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YOUNG ADULTHOOD AS A TRANSITIONAL LEGAL CATEGORY: SCIENCE, SOCIAL CHANGE, AND JUSTICE POLICY

Elizabeth S. Scott, Richard J. Bonnie** & Laurence Steinberg****

INTRODUCTION

In the past decade, much attention has focused on developmental brain research and its implications for the regulation of crime. Public and policy interest has been directed primarily toward juveniles. In light of recent research, courts and legislatures increasingly have rejected the punitive response of the 1990s and embraced a developmental approach to young offenders.¹ Of particular importance in propelling this trend has been the framework offered by the U.S. Supreme Court in a series of Eighth Amendment opinions that have rejected harsh adult sentences for juveniles.² These decisions, supported by adolescent brain research,³ rested on two empirically based principles: First, juvenile offenders, due to their developmental immaturity, typically are less culpable and, therefore,

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1. See ELIZABETH S. SCOTT & LAURENCE STEINBERG, *RETHINKING JUVENILE JUSTICE* 206–13 (2008); see also NAT'L RES. COUNCIL, NAT'L ACADS., *REFORMING JUVENILE JUSTICE: A DEVELOPMENTAL APPROACH* 31–88 (Richard J. Bonnie et al. eds., 2013).

2. In 2005, the Supreme Court held that the Eighth Amendment prohibits the death penalty for crimes committed by juveniles in *Roper v. Simmons*, 543 U.S. 551, 578–79 (2005). In 2010, the Court prohibited the imposition of life without parole for juveniles committed by juveniles. *Graham v. Florida*, 560 U.S. 48, 82 (2010). Two years later, the Court extended *Graham*, holding that the Eighth Amendment prohibits the mandatory sentence of life without parole even for juveniles convicted of homicide in *Miller v. Alabama*, 132 S. Ct. 2455, 2475 (2012). Most recently, in *Montgomery v. Louisiana*, 136 S. Ct. 718, 736 (2016), the Court held that *Miller* created a rule of substantive constitutional law and therefore must be applied retroactively.

3. See *Miller*, 132 S. Ct. at 2464–65 (citing developmental brain research showing differences between juvenile and adult brains); *Graham*, 560 U.S. at 68 (same).

deserve less punishment than their adult counterparts. Second, because their criminal conduct is the product of immaturity, most juveniles have a greater potential to reform than do adults. This framework has influenced broader sentencing reforms for juvenile offenders.⁴ It has also led policymakers to focus on the impact of juvenile justice settings and programs on youth development and crime reduction.⁵

More recently, advocates and some policymakers have argued that developmental research should shape the law's response to young adult offenders.⁶ Over the past decade, developmental psychologists and neuroscientists have found that biological and psychological development continues into the early twenties, well beyond the age of majority.⁷ Recently, researchers have found that eighteen- to twenty-one-year-old adults are more like younger adolescents than older adults in their impulsivity under conditions of emotional arousal.⁸ It is also well established that young adults, like teenagers, engage in risky behavior, such as drinking, smoking, unsafe sex, drug use, and criminal activity, to a greater extent than older adults.⁹ The possibility that much risky behavior, including involvement in criminal activity, is a product of psychological and social immaturity raises the question of whether the presumption of reduced culpability and greater potential for reform should be applied to young adult offenders as well as juveniles.

Major reform of this kind would represent a substantial departure from what has become a commonly recognized boundary in the justice system between juveniles and adults, marked by the age of majority: legal adults charged with criminal acts are typically subject to a standard punishment regime that applies to all offenders whether they are eighteen or thirty-five years old.¹⁰ This response is not surprising. Legal line drawing is inevitably arbitrary at the margins, and age eighteen, the default age of

4. See ELIZABETH SCOTT ET AL., *THE SUPREME COURT AND THE TRANSFORMATION OF JUVENILE SENTENCING* 25–29 (2015), http://modelsforchange.net/publications/778/The_Supreme_Court_and_the_Transformation_of_Juvenile_Sentencing.pdf [<https://perma.cc/WM4Z-XWTC>].

5. See NAT'L RES. COUNCIL, *supra* note 1, at 241–80.

6. See Vincent Schiraldi et al., *Community-Based Responses to Justice-Involved Young Adults*, NEW THINKING COMMUNITY CORRECTIONS, Sept. 2015, at 1–3 (recommending that cases involving young adults be handled by the juvenile system). Recently, New York City Mayor Bill de Blasio took action to address some of the unique challenges posed by young adults in the New York City justice system. See Press Release, Office of the Mayor, Mayor de Blasio Appoints Heads of Key Criminal Justice Positions (Mar. 11, 2014), <http://www1.nyc.gov/office-of-the-mayor/news/082-14/mayor-de-blasio-appoints-heads-key-criminal-justice-positions#0> [<https://perma.cc/Q9JE-74M7>].

7. See LAURENCE STEINBERG, *AGE OF OPPORTUNITY: LESSONS FROM THE NEW SCIENCE OF ADOLESCENCE* 5 (2014).

8. See Alexandra O. Cohen et al., *When Is an Adolescent an Adult?: Assessing Cognitive Control in Emotional and Nonemotional Contexts*, 27 *PSYCHOL. SCI.* 549, 559–60 (2016).

9. Different types of risky behavior peak at different ages. For example, binge drinking peaks at age twenty, while involvement in criminal activity peaks at age eighteen.

10. See Elizabeth S. Scott, *The Legal Construction of Adolescence*, 29 *HOFSTRA L. REV.* 547, 547–50 (2000).

majority, seems like a natural dividing line between adult and juvenile status in the justice system.¹¹ Further, individuals between the ages of eighteen to twenty-one commit a large portion of serious offenses and have high recidivism rates.¹² Thus, limiting the rehabilitative and more lenient approach of the juvenile system to youths who are legal minors might be justified on public safety grounds. Moreover, until recently, no compelling scientific argument existed for treating young adults differently than their older counterparts. Not so long ago, developmentalists thought that eighteen-year-olds were biologically mature and that young adult brains were fully developed.¹³

In other legal domains, the age at which children attain adult status is often raised or lowered from the default age of majority (age eighteen) when social welfare interests are served.¹⁴ Is it time to reconsider the law's approach to young adult offenders in light of the recent scientific research?

In our view, modest policy reform is justified, although the developmental research suggesting that young adults are not fully mature is in an early stage. In part we reach this conclusion because the scientific research is reinforced by demographic data indicating that the social transition to independent adulthood extends well beyond the age of majority. In contemporary society, age eighteen no longer marks the assumption of mature adult roles. Only a small percentage of young adults today marry or live self-sufficient lives. Instead, this period has become a critical developmental stage of extended dependency and investment in acquiring the skills necessary to accomplish the transition to mature adulthood.¹⁵ For many young adults in the justice system, the prospect of successfully navigating this transition is low.

This Article seeks to advance discussions about the potential implications for justice policy of recent neuroscientific, psychological, and sociological research on young adults. In doing so, we emphasize the importance of not exaggerating either the empirical findings or their policy relevance. The available research does not indicate that individuals between the ages of eighteen and twenty are indistinguishable from younger adolescents in attributes relevant to criminal offending and punishment.¹⁶ Thus, we are skeptical on both scientific and pragmatic grounds about the merits of the proposal by some advocates that juvenile court jurisdiction should be

11. *See id.* at 548.

12. *See* CRAIG A. PERKINS, U.S. DEP'T OF JUSTICE, AGE PATTERNS OF VICTIMS OF SERIOUS VIOLENT CRIME 2 (1997), <http://www.bjs.gov/content/pub/pdf/apvsvc.pdf> (finding that the eighteen- to twenty-one-year-old population commits the highest percentage of serious violent crimes out of all age groups) [<https://perma.cc/MA5A-LGBE>].

13. *See* NAT'L RES. COUNCIL, NAT'L ACADS., ADOLESCENT DEVELOPMENT AND THE BIOLOGY OF PUBERTY 1-3 (Michele D. Kipke ed., 1999).

14. *See* Scott, *supra* note 10, at 556.

15. *See* INST. OF MED. & NAT'L RES. COUNCIL, INVESTING IN THE HEALTH AND WELL-BEING OF YOUNG ADULTS (Richard J. Bonnie et al. eds., 2015) (providing a comprehensive discussion of the changing nature of young adulthood and finding young adulthood in contemporary society to be a vulnerable period of extended dependency and proposing policy reforms).

