at the stage their brains are at, teenagers will continue to act recklessly without mediating the consequences; hence, a harsh retributive punishment will not deter future crimes.<sup>102</sup> “Teens are less likely to weigh the prospect of future punishment relative to immediate reward.”<sup>103</sup> Meanwhile, rehabilitating a teenager is a real possibility since they are in constant development. Teens are highly influenced by others; by giving them a chance to rehabilitate they can reform and thus, “pose a lower risk of recidivism and need not be incapacitated for life.”<sup>104</sup>

We must remember that, even though the goal is to punish and deter the crime for which a teen is being punished, this is happening during the adolescence. This means that it happens due to the immaturity (and sometimes, lack of guidance) a person goes through, which eventually fades. Professor Steinberg stated that “only [ten] percent of serious juvenile offenders become adult criminals.”<sup>105</sup> Which is why courts should consider the age and maturity and lean towards a lesser punishment for juvenile delinquents for them to be able to participate in vocational training and rehabilitation programs.<sup>106</sup>

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<sup>97</sup> Fassler, *supra* note 20.

<sup>98</sup> *Id.*

<sup>99</sup> Ritter, *supra* note 9 (quoting Peter Ash).

<sup>100</sup> *Id.*

<sup>101</sup> Pimentel, *supra* note 59, at 94.

<sup>102</sup> Tennison & Pustilnik, *supra* note 5, at 584.

<sup>103</sup> *Id.* at 576.

<sup>104</sup> *Id.* n.51.

<sup>105</sup> Steinberg, *Sentences*, *supra* note 82.

<sup>106</sup> *Id.*; see Kelvin Merced, *Hacia un acercamiento terapéutico: análisis de los servicios rehabilitativos provistos a los menores Institucionalizados en facilidades carcelarias*, 87 REV. JUR. UPR 1281, 1283 (2018) (translation by the author) (stating that “it is necessary to indicate that the rehabilitative processes of young offenders are totally different from those provided in the adult system due to their minority and the stage of development in which they find themselves”).

#### IV. TEENAGE BRAIN DEVELOPMENT SUPREME COURT JUVENILE CASES

##### A. *Roper v. Simmons*

In *Roper v. Simmons*,<sup>107</sup> Christopher Simmons was a seventeen-year-old kid in Missouri when he committed a murder after a burglary. Alongside a friend, he broke into the victim's home, tied her up and pushed her from a bridge into a river, causing her to drown. His friend testified against him saying the crime was planned and premeditated, and Simmons was found guilty.<sup>108</sup> At that time, State law required that when a teenager committed a crime like murder, he must be tried as an adult.<sup>109</sup> The lower court told the jury to consider two things: Simmons age at the time of the event as a mitigating factor, and death penalty.<sup>110</sup> The case reached the Supreme Court of the United States, where the majority went State-by-State analyzing juvenile death penalty, and decided against it for individuals under the age of eighteen at the time of the offense, concluding that the Eighth Amendment rejected such punishment for minors.<sup>111</sup> They reached this consensus by analyzing Simmons' age and how teenagers have a less developed brain and cognitive skills—compared to adults. Based on this, the Court noted three factors that demonstrate that adolescents can't be placed in the same level of adult offenders that are subject to death penalty.<sup>112</sup> The first factor was that a "lack of maturity and an underdeveloped sense of responsibility . . . found in youth more often than in adults [leads to] impetuous and ill-considered actions and decisions."<sup>113</sup> The other factor that the Court considered was that "juveniles are more vulnerable [and] susceptible to negative influences and outside pressures, including peer pressure."<sup>114</sup> The third determining factor was 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."<sup>115</sup> For the purpose of this article, this third factor supports the main idea that teenagers, if given the opportunity to rehabilitate, will reform. The Court specifically stated that:

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 greater possibility exists that a minor's character deficiencies will be reformed.<sup>116</sup>

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<sup>107</sup> *Roper v. Simmons*, 543 U.S. 551 (2005).

<sup>108</sup> *Id.* at 556.

<sup>109</sup> *Id.* at 557.

<sup>110</sup> *Id.* at 558.

<sup>111</sup> *Id.* at 564-68; U.S. CONST. amend. VIII.

<sup>112</sup> *Id.* at 569.

<sup>113</sup> *Id.* (citing *Johnson v. Texas*, 509 U.S. 350, 367 (1993)).