16. *See infra* Part I.

categorically extended to age twenty-one.¹⁷ But the research does suggest that young adults, like juveniles, are more prone to risk-taking and that they act more impulsively than older adults in ways that likely influence their criminal conduct. Moreover, correctional reform is justified because young adult offenders, like noncriminal young adults and juvenile offenders, are more likely to become productive members of society if they are given the tools to do so during a critical developmental period.

Policymakers today can draw lessons from the developmental model that has shaped juvenile justice reform. At the heart of this reform is a conception of adolescence as a distinct stage between childhood and adulthood.¹⁸ This conception has supported a classification of juveniles as an intermediate category of offenders who are neither excused for their crimes as children nor deemed fully responsible adults.¹⁹ Juvenile justice programs increasingly respond to the developmental needs of adolescent offenders, recognizing that this is the best means of promoting their productive engagement in society and reducing crime.²⁰ Young adults between the ages of eighteen and twenty-one constitute a less well-defined category that has only recently received even informal acknowledgment. But this developmental stage has taken on heightened importance as a period of preparation for adult roles. We conclude that the research supports a regime that recognizes young adults as a transitional category between juveniles and older adult offenders.

Part I of this Article analyzes the behavioral and neuroscientific research on young adults. The research on age patterns of risk-taking, combined with the neuroscientific and psychological research on young adults, suggests that the period of young adulthood can be understood as a transitional stage between adolescence and mature adulthood. Part II turns to the sociological research that reinforces this conception of young adults as occupying a transitional developmental stage. Finally, Part III explores the implications of the developmental and sociological research for crime regulation. We conclude that many of the developmental lessons that have driven reforms of the treatment of juveniles in the justice system can inform the response to the criminal conduct of young adults. Young adults should be treated as a distinct, transitional category subject to reduced sanctions for less serious crimes, special expedited parole policies, and correctional programs and settings designed to serve their developmental needs. This approach can promote the social welfare goals of the justice system more effectively than the conventional binary approach that prevails today.

17. See Schiraldi et al., *supra* note 6.

18. See SCOTT & STEINBERG, *supra* note 1, at 31.

19. See Elizabeth S. Scott & Laurence Steinberg, *Adolescent Development and the Regulation of Youth Crime*, 18 FUTURE CHILD. 15, 19 (2008).

20. See *infra* Part III.

I. BEHAVIORAL, PSYCHOLOGICAL, AND NEUROBIOLOGICAL DEVELOPMENT IN YOUNG ADULTS

Studies of behavioral, psychological, and neurobiological development indicate that the years from the late teens to the early twenties constitute a transitional period that bridges adolescence and mature adulthood. Development is gradual, and the psychological boundaries between adolescence and adulthood are fuzzy. Although eighteen- to twenty-one-year-olds are in some ways similar to individuals in their midtwenties, in other ways, young adults are more like adolescents in their behavior, psychological functioning, and brain development. Thus, developmental science does not support the bright-line boundary that is observed in criminal law under which eighteen-year-olds are categorically deemed to be adults.

A. Age Patterns of Risk-Taking Behavior

An important similarity between adolescents and young adults—potentially relevant to justice policy—is that eighteen- to twenty-one-year-olds, like adolescents, engage in risk-taking behavior (including involvement in criminal activity) at a higher rate than older adults.²¹ Research on the developmental trajectory of criminal behavior has consistently documented an age-linked pattern of offending—the “age-crime curve”—in which rates of criminal behavior increase over the course of adolescence, peak around age eighteen, and then decline during the early twenties.²² Therefore, young adulthood is both the stage during which criminal behavior is most common and the period during which the vast majority of offenders begin desisting from crime. In this regard, young adulthood is arguably the most significant transitional period in the development of criminal behavior.

Young adult offending is best understood as part of a broader behavioral pattern, and not as an isolated phenomenon, because many forms of risk-taking behavior are disproportionately likely during this period.²³ It is noteworthy that the inverted U-shaped developmental pattern observed in the age-crime curve applies as well to most forms of risky activity, which increase over the course of adolescence, peak in the late teens or early twenties (the peak age varies somewhat across different behaviors), and then decline.²⁴ According to a recent Institute of Medicine/National Research Council (IOM/NRC) report, young adults (aged eighteen to twenty-four) experience higher rates of morbidity and mortality than either

21. See INST. OF MED. & NAT'L RES. COUNCIL, *supra* note 15, at 203–13; Teena Willoughby et al., *Examining the Link Between Adolescent Brain Development and Risk Taking from a Social-Developmental Perspective*, 83 BRAIN & COGNITION 315, 315–16 (2013).

22. See generally Gary Sweeten et al., *Age and the Explanation of Crime, Revisited*, 42 J. YOUTH ADOLESCENCE 921 (2013). This pattern is found across the developed world, over time within the United States, and with respect to both violent and nonviolent crime.

23. See INST. OF MED. & NAT'L RES. COUNCIL, *supra* note 15.

24. See generally Sweeten, *supra* note 22.

adolescents or older adults from a wide variety of preventable causes, including automobile crashes, physical assaults, gun violence, sexually transmitted diseases, and substance abuse.²⁵ In short, developmental changes in criminal activity follow the same age pattern as developmental changes in risky, but noncriminal, activity.²⁶

Viewing criminal offending as a specific instance of the more general inclination of young adults to engage in risky activity can inform discussions of how we should respond to criminal behavior at this age. During the past two decades, developmental science has been invoked in discussions of juvenile justice reform to advance the argument that much adolescent crime is the product of developmental immaturity.²⁷ This, in turn, supported policies based on the premise that adolescents are both less culpable and more amenable to reform than adults, in part, simply through maturation.²⁸ To the extent that young adult offending is also the consequence of normative developmental changes that create a transient inclination toward risky behavior, it should prompt a similar conversation.

*B. Explaining Young Adult Risk-Taking:
Psychological Development in Young Adults*

In recent years, developmental scientists have sought to understand the underlying causes of age differences in risk-taking. However, as we explain below, research on developmental differences between adolescents and adults often has not drawn age distinctions among individuals older than eighteen, and therefore is of limited value in understanding risk-taking among young adults.²⁹ Nevertheless, theoretical models, advanced to explain heightened rates of risk-taking among adolescents relative to children or adults, can inform our discussion of risk-taking in young adulthood. These “dual systems” or “maturational imbalance” models emphasize the different developmental trajectories of reward seeking and self-control.³⁰ Heightened risk-taking during adolescence is understood to be the result of a developmental asynchrony wherein inclinations to pursue exciting, potentially rewarding experiences are especially strong, but the ability to control such urges is still relatively immature. The tendency toward heightened sensation seeking is thought to be sparked by the

25. See INST. OF MED. & NAT'L RES. COUNCIL, *supra* note 15, at 203–13.

26. In one large longitudinal study of serious juvenile offenders tracked for seven years, impulsivity was one of the best psychological predictors of offending in young adulthood: Individuals who developed mature impulse control were most likely to desist from crime. See Kathryn C. Monahan et al., *Psychosocial (Im)maturity from Adolescence to Early Adulthood: Distinguishing Between Adolescence-Limited and Persisting Antisocial Behavior*, 25 DEV. & PSYCHOPATHOLOGY 1093, 1093–95 (2013).

27. See generally SCOTT & STEINBERG, *supra* note 1.

28. See *id.* Adolescent brains are also more plastic than those of adults, which may contribute to amenability. See generally STEINBERG, *supra* note 7.

29. This limitation also applies to developmental neuroscience research.

30. See B.J. Casey, *Beyond Simple Models of Self-Control to Circuit-Based Accounts of Adolescent Behavior*, 66 ANN. REV. PSYCHOL. 295, 298–300 (2015); Elizabeth P. Shulman et al., *The Dual Systems Model: Review, Reappraisal, and Reaffirmation*, 17 DEVELOPMENTAL COGNITIVE NEUROSCIENCE 103, 103–05 (2016).

hormonal changes of puberty, which are believed to increase activity in the brain's reward pathways, making individuals more attentive, sensitive, and responsive to actual and potential rewards.³¹ However, because development of brain systems that regulate impulse control is more protracted, continuing into the early twenties, a period of vulnerability to risky behavior results.³² As some writers have described it, adolescence is a time when the “accelerator” is pressed to the floor, but a good “braking system” is not yet in place.³³

From this perspective, the relatively high rate of risky activity observed in late adolescence and young adulthood—including criminal offending—is likely due to a combination of high reward seeking and poor self-control, leading individuals to make impetuous, short-sighted decisions that privilege the potential rewards of risky choices and underestimate the potential costs. According to this view, risk-taking declines as individuals develop more mature judgment, as a result of a decrease in reward seeking, an increase in self-control, or both.³⁴ Importantly, these developmental changes, which continue into the early twenties, are now viewed as normative, driven by processes of brain maturation that are not under the control of young people.

These theoretical models, and the research they have generated, have influenced discussions of juvenile justice policy over the past decade.³⁵ Indeed, the tendency of adolescents to make impulsive and shortsighted decisions is one of the characteristic features of adolescence highlighted by the U.S. Supreme Court in its Eighth Amendment opinions limiting the use of harsh sentences for juveniles.³⁶ The Court also pointed to adolescents' heightened susceptibility to social influence—particularly peer influence—and to the relatively unformed nature of adolescents' character, which makes them better candidates for rehabilitation.³⁷ The Court found that these hallmark features of adolescence contribute to reduced culpability in juvenile offenders, as compared to adults, and to their greater potential to reform. Now that policy discussions about the treatment of young offenders are beginning to include young adults, it is important to ask whether these characteristics apply to this group as well.

The age patterns in risk-taking would seem to offer support for the conclusion that young adults are also affected by the developmental

31. See Ashley R. Smith et al., *Impact of Socio-Emotional Context, Brain Development, and Pubertal Maturation on Adolescent Risk-Taking*, 64 HORMONES & BEHAV. 323, 323–25 (2013).

32. See generally Casey, *supra* note 30.

33. See STEINBERG, *supra* note 7, at 85.

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

35. See Laurence Steinberg, *The Influence of Neuroscience on US Supreme Court Decisions About Adolescents' Criminal Culpability*, 14 NATURE REVIEWS NEUROSCIENCE 513, 513 (2013).

36. See generally *Montgomery v. Louisiana*, 136 S. Ct. 718 (2016); *Miller v. Alabama*, 132 S. Ct. 2455 (2012); *Graham v. Florida*, 560 U.S. 48 (2010); *Roper v. Simmons*, 543 U.S. 551 (2005).

37. See *Roper*, 543 U.S. at 569.

influences that contribute to juvenile offending—at least to some degree.³⁸ But the study of psychological development in young adulthood is less advanced, and the findings of this research are less consistent than the findings of research on adolescents.³⁹ One limitation is that studies rarely survey a sample that includes adolescents, young adults, and individuals in their late twenties using the same measures for all three age groups. A second limitation is that studies that span the necessary age range frequently lack the statistical power to compare narrowly defined age groups. A third limitation is that many studies cluster individuals into broad age categories, often including in the same group individuals whose chronological age would place them on different sides of a legally important age boundary.

One challenge is to formulate research questions in ways that are most informative to legal policy debates. Scientists cannot point to a specific chronological age as the appropriate boundary between legal childhood and adulthood because different aspects of psychological and neural functioning develop along different timetables.⁴⁰ But a reasonable, and potentially answerable, research question is whether development continues in legally relevant psychological domains beyond age eighteen, the presumptive age of majority. The few existing studies that may be relevant to justice policy have yielded equivocal results that vary as a function of the outcome, age range, and sample studied. Thus, a reasonable assessment is that the extant research is suggestive but inconclusive. Nonetheless, it is possible to draw several broad, albeit cautious, conclusions.

First, it is clear that individuals mature intellectually before they mature emotionally or socially and that emotional and social development continues past age eighteen in realms that are legally relevant.⁴¹ Thus, studies of age differences in basic cognitive abilities, such as memory or logical reasoning, do not find appreciable growth after age sixteen.⁴² This is consistent with studies of adjudicative competence, which also do not find significant age differences after sixteen.⁴³ In contrast, studies of the two hypothesized contributors to adolescents' immature judgment, often, but not always, have found continued decline in sensation seeking and improvement in self-control between ages seventeen and thirty. However,

38. See *infra* Parts II–III.

39. See Alexandra O. Cohen et al., *When Does a Juvenile Become an Adult? Implications for Law and Policy*, 88 TEMP. L. REV. 769, 769–72 (2016).

40. See Laurence Steinberg, *Should the Science of Adolescent Brain Development Inform Public Policy?*, ISSUES SCI. & TECH., Spring 2012, at 67, 67–70 (2012).

41. See 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, 592–93 (2009).

42. See *id.*

43. See Thomas Grisso & Linda Vierling, *Minors' Consent to Treatment: A Developmental Perspective*, 9 PROF. PSYCHOL. 412, 415–16 (1978); Thomas Grisso et al., *Juveniles' Competence to Stand Trial: A Comparison of Adolescents' and Adults' Capacities as Trial Defendants*, 27 LAW & HUM. BEHAV. 333, 356–61 (2003).

the age at which developmental change is most evident during this interval depends on the specific outcome being assessed.⁴⁴

Second, conclusions about whether psychological development continues beyond age eighteen are highly task dependent. Consider, for example, the question of whether young adults, like juveniles, are more susceptible than older adults to peer influence. The answer is equivocal. Studies of resistance to peer influence using self-reports do not find age differences after eighteen,⁴⁵ but experimental studies comparing individuals' performance on decision-making tasks when they are alone versus when they are with their peers find peer effects on task performance after this age, at least into the early twenties. For example, exposure to peers increases young adults' preference for immediate rewards,⁴⁶ willingness to engage in exploratory behavior,⁴⁷ and ability to learn from experience.⁴⁸ In some studies, exposure to peers has been shown to increase young adults' risk-taking,⁴⁹ but in other studies, this has not been found.⁵⁰

Third, psychological maturity among individuals at any given age varies considerably.⁵¹ Consider the research on the stability of personality over time. As noted above,⁵² the Supreme Court cited the relatively unformed nature of character as a defining feature of adolescence that justifies more lenient sentences for juveniles.

Is young adulthood a similarly inchoate stage of character development? The empirical literature on personality development is ambiguous. The prevailing view among psychologists is that during adulthood, personality becomes more stable over time, but no consensus exists on when, if at all, personality ceases to change.⁵³ Some studies have found that young

44. See 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 DEVELOPMENTAL PSYCHOL. 1764, 1764–66 (2008).

45. See generally Laurence Steinberg & Kathryn C. Monahan, *Age Differences in Resistance to Peer Influence*, 43 DEVELOPMENTAL PSYCHOL. 1531 (2007).

46. See generally Lia O'Brien et al., *Adolescents Prefer More Immediate Rewards When in the Presence of Their Peers*, 21 J. RES. ON ADOLESCENCE 747 (2011); Alexander Weigard et al., *Effects of Anonymous Peer Observation on Adolescents' Preference for Immediate Rewards*, 17 DEVELOPMENTAL SCI. 71 (2014).

47. See Karol Silva et al., *Peers Increase Late Adolescents' Exploratory Behavior and Sensitivity to Positive and Negative Feedback*, J. RES. ON ADOLESCENCE 7–9 (Aug. 19, 2015), <http://onlinelibrary.wiley.com/doi/10.1111/jora.12219/epdf> [<https://perma.cc/9QWF-3JS2>].

48. See *id.*

49. See Margo Gardner & Laurence Steinberg, *Peer Influence on Risk Taking, Risk Preference, and Risky Decision Making in Adolescence and Adulthood: An Experimental Study*, 41 DEVELOPMENTAL PSYCHOL. 625, 632–34 (2005).

50. See Jason Chein et al., *Peers Increase Adolescent Risk Taking by Enhancing Activity in the Brain's Reward Circuitry*, 14 DEVELOPMENTAL SCI. F1, F7–F9 (2010).

51. See Steinberg, *supra* note 40, at 67–70.

52. See *supra* note 36 and accompanying text.

53. See Avshalom Caspi & Brent W. Roberts, *Personality Development Across the Life Course: The Argument for Change and Continuity*, 12 PSYCHOL. INQUIRY 49, 51 (2001); Robert R. McCrae & Paul T. Costa, Jr., *The Stability of Personality: Observations and Evaluations*, 3 CURRENT DIRECTIONS PSYCHOL. SCI. 173 (1994).

adulthood is a time of considerable stability in personality;⁵⁴ others have found that it is a time of instability, especially during the transition from adolescence to young adulthood;⁵⁵ and yet another group has found variation among individuals.⁵⁶ Moreover, some studies have also found variability *within individuals* in the stability of personality, in that some traits appear to be considerably more stable than others.⁵⁷

Finally, age differences in psychological functioning in young adulthood vary as a function of the context in which individuals are assessed. Recent work conducted under the auspices of the MacArthur Foundation Research Network on Law and Neuroscience (of which the authors are members) is illustrative.⁵⁸ In this research, adolescents (ages thirteen to seventeen), young adults (ages eighteen to twenty-one), and somewhat older young adults (ages twenty-two to twenty-four) were asked to perform a standard task measuring self-control under conditions that were systematically manipulated to vary the degree and nature (positive or negative) of emotional arousal.⁵⁹ Under nonarousing conditions, young adults' performance did not differ from that of the younger or older subjects; however, the adolescents performed worse than the oldest group.⁶⁰ Under conditions of positive arousal, the young adults performed comparably to the older group and better than the adolescents.⁶¹ Under negatively arousing conditions, however, the adolescent and young adult groups did not differ, and both performed worse than the oldest group.⁶² In other words, whereas the differences between adolescents under age eighteen and individuals older than twenty-one were observed consistently, differences between young adults and the other two age groups depended on the emotional context. Sometimes young adults behaved like people in their mid-twenties. But sometimes they behaved like teenagers—a conclusion that will surely resonate with those who spend time on college campuses.