<sup>114</sup> *Id.*

<sup>115</sup> *Id.* at 570.

<sup>116</sup> *Id.*

These factors diminished Simmons' culpability and justified abolishing death penalty for teenagers. Furthermore, these factors, while lessening culpability, also support the idea that harsh punishments will not deter adolescents from committing crimes; hence, retribution is not appropriate.

*B. Graham v. Florida*

*Graham v. Florida* started with Graham committing an offense at the age of sixteen. He was charged as an adult and he entered a plea deal in which he did jail time and probation.<sup>117</sup> During his probation, Graham was arrested for an alleged involvement in a shooting. At the age of eighteen he faced a different judge, who sentenced him for violating his initial probation.<sup>118</sup> The judge scolded Graham for not taking the advantage to turn his life around, determined that he had an escalating pattern of crime that proved that there were no other sentencing options, and proceeded to sentence Graham to life in prison without the possibility of parole.<sup>119</sup> In this case, imposition of a life sentence without the possibility of parole was for a minor who had committed armed burglaries and robberies. The Supreme Court repeated the scientific analysis used in *Roper*, and established that states cannot impose a life sentence without the possibility of parole to a minor who did not commit murder.<sup>120</sup> The majority added that brain science—as Graham's *Amici Curiae* pointed out—suggests that there are fundamental differences between juvenile and adult minds. Following this line of thought, the Court focused on how “parts of the brain involved in behavior control continue to mature through late adolescence.”<sup>121</sup> Thus, this developmental difference, the Court figured, means that a juvenile's brain is constantly changing, therefore they have a bigger chance of change than adults, resulting in actions that will not constitute “irretrievably depraved character” as it tends to happen with adults.<sup>122</sup> The Court also noted in the *Amici* that, these differences “also put[s] juveniles] at a significant disadvantage in criminal proceedings.”<sup>123</sup> This increases the risk of error in assessing their culpability, because it impairs youths' ability to understand legal proceedings, to communicate with counsel, and to make legal decisions.<sup>124</sup> The Court found that the punishment was too harsh, and with the lessening culpability acknowledged from *Roper* it was held that retribution and deterrence were inappropriate.<sup>125</sup> Additionally, the Court added that the harsh punishment prevented the possibility of rehabilitation.<sup>126</sup> With this rationale, it can be implied that, teenagers that commit serious crimes are not hopelessly lost.

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<sup>117</sup> *Graham v. Florida*, 560 U.S. 48, 53-54 (2010).

<sup>118</sup> *Id.* at 55.

<sup>119</sup> *Id.* at 56-57.

<sup>120</sup> *See id.* at 69-75.

<sup>121</sup> *Id.* at 68.

<sup>122</sup> *Id.* (citing *Roper v. Simmons*, 543 U.S. 551, 570 (2005)).

<sup>123</sup> *Id.* at 78.

<sup>124</sup> *Id.*

<sup>125</sup> *Id.* at 70-72.

<sup>126</sup> *Id.* at 74.

They just need to feel the possibility of getting out as a new reformed citizen, and to sentence a teenager to life in prison without the possibility of parole prevents them from doing so.<sup>127</sup>

The dissent by Justice Thomas, joined by Justice Scalia and Justice Alito, focused, in part, on the relevance of science and juvenile punishment. Specifically, they argued how the majority sided with the *Amicus*' brief on the differences between "adolescents for whom antisocial behavior is a fleeting symptom and those for whom it is a lifelong pattern."<sup>128</sup> They relied on a study, not cited in the *Amicus* brief. The study was an older 1993 paper, published well before the real advent of modern neuroscience.<sup>129</sup> However, this study was not contrary to what was stated by the *Amicus* regarding antisocial behavior, it basically reaffirmed it. What is true for adolescents is that their brains can be *molded*. They are in a period of development. What the majority wanted to assert was that not all adolescents guilty of even major crimes are hopelessly lost.