54. See generally Brent W. Roberts et al., *The Kids Are Alright: Growth and Stability in Personality Development from Adolescence to Adulthood*, 81 J. PERSONALITY & SOC. PSYCHOL. 670 (2001); Richard W. Robins et al., *A Longitudinal Study of Personality Change in Young Adulthood*, 69 J. PERSONALITY 617 (2001).

55. See generally Norma Haan et al., *As Time Goes By: Change and Stability in Personality over Fifty Years*, 1 PSYCHOL. & AGING 220 (1986).

56. See generally M. Brent Donnellan et al., *Personality Development from Late Adolescence to Young Adulthood: Differential Stability, Normative Maturity, and Evidence for the Maturity-Stability Hypothesis*, 75 J. PERSONALITY 237 (2007).

57. See generally Jatin G. Vaidya et al., *On the Temporal Stability of Personality: Evidence for Differential Stability and the Role of Life Experiences*, 83 J. PERSONALITY & SOC. PSYCHOL. 1469 (2002).

58. See generally Cohen et al., *supra* note 8.

59. See *id.*

60. See *id.*

61. See *id.*

62. See *id.*

*C. Neurobiological Research:
Brain Development in Young Adulthood*

Research on the extent and nature of age differences in brain structure and function after age eighteen is also best characterized as suggestive but inconclusive. As with behavioral research, very few studies have systematically examined age differences in brain development among individuals older than eighteen. In most studies, adolescents are compared to “adults,” with the latter group composed of people who may be as young as nineteen or as old as fifty. When adult comparison groups average data from such a wide age range, it is impossible to draw specific inferences about potential differences between young adults and their older counterparts.

Brain maturation comprises several processes that vary in their developmental timetable across brain regions and systems.⁶³ The most important components of brain maturation in adolescence and young adulthood involve changes in the prefrontal cortex and its connections with other brain regions. The prefrontal cortex plays a crucial role in advanced thinking abilities, including planning ahead and weighing risk and reward, and in self-regulation, including impulse control and the coordination of emotion and cognition. Immaturity in the prefrontal cortex is thought to make adolescents and young adults more susceptible to impetuous and shortsighted decision making and more vulnerable to the effects of emotional and social arousal on intellectual functioning.⁶⁴ This aspect of brain development has been critically important to discussions about the appropriate legal response to criminal activity in adolescents and young adults.

The maturation of the prefrontal cortex is multifaceted, involving synaptic pruning (which increases the efficiency of information processing by eliminating unnecessary connections between neurons), myelination (which increases the speed of information processing by “insulating” neural pathways), and improved structural and functional connectivity (which enhances communication between the prefrontal cortex and other brain regions). These processes are all ongoing during adolescence, but they are completed at different ages.⁶⁵ For example, pruning of the prefrontal cortex is more or less complete by midadolescence, which is why there is little improvement in basic thinking abilities beyond this age.⁶⁶ In contrast, connectivity, especially between the prefrontal cortex and brain regions that process rewards and respond to emotional and social stimuli, is not complete until the midtwenties,⁶⁷ which is why aspects of social and emotional functioning, such as impulse control and resistance to peer

63. See generally Steinberg, *supra* note 40.

64. See *id.*

65. See generally Cohen et al., *supra* note 39.

66. See *id.*

67. See generally Nico U.F. Dosenbach et al., *Prediction of Individual Brain Maturity Using fMRI*, 329 SCIENCE 1358 (2010).

influence, are slower to mature.⁶⁸ The bottom line is that brain systems that govern “cold cognition” (thinking that takes place under ideal conditions) reach adult levels of maturity long before those that govern “hot cognition” (thinking that takes place under conditions of emotional or social arousal).⁶⁹ In the MacArthur study mentioned earlier, patterns of brain activation and functional connectivity in young adults resembled those of teenagers when brain activity was assessed under emotionally arousing conditions but appeared more similar to those of people in their midtwenties when conditions were more neutral.⁷⁰

Studies of brain development in adolescence and young adulthood have not yet significantly informed our understanding of the neural underpinnings of age differences in susceptibility to social influence or in the potential for rehabilitation—characteristics considered important in legal policy discussions on juvenile crime.⁷¹ The research indicates that brain systems governing thinking about social relationships undergo significant change in adolescence in ways that heighten concerns about the opinions of others.⁷² Compared to adults, adolescents seem especially sensitive to both praise and rejection, making young people potentially more easily influenced by their peers.⁷³ But very little research has asked whether and how these brain systems continue to change beyond the teen years. One study that examined the impact of peers on neural responses to reward in a sample of adolescents (ages fourteen to eighteen), young adults (nineteen to twenty-two), and adults (twenty-four to twenty-nine) found that the presence of peers increased activation in this brain region among adolescents but had no impact in the other two age groups.⁷⁴

With respect to potential for rehabilitation, there is a growing consensus that adolescence is likely to be a period of heightened brain plasticity—the capacity of the brain to change in response to experience—not unlike the first few years of life.⁷⁵ If so, juveniles are probably better candidates for rehabilitation than adults. This strengthens the argument against imposing long sentences on juveniles and especially against harsh sentences that can inflict toxic harm during a susceptible developmental period. It is not known, however, how long this period of plasticity extends.⁷⁶ One difficulty is that much of the evidence of heightened brain plasticity in adolescence comes mainly from studies of rodents, whose development can

68. See generally Cohen et al., *supra* note 39.

69. See generally STEINBERG, *supra* note 7.

70. See generally Cohen et al., *supra* note 8; Marc Rudolph et al., At Risk of Being Risky: The Relationship Between “Brain Age” Under Emotional States and Risk Preference (unpublished manuscript) (on file with the author).

71. See Sarah-Jayne Blakemore, *Development of the Social Brain in Adolescence*, 105 J. ROYAL SOC'Y MED. 111, 112 (2012); Sarah-Jayne Blakemore & Kathryn L. Mills, *Is Adolescence a Sensitive Period for Sociocultural Processing?*, 65 ANN. REV. PSYCHOL. 187, 189 (2014).

72. See Blakemore, *supra* note 71, at 112; Blakemore & Mills, *supra* note 71, at 189.

73. See Blakemore, *supra* note 71, at 112; Blakemore & Mills, *supra* note 71, at 189.

74. See generally Chein et al., *supra* note 50.

75. See generally STEINBERG, *supra* note 7.

76. See *infra* Part II.

be reliably segmented into just three stages: infant, juvenile (peripubertal), and adult.⁷⁷ Thus, the distinctions between “young adult” and “adult” that can be applied to humans cannot be applied to most other animals.

Because the research described in this part is at a relatively early stage, its implications for justice policies directed toward young adults are uncertain. It is clear that the psychological and neurobiological development that characterizes adolescence continues into the midtwenties, but the research has not yet produced a robust understanding of maturation in young adults age eighteen to twenty-one. Studies find continued development during this period but also find that, in some ways, young adults are similar to adults in their midtwenties. The research on age patterns in risk-taking and on emotional maturation—particularly on impulse control in negative arousal states and peer influence in social contexts—provides the most powerful evidence that young adult offending likely represents a continuation of adolescent risk-taking, driven by developmental forces; but many uncertainties remain. The question is to what extent this still-developing body of research on young adults should affect justice policy.

II. THE CHANGING SOCIOECONOMIC CONTEXT OF YOUNG ADULTHOOD

Although the biological and psychological account of maturation is incomplete, it is clear that the transition to *social* adulthood is grounded in cultural norms that vary over time (and across cultures), dictating when young people are expected to achieve independence and assume adult roles. Demographic research indicates that, today, young adults in the United States and other developed societies experience a prolonged and stressful period of transition to adulthood. Contemporary society is marked by increased knowledge and information transfer, heightened risks, fairly low social mobility, and greater economic inequality—changes that have placed greater demands on young adults than previous generations experienced, while also providing less latitude for failure.⁷⁸ Not so long ago, the typical transitional path for most young adults was to graduate from high school, enter college or the workforce, leave home, establish an enduring romantic relationship, marry, and start a family. These milestones provided structure and direction for most young adults as they assumed adult responsibilities; they also fostered connection with the larger society and its institutions. Today, those pathways are considerably less predictable, often extended, and—for many—significantly more challenging.⁷⁹

Based on this trend, a 2014 IOM/NRC report characterized young adulthood in our society as a “critical” developmental period⁸⁰ that has a

77. See generally LD Selemon, *A Role for Synaptic Plasticity in the Adolescent Development of Executive Function*, 3 TRANSLATIONAL PSYCHIATRY 1 (2013).

78. INST. OF MED. & NAT'L RES. COUNCIL, *supra* note 15, at 35–67.

79. See *id.*

80. Young adults continue to mature socially, psychologically, and biologically; however, social features of maturation predominate during this period. See *id.* at 1–3.

profound impact on individuals' future life-course trajectories, analogous to the critical periods of early childhood and adolescence. Success or failure during this time can have a lifelong impact. Thus, the stakes are high both for young adults and for society. The report drew out the policy implications of this social trend, particularly emphasizing the need to provide developmentally appropriate supports and interventions for young adults during this period.⁸¹

A. Education and Employment

Achievement of financial independence has become a prolonged and uncertain challenge for an increasing number of young adults. College enrollment has increased dramatically in recent years,⁸² but many students who enroll in college do not earn a degree.⁸³ Indeed, the college graduation rate in the United States has *dropped* even as enrollment rates have increased.⁸⁴ In part, this is because the cost of college has grown substantially, and many students are unable to finance the investment. Yet prospects for well-paying jobs for young adults without a college degree are slim.

The problem for young adults without a college degree has been exacerbated in recent decades by the sharply reduced number of good manufacturing jobs. Even accounting for the increased percentage of young adults attending college (and thus not in the work force), the unemployment rate among individuals under age twenty-five is twice that of the general population.⁸⁵ This disparity has been growing in recent decades and has become especially pronounced since the start of the 2008 recession.⁸⁶ Young adults without a college degree who *are* employed generally receive low wages because they lack skills needed for higher paying, knowledge-based jobs.⁸⁷ Many obtain only part-time employment. Not surprisingly perhaps, the earning gap between college graduates and those with only a high school education has more than doubled since 1980.⁸⁸ Today, young adults without a college degree—a cohort that includes most individuals in

81. *See id.*

82. *See id.* at 129.

83. *See id.* at 135.

84. *See id.* at 47; Martha J. Bailey & Susan M. Dynarski, *Inequality in Postsecondary Education*, in *WHITHER OPPORTUNITY?: RISING INEQUALITY, SCHOOLS, AND CHILDREN'S LIFE CHOICES* 117 (Greg J. Duncan & Richard J. Murnane eds., 2011). Large gaps exist in Bachelor of Arts completion rates by race and socioeconomic position. Completion rates for whites exceed those for blacks and Hispanics by 20–30 percent, and students from families in the bottom socioeconomic quartile have completion rates nearly 40 percent lower than those of other students. *See* INST. OF MED. & NAT'L RES. COUNCIL, *supra* note 15, at 137–38.

85. *See* INST. OF MED. & NAT'L RES. COUNCIL, *supra* note 15, at 47; *see also* CLIVE R. BELFIELD & HENRY M. LEVIN, *THE ECONOMICS OF INVESTING IN OPPORTUNITY YOUTH 7* (2012) (showing 17 percent of youth and young adults between ages sixteen and twenty-four are neither in school nor working).

86. *See* INST. OF MED. & NAT'L RES. COUNCIL, *supra* note 15, at 48.

87. *See id.* at 123–34. Many young adults earn less than similar demographic groups have earned in the past and an increasing number of low skill positions are part-time jobs.

88. *See id.* at 131.

the justice system—face greater challenges in attaining financial self-sufficiency as adults than did earlier generations.

B. Partnering and Parenting

A similar gap has emerged in contemporary patterns of family formation. Traditionally, marriage was a marker of adult status and independence from parents across social classes.⁸⁹ For middle and upper class couples, marriage often followed graduation from college, while working class couples tended to marry at an earlier age.⁹⁰ Today, middle class individuals tend to become independent of their parents, marry, and have children years later than their parents did.⁹¹ In part, of course, this is because the period of young adulthood is devoted to education, skills training, and career development for this cohort. Such investment in human capital can be more readily accomplished without family responsibilities. For less educated young adults, particularly those from disadvantaged backgrounds, the pattern is quite different. Marriage has become less common altogether for this group, and partnering typically takes the form of informal, often unstable, unions.⁹² Many less educated young people have children outside of marriage, often before they have the skills and income to support a family.⁹³ In turn, the burden of raising children impedes young parents' ability to acquire the skills and training necessary to become economically self-sufficient.

C. Inequality

Recent changes in the established economic and social pathways of young adulthood have presented more choice and opportunity for some young adults and created more barriers for many others. Of particular importance for our purposes is the impact of these economic and social trends on marginalized young adults from disadvantaged backgrounds—namely, those who are children of low-income immigrants, those aging out of foster care, those with histories of involvement in the justice system, those with disabilities, and those who dropped out of school. These young adults are substantially less likely than their peers to experience a successful transition to adulthood.⁹⁴ Compared with other young adults, for example,

89. See generally JUNE CARBONE & NAOMI CAHN, *MARRIAGE MARKETS: HOW INEQUALITY IS REMAKING THE AMERICAN FAMILY* (2014).

90. See *id.*

91. See generally Monica Kirkpatrick Johnson et al., *Insights on Adolescence from a Life Course Perspective*, 21 J. RES. ON ADOLESCENCE 273 (2011); Glenn I. Roisman et al., *Salient and Emerging Developmental Tasks in the Transition to Adulthood*, 75 CHILD DEV. 123 (2004). In the 1980s, the age at first marriage was twenty-two; today it is twenty-seven. See INST. OF MED. & NAT'L RES. COUNCIL, *supra* note 15, at 45.

92. This trend has been well documented. See generally CARBONE & CAHN, *supra* note 89; ANDREW CHERLIN, *THE MARRIAGE GO-ROUND: THE STATE OF MARRIAGE AND THE FAMILY IN AMERICA TODAY* (2010).

93. See generally SARA MCLANAHAN & GARY SANDEFUR, *GROWING UP WITH A SINGLE PARENT* (1997).

94. See *supra* note 78 and accompanying text.

former foster youths are less likely to graduate from high school, have lower rates of college attendance, suffer from more mental and physical health problems, and experience higher levels of housing instability and homelessness; they are more likely to be dependent on public assistance and unemployed, and be involved with the criminal justice system.⁹⁵ These disadvantaged young adults also are less likely to marry or cohabit and are more likely to have children outside of marriage.⁹⁶ A particular source of concern is the increase in early parenthood by adolescents and young adults in this cohort and the increasing number of young children with one or more incarcerated parents.⁹⁷

Young adults in the justice system largely belong to a cohort of individuals whose prospects of making a successful transition to adulthood are poor. As a 2015 IOM/NRC report emphasized, meeting the needs of marginalized young adults not only has the potential to improve their lives and reduce persistent inequalities due to family background, but it can also help them become more fully contributing members of society.⁹⁸ Absent deliberate action by policymakers, however, this period of development is likely to magnify inequality, with lasting effects through adulthood. For young adult offenders, the cost of failing to intervene to promote successful maturation extends even beyond the enormous social cost of continued involvement in criminal activity. Many young adults in the justice system have children born into nonmarital relationships; thus, an increasing number of children have one or more incarcerated parent.⁹⁹ This concern led the IOM/NRC committee to highlight the urgency of investing in incarcerated and otherwise marginalized young adults and their children to interrupt the transmission of disadvantage from generation to generation.¹⁰⁰

Young adulthood is a period of risk and heightened stress for those individuals without the support and resources they need. This includes young adult offenders whose prospects for productive lives may depend on the justice system's response to their crimes. Counterintuitively perhaps, their criminal offending presents the opportunity for intervening in ways that can serve their interests and society's interest as well.

III. YOUNG ADULT OFFENDERS IN THE JUSTICE SYSTEM

The developmental and sociological research described in Parts I and II supports justice system reforms that focus on young adults as a transitional category of offenders between juveniles and adults. The research, although not conclusive, indicates that offending by young adults often may be

95. The IOM/NRC report emphasized the critical challenges facing this group. See INST. OF MED. & NAT'L RES. COUNCIL, *supra* note 15, at 4.

96. *See id.*

97. About 45 percent of incarcerated young adults have children. Parental incarceration is associated with family instability, economic hardship, reductions in fathers' involvement in their children's lives, and increased child behavior problems. *See id.* at 107, 357–58.

98. *See id.* at 347–92.

99. *See supra* note 97 and accompanying text.

100. *See supra* note 15 and accompanying text.

driven by tendencies toward impulsivity and risk-taking that characterize much of the criminal activity of juveniles.¹⁰¹ This conclusion is also supported by empirical data on age patterns in risky behavior.¹⁰² If immaturity continues to play a role in criminal involvement beyond age eighteen, many young adults, like most juveniles, are likely to desist from criminal involvement as they mature. Moreover, recent social and economic trends have prolonged the period of dependency and vulnerability into adulthood.¹⁰³ Against this backdrop, the potential criminogenic effects of imprisonment and the benefits of rehabilitative programs for young adult offenders have become more salient.¹⁰⁴ In short, our expanded knowledge about this period of life supports legal changes that acknowledge young adults' potential for reform and aim to facilitate offenders' transitions to noncriminal adulthood.

The approach to reform that we propose draws on the developmental model that has powerfully influenced the law's response to juvenile crime in the past decade.¹⁰⁵ Like juveniles, young adults are most usefully classified as a distinct category of offenders in recognition of the social reality that young adulthood, like adolescence, is a critical developmental period.¹⁰⁶ This does not mean, however, that eighteen- to twenty-one-year-olds generally should be reclassified as juveniles or that their crimes should be adjudicated in the juvenile court.

The evidence suggests that young adult offenders are developmentally distinguishable from adolescents in several ways. Furthermore, as we discuss below, pragmatic considerations militate against categorically raising the age of juvenile court jurisdiction to twenty-one.¹⁰⁷ But, just as the justice system has come to recognize that adolescents are neither innocent children nor fully responsible adults, lawmakers should understand that young adults occupy a transitional developmental space between adolescents and mature adults. As we will explain, this approach supports reforms in the adult justice system directed toward young adults that not only enhance the welfare of these individuals but also offer the potential to reduce crime. These reforms include special sentencing and parole policies, as well as correctional programs that aim to provide young adult offenders with the skills necessary to function adequately in adult roles.

Attention to the research evidence comes at a propitious time: when many lawmakers and the public increasingly are receptive to reform. The extraordinary increase in incarceration rates over the past forty years has generated sharp criticism across the political spectrum.¹⁰⁸ Critics recognize

101. *See supra* Part I.

102. *See supra* Part I.

103. *See supra* Part II.

104. *See generally* NAT'L RES. COUNCIL, *supra* note 1; SCOTT & STEINBERG, *supra* note 1.

105. *See generally* NAT'L RES. COUNCIL, *supra* note 1; SCOTT & STEINBERG, *supra* note 1.

106. *See supra* Part II.

107. *See infra* Part III.C.

108. *See* NAT'L RES. COUNCIL, NAT'L ACADS., *THE GROWTH OF INCARCERATION IN THE UNITED STATES: EXPLORING CAUSES AND CONSEQUENCES 2* (Jeremy Travis et al. eds., 2014)

that overincarceration has had only a modest impact on crime reduction, while it has generated a wide range of well-documented financial and social costs: the latter have particularly burdened the large cohort of incarcerated young adults.¹⁰⁹ It is well understood that criminal convictions and incarceration negatively affect employment, educational attainment, and civic engagement, diminishing the prospect that young adult offenders will become productive citizens or assume conventional adult roles.¹¹⁰ The call for reform is made even more urgent because the consequences of our penal policies fall disproportionately on racial and ethnic minorities.¹¹¹

A. Young Adulthood: A Transitional Category

The boundary between childhood and adulthood typically creates binary legal categories: individuals are either adults or children for particular legal purposes. For most purposes, age eighteen marks the boundary, but the line between childhood and adulthood is sometimes drawn either before or after this age.¹¹² For example, young adults are sometimes classified as legal children; they cannot obtain and drink alcoholic beverages and may be entitled to financial support from noncustodial parents while they attend college.¹¹³ These regulations recognize that a categorical assumption that eighteen-year-olds conform to the conventional expectations of adults in their maturity, competence, and independence sometimes can undermine social welfare.¹¹⁴

In the context of justice policy, age classification is more complex in a way that may be instructive for reforming the law's response to young adult offenders. To be sure, the binary norm currently prevails in the classification of adults in the justice system: eighteen- and thirty-five-year-old offenders typically have been subject to undifferentiated treatment as "adults." But in dealing with juvenile offenders, contemporary lawmakers have effectively created an intermediate category. Under the recent legal

(describing the increase as "historically unprecedented and internationally unique"). Calls for reform have come from both sides of the political spectrum.

109. Approximately 410,900 young adults ages eighteen to twenty-four were in state or federal prisons or local jails in 2010. *See id.*

110. *See generally* NAT'L RES. COUNCIL, *supra* note 1; SCOTT & STEINBERG, *supra* note 1.

111. Among young men ages twenty to twenty-four, 8 percent of non-Hispanic blacks, 3.3 percent of Hispanics, and 1.3 percent of whites, were incarcerated in 2010. *See* NAT'L RES. COUNCIL, *supra* note 108.

112. *See* Scott, *supra* note 10, at 552. For example, legal minors can obtain motor vehicle licenses, exercise their right of free speech, and consent to particular medical treatments, including treatment for substance abuse, sexually transmitted diseases, and mental illness. *See id.*

113. *See id.* at 560. Congress raised the legal drinking age in response to data indicating that drunk drivers in this age cohort caused a disproportionate percentage of serious motor vehicle accidents. *See* NAT'L RES. COUNCIL, NAT'L ACADS., REDUCING UNDERAGE DRINKING: A COLLECTIVE RESPONSIBILITY 2 (Richard J. Bonnie & Mary Ellen O'Connell eds., 2004).

114. *See* Scott, *supra* note 10, at 589; *see also* INST. OF MED. & NAT'L RES. COUNCIL, *supra* note 15, at 101–04, 235–39 (discussing parental support and minimum purchase ages).

reforms, the response to juvenile offending has been tailored to the developmental needs and capacities of adolescents.¹¹⁵

The acknowledgement that teenage offenders are neither children nor adults is grounded in pragmatic, political, and scientific considerations that have emerged from the recognition that the law's conventional binary approach is unsatisfactory as a basis for responding to juvenile crime.¹¹⁶ The traditional characterization of young offenders as children who lacked responsibility for their crimes seemed discordant as applied to older youths who committed violent crimes. Not surprisingly, perhaps, this approach was effectively ridiculed by the punitive law reformers of the 1990s.¹¹⁷ But their view that juveniles are not different from adult criminals has also been rejected as costly, offensive to conventional morality, and inconsistent with developmental research.¹¹⁸ Under modern law reforms, juveniles are held accountable for their crimes, but their culpability is mitigated as compared to adults.¹¹⁹ Furthermore, contemporary lawmakers increasingly realize that correctional programs and dispositions tailored to the developmental needs of adolescent offenders are more likely to reduce crime at a lower cost than either punitive adult sanctions or permissive policies that treat delinquent youth as children. A core objective of modern justice policy (and one submerged until recently) is to facilitate the transition of teenage offenders to productive adulthood by providing a healthy developmental context and giving them the tools they need to succeed.

This model can be adapted to young adult offenders, who also can be usefully classified as a transitional category, but one located within the adult justice system. Like juveniles, young adults are not fully mature and are more likely to reform than are older offenders. Also like juveniles, young adult offenders are in a critical period in which programs targeted to their developmental needs may powerfully influence their future lives in a positive direction. The monolithic classification of offenders over age eighteen under contemporary law assumes that uniform offense-based sentencing policies directed at adults regardless of age will protect the public and reduce crime. But this strategy is shortsighted to the extent that much young adult crime is the product of immature risk-taking propensities and that investment during this developmental period could facilitate these offenders' transitions to productive adult lives. At the same time, however, existing research does not support the classification of young adults as juveniles.¹²⁰ As we explain below, under current conditions, an institutional structure that generally treats young adults as separate transitional category of criminal offenders is likely to enhance the effectiveness of justice policy.

115. See generally NAT'L RES. COUNCIL, *supra* note 1; SCOTT & STEINBERG, *supra* note 1.

116. See SCOTT & STEINBERG, *supra* note 1, at 82–117.

117. See *id.*

118. See *id.*

119. See *id.*; see also *supra* Part I (discussing Supreme Court opinions).

120. See *infra* Part III.C.

*B. Twenty-First Century Criminal Justice:
A Developmental Approach to Young Adult Offenders*

In this section, we suggest how an understanding of young adulthood as a period of biological, psychological, and social maturation might be translated into policies and programs directed at this group of offenders. The elements of reform already exist: some proposals draw on sentencing and parole policies directed at juvenile offenders, while others (youthful offender statutes) would revive ameliorative statutory policies enacted in an earlier era.¹²¹ The heart of reform, however, is an ongoing project to develop effective interventions to provide young adult offenders with the tools to make the transition to productive adulthood. Just as policymakers in the juvenile system turned to evidence-based correctional programs grounded in developmental knowledge in seeking effective responses to juvenile crime, criminal justice officials in some jurisdictions have begun to invest in programs directed at young adults in pursuit of the same goal.¹²² As we explain, although few programs have been evaluated, investment in promising correctional programs that promote healthy development in these still maturing offenders is likely to be the most effective response to their criminal conduct.

1. Young Adult Offender Status for Nonviolent Offenders

For young adults who commit nonviolent crimes, a regime modeled on the young offender statutes enacted in the 1960s and 1970s¹²³ can preserve future life options. These statutes create a special status, extending rehabilitative features of juvenile proceedings to eligible young adults (as well as transferred juveniles) who are prosecuted in the criminal courts.¹²⁴ Young offender status limits sentence duration and shields offenders from the burdensome collateral consequences of having a criminal record, which can severely restrict their ability to pursue educational, employment, and

121. See *infra* Part III.C.1–2.

122. See *infra* Part III.C.3.

123. See COLO. REV. STAT. § 18-1.3-407 (2013); FLA. STAT. ANN. §§ 958.011–.15 (West 2012); GA. CODE ANN. §§ 42-7-1 to -9 (West 1997); MICH. COMP. LAWS ANN. §§ 762.11–.16 (West 2000); N.Y. CRIM. PROC. LAW § 720.10–.35 (McKinney 2011); S.C. CODE ANN. § 24-19-10 to -160 (2007). One rationale for young offender status is to protect young offenders from the harshness and collateral consequences of criminal prosecution and conviction. See *Raines v. State*, 317 So. 2d 559, 561 (Ala. 1975); *People v. Perkins*, 309 N.W.2d 634, 636–37 (Mich. Ct. App. 1981). Other rationales include provisions of educational, training, and rehabilitation programs to reduce recidivism. See FLA. STAT. ANN. § 958.021; GA. CODE ANN. § 42-7-3(a); S.C. CODE ANN. § 24-19-60; *Perkins*, 309 N.W.2d at 636–37.

124. See William Easton, *Expunging Criminal Records: A Judge's Perspective*, 27 WAYNE L. REV. 1391, 1396 (1981); Sally Terry Green, *Realistic Opportunity for Release Equals Rehabilitation: How the States Must Provide Meaningful Opportunity for Release*, 16 BERKELEY J. CRIM. L. 1, 24–26 (2011). One of the most comprehensive statutes is New York's, which provides for confidentiality of records, restrictions on the consequences of a criminal conviction, and lenient sentencing alternatives. See N.Y. CRIM. PROC. LAW §§ 720.15, 720.35; N.Y. PENAL LAW § 60.02 (McKinney 2009). See generally Alison Marie Grinnell, Note, *Searching for a Solution: The Future of New York's Juvenile Offender Law*, 16 N.Y.U. J. HUM. RTS. 635 (2000).

even housing opportunities essential to the transition to adulthood.¹²⁵ Typically, trial courts have discretion to confer this status on a young adult offender charged with designated crimes, and some laws restrict the status to first-time offenders.¹²⁶ Most statutes limit the maximum sentence to between one and three years.¹²⁷ Other consequences of being designated as a young offender vary from state to state and include the opportunity to avoid a criminal conviction (and thus a criminal record)¹²⁸ and to have the record sealed after a period of good behavior.¹²⁹ A contemporary young offender statute could confer the status presumptively on all adults under twenty-one and transferred juveniles charged with particular crimes, including misdemeanors, most property crimes, and drug possession offenses.¹³⁰ Beyond this, brief sentences, together with protection from the collateral consequences of criminal conviction, can help preserve the opportunities for productive adult lives for many young adult offenders.

2. Sentencing and Parole Policies

For young adults who commit serious violent offenses, young offender status is unlikely to be deemed sufficiently protective of public safety. Nonetheless, their relative youth should be considered in sentencing. Age has long been considered a basis for mitigation under both capital and noncapital sentencing statutes.¹³¹ Immaturity has featured most prominently as a key mitigating factor in juvenile sentencing cases,¹³² but recently courts sentencing young adults also have begun to consider

125. See generally COUNCIL OF STATE GOV'TS JUSTICE CTR., REDUCING RECIDIVISM AND IMPROVING OTHER OUTCOMES FOR YOUNG ADULTS IN THE JUVENILE AND ADULT CRIMINAL JUSTICE SYSTEMS (Nov. 2015) (discussing the collateral consequences of having a criminal record and the ways in which it inhibits the ability of young adults to transition to productive adulthood).

126. See MICH. COMP. LAWS ANN. §§ 762.11 (excluding offenses carrying a maximum penalty of life imprisonment, major controlled substance offenses, traffic offenses, and criminal sexual conduct, and excluding offenders with a prior conviction or adjudication for an offense requiring a sex-offender registration); N.Y. CRIM. PROC. LAW § 720.10(3) (excluding murder, armed felonies, rape in the first degree, criminal sexual act in the first degree, or aggravated sexual abuse).

127. See ALA. CODE § 15-19-6(a)(4) (LexisNexis 2011) (limiting to no more than three years for felonies); FLA. STAT. ANN. § 958.04(1)(2)(c)-(d) (limiting to no more than six years); MICH. COMP. LAWS ANN. § 762.13(1) (limiting to no more than one year); N.Y. PENAL CODE §§ 60.02(2), 70.00(2)(e) (limiting to no more than four years for most felonies).

128. See ALA. CODE § 15-19-7(a); MICH. COMP. LAWS ANN. § 762.11(1); N.Y. CRIM. PROC. LAW § 720.35(1).

129. See S.C. CODE ANN. § 22-5-920(B) (2007) (providing for applications to expunge records of arrest and conviction fifteen years after conviction).

130. The New York legislature is currently considering a bill that proposes a presumption of youthful offender status to young defendants who do not have a prior conviction or adjudication for a felony. See Assemb. 238-7642, 2015–2016 Reg. Sess. § 79 (N.Y. 2015); S. 238-5642, 2015–2016 Reg. Sess. § 79 (N.Y. 2015).

131. See ARIZ. REV. STAT. ANN. § 13-751(G)(5) (2010) (considering the defendant's age as a mitigating circumstance); S.C. CODE ANN. § 16-3-20(3)(C)(b)(7) (same); UTAH CODE ANN. § 76-3-207(4)(e) (LexisNexis 2012) (same).

132. See *supra* notes 2, 36 and accompanying text.

evidence of immaturity in mitigation.¹³³ In 2015, for example, an Illinois court set aside a mandatory sentence of life without parole imposed on a nineteen-year-old as a violation of the Eighth Amendment prohibition of cruel and unusual punishment.¹³⁴ The court cited the Supreme Court's juvenile sentencing opinions and also pointed to developmental research indicating that brain maturation continues into the twenties.¹³⁵ This evidence can also support a presumption that mandatory minimum adult sentencing regimes should exclude young adult offenders, just as juvenile offenders are excluded in some states.¹³⁶

The determination of whether a reduced sentence is warranted can also be made *ex post* through parole policies designed for young adult offenders. Some states have adopted special statutes that allow juvenile prisoners sentenced for serious offenses in the adult system to petition for expedited parole and provide programmatic assistance to prepare them for the hearing.¹³⁷ These laws are premised on developmental evidence that much juvenile crime is the product of immaturity and that many young offenders will reform as they mature.¹³⁸ If the crimes of many young adult offenders similarly represent impulsive risk-taking behavior that is characteristic of this period of life, their inclination to offend is likely to decline with maturation. A special parole statute would allow the young adult offender to demonstrate, on an expedited basis, that he no longer represents a threat to society. These prisoners can be held accountable and public safety can be protected through briefer sentences than those imposed on prisoners who offended as older adults or who have not demonstrated reform.

3. Specialized Correctional Facilities and Programs

At this point, the justice system has only begun to offer correctional programs or special facilities aimed at young adult offenders (and juvenile offenders sentenced as adults),¹³⁹ and few programs have been subject to rigorous evaluation. Thus, no blueprint exists for transforming correctional

133. See, e.g., *United States v. C.R.*, 296 F.R.D. 131, 132–35 (E.D.N.Y. 2013); *People v. House*, No. 1-11-0580, 2015 WL 9428803, at *27 (Ill. App. Ct. Dec. 24, 2015).

134. See *House*, 2015 WL 9428803, at *27; see also *C.R.*, 296 F.R.D. at 132–35 (sentencing a nineteen-year-old defendant to the five year minimum). In a lengthy memorandum, Judge Jack Weinstein described the research on brain development in young adulthood as justification for imposing the minimum sentence. See Sentencing Memorandum, *C.R.*, 296 F.R.D. 131 (No. 09 Cr. 0155 (JBW)), 2013 WL 11263190.

135. See Sentencing Memorandum, *supra* note 134.

136. See *State v. Lyle*, 854 N.W.2d 378, 386 (Iowa 2014) (finding mandatory minimum sentences inappropriate for juveniles).

137. See CAL. PENAL CODE § 4801 (West 2011) (special expedited parole statute for juvenile offenders); WASH. REV. CODE ANN. § 10.95.030 (West 2014).

138. See CAL. PENAL CODE § 4801, pmbl. (offering this rationale).

139. Colorado's Youthful Offender System (YOS) was legislatively created primarily to reduce recidivism in violent offenders, both transferred juveniles and (through a later statute) young adults ages eighteen and nineteen, and to provide them with the means to become productive adult citizens. See COLO. DEP'T OF PUB. SAFETY, EVALUATION OF THE YOUTHFUL OFFENDER SYSTEM (YOS) IN COLORADO: A REPORT OF FINDINGS PER 18-1.3-408, C.R.S. 14-17 (2014).

policy. However, promising reforms implemented in the juvenile system over the past generation provide guidance for policymakers focusing on young adult offenders. Effective juvenile programs, policies, and practices that are tailored to the unique needs of this population can be—and are being—adapted for young adults.¹⁴⁰ For example, multi-systemic therapy, which has been shown to effectively reduce recidivism in juveniles, is being adapted to treat young adults.¹⁴¹ Substance abuse and other mental health services, as well as social skills training, are important interventions with young adult offenders, as with juveniles. Finally, developing effective educational and vocational skills training programs for this age cohort is essential to successful justice policy and poses a challenge perhaps even greater than in the juvenile justice context. Sociological research indicates that young adult offenders are often detached from the socializing institutions of work and family that reduce recidivism.¹⁴² What is needed is a comprehensive effort to provide these offenders with programs and facilities that will aid in promoting their integration into the larger society as productive adults.

Increasingly, states and localities have begun to take up this challenge, persuaded that policies targeting young adult offenders potentially can be an effective means to reduce recidivism. Localities have developed promising community-based programs for young adult offenders that provide intensive services and supervision, with good employment and recidivism-reduction outcomes.¹⁴³ For incarcerated young adult offenders, some states have created separate facilities modeled on successful juvenile facilities and programs. These facilities have developmentally trained staff and emphasize education, workforce development, and cognitive behavioral training and typically are connected with specialized aftercare services.¹⁴⁴ Programs directed at young adults within integrated facilities are also being

140. See COUNCIL OF STATE GOV'TS JUSTICE CTR., *supra* note 125, at 7.

141. See *id.* Multisystemic therapy has been one of the most effective programs with both violent and nonviolent juvenile offenders. See SCOTT & STEINBERG, *supra* note 1, at 217–20.

142. See Schiraldi et al., *supra* note 6, at 4.

143. The San Francisco Adult Probation Transitional Age Youth Unit is a successful community-based program. See *id.* at 11. Roca, a Massachusetts program that combines cognitive behavioral therapy, substance abuse treatment, and best-practice community corrections, has effectively reduced recidivism and increased employment in justice-involved high-risk young men. See *id.* at 12.

144. The Colorado YOS is among the most comprehensive programs aimed at young adults ages eighteen and nineteen. See generally COLO. DEP'T OF PUB. SAFETY, *supra* note 139. First established in 1994 for violent juvenile offenders in the adult system, YOS houses offenders in separate facilities and provides specially designed programs and services that focus on academics, rehabilitation, and the development of prosocial behaviors and reentry planning. The recidivism rates of offenders who successfully complete the YOS program (most offenders) is far better than comparable offenders. YOS offenders receive career and technical education, anger management treatment, and substance abuse treatment. See *id.* at 43. New York City and California are developing facilities for young adults. The planned California facility (the California Leadership Academy) is modeled on the successful "Missouri Model" of juvenile residential facilities. See COUNCIL OF STATE GOV'TS JUSTICE CTR., *supra* note 125, at 14.

developed.¹⁴⁵ Through these programs, policymakers recognize that even when incarceration is justified for punishment and public protection, society's interests, as well as that of offenders, are served by investing in the education, health, and well-being of young adults who will eventually be allowed to return to the community.¹⁴⁶

C. *Why Not Extend the Jurisdictional Age of Juvenile Court?*

As we have indicated, reforms in the justice system's treatment of young adult offenders should build on the developmental approach to juvenile justice. Thus, the natural next move might seem to be a unitary rehabilitative justice system with general jurisdiction over juveniles and young adults. Nonetheless, we are hesitant to argue for this bold reform for several reasons.

As we have shown, the scientific evidence does not currently justify an institutional reform of this magnitude. Moreover, the political and practical obstacles to such a change are formidable. Although modest steps toward consolidating responses to minor offenses by young adults may be feasible, it is not clear that, under current conditions, the interests of either juveniles or young adults would be promoted by a unitary justice system.

Some reformers have pointed to neuroscience and other research in advocating that young adults be adjudicated in the juvenile system.¹⁴⁷ But the research supporting the presumption underlying the lenient, rehabilitative approach of the juvenile system—that youthful offending is driven by developmental immaturity—is weaker for young adults.¹⁴⁸ Because of their youth, adolescents are deemed less culpable and more malleable than older offenders. The emerging developmental evidence indicates that young adult brains are developing and that these offenders may be similar to adolescents in their impulsivity.¹⁴⁹ However, the developmental factors that likely drive offending in younger teens are subtler in young adults, and, in some regards, young adults are more like older adults than teenagers.¹⁵⁰ As explained in Part I, scientific evidence is simply not robust enough to support a response of categorical leniency toward young adult offenders.

We are also concerned that raising the age for juvenile court adjudication to twenty-one may have the unintended consequence of making adolescents

145. See *About the Division of Juvenile Justice*, CAL. DEP'T OF CORRECTIONS & REHABILITATION, http://www.cdcr.ca.gov/Juvenile_Justice/About_DJJ/index.html (last visited Oct. 16, 2016) (providing training and treatment to young adult offenders) [<https://perma.cc/59FM-CQEG>]; FLA. S., INTERIM REPORT ON YOUTHFUL OFFENDER DESIGNATION IN THE DEPARTMENT OF CORRECTIONS, S. 2011-114, at 3 (2010) (providing educational, work, and rehabilitative programs to young adult offenders).

146. See INST. OF MED. & NAT'L RES. COUNCIL, *supra* note 15, at 361-66.

147. See *supra* note 17 and accompanying text.

148. See *supra* Part I.

149. See *supra* Part I.

150. Young adults respond more like adolescents on measures of self-control under conditions of threat, but they perform more like adults under conditions of positive arousal. See *supra* Part I.

in the justice system worse off than under the current regime without producing the intended benefits for young adults. Political reality dictates that public safety will always be a preeminent concern of justice policy. Indeed, the juvenile system, with its commitment to rehabilitation, often has been challenged on the ground that its lenient response to young offenders sacrifices public safety.¹⁵¹ During periods when public fears about violent juvenile crime are aroused, such as the 1990s, politicians have responded by adopting punitive laws facilitating the adult prosecution and punishment of juveniles.¹⁵² To be sure, the moral panic of that period has receded. But the lessons of the 1990s are that public and political acceptance of the special status of juveniles is tentative and that the developmental approach to juvenile justice policy could be readily destabilized.¹⁵³ Extending the general jurisdiction of the juvenile system to age twenty-one would only increase its vulnerability. A system committed to leniency and to more abbreviated sanctions is unlikely to be deemed satisfactory in dealing with a category of offenders who commit