### C. *Miller v. Alabama*

In *Miller v. Alabama* the Supreme Court of the United States consolidated two appeals, one of which involved a fourteen-year-old boy who participated in a robbery in which his accomplice killed an employee of a store.<sup>130</sup> Although the prosecutor had the discretion to prosecute (or not) the minor as an adult, after being convicted as an adult, the only sentence available was life without the possibility of parole. The case also involved a fourteen-year-old boy who had killed a victim in the process of another robbery. The state juvenile court sent the case to an adult court, and the minor received a mandatory life sentence without parole. The Supreme Court declared these sentences unconstitutional noting the diminished culpability and the likelihood to reform. They based their position on the same scientific analysis cited in *Roper* and *Graham*. The Court held that the neurological—scientific—factors established in the previous cases had become stronger.<sup>131</sup>

Some factors that this Court acknowledged from *Roper*, were that only a "small proportion" of teenagers that commit any illegal activity, will continue to engage in this problematic behavior.<sup>132</sup> The Court noted that *Graham* stated continuing scientific developments that showed significant brain differences between adults and teenagers, specifically parts "involved in behavior control."<sup>133</sup> Another factor that the Court considered, according to the *Amicus Curiae* by the American Psychological Association, was how "that adolescent brains are not yet

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<sup>127</sup> *Id.* at 73-74.

<sup>128</sup> *Id.* at 117 (Thomas, J., dissenting).

<sup>129</sup> *Id.* at 118 (Thomas, J., dissenting).

<sup>130</sup> *Miller v. Alabama*, 567 U.S. 460 (2012).

<sup>131</sup> *Id.* at 472 n.5.

<sup>132</sup> *Id.* at 471.

<sup>133</sup> *Id.*; see also *Id.* at 460 n.5 (mentioning the on-going research and cited the Brief of the American Psychological Association as stating "[a]n ever-growing body of research in developmental psychology and neuroscience continues to confirm and strengthen the Court's conclusions").

fully mature in regions and systems related to higher-order executive functions such as impulse control, planning ahead, and risk avoidance.<sup>134</sup> Consequently, the Court insisted that a sentencer must consider mitigating factors in juvenile cases such as the stage in life that the teenager is at. This means, taking into consideration that adolescence is: (1) “a time of immaturity, irresponsibility, ‘impetuousness[,] and recklessness’”;<sup>135</sup> (2) a moment in life when a person may get caught up in the claws of peer pressure, and (3) a time of mental and emotional development, which could lead to psychological damage.<sup>136</sup>

## CONCLUSION

Neurobiological research through M.R.I. has proved that teenagers’ brains and the way they function when making decisions or solving problems, are different than adults. Depending on the stage of the brains development, not the age, adolescents are prone to act on impulse and rewards, and will not measure right or wrong behavior (even though they recognize what is right and what is wrong). While brain scans do show differences between adult and teen brains, courts should decide whether or not that matters in the courtroom. Even if courtrooms decide not to engage in neuroimaging science, there is enough research to prove and focus on the importance of adolescent development. So, should the justice system punish a teenager who commits a serious crime differently from an adult that commits the same crime? As this article has explained, the answer is Yes. I am not suggesting that society should punish a teenager differently than an adult because teenagers need to be excused from total criminal responsibility. I am not arguing that at all. What I am suggesting is that research has shown that kids will mature; therefore, a kid that commits a crime is likely to reform. Teenagers, when up for sentencing, should be considered for rehabilitation. This gives them an opportunity to reform and phase out their criminal behavior; it gives them hope and prevents cruel punishments related to retribution.

It is time to re-evaluate the policies regarding young offenders, and advocate for policies that protect them from harsh punishments by assessing each adolescent’s maturity in order to determine a just punishment. After all, teenagers are treated as minors for many things, such as getting married, drinking, going to the casino, needing a parent or caretaker to go to the doctor; the justice system needs to be in sync with the times. Since it is not a viable idea to create a court to attend juvenile cases ranging from fifteen to nineteen years of age, what I am suggesting is to consider the offender’s age and maturity to mitigate the punishment. The United States Supreme Court has acknowledged several differences in brain development between youth and adult minds, and thus, has established mitigating factors to consider in juvenile cases. Professionals in the

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<sup>134</sup> *Id.* at 472 n.5 (citing Brief for American Psychological Association et al. as Amici Curiae Supporting Respondents at 4, *Miller v. Alabama*, 567 U.S. 460 (2012) (Nos. 10-9646, 10-9647)).

<sup>135</sup> *Id.* at 476 (citing *Johnson v. Texas*, 509 U.S. 350, 368 (1993)).

<sup>136</sup> *Id.*

legal field and court systems need to educate themselves about these differences in brain development, how teenagers react to the world around them, and apply this knowledge when sentencing a juvenile felon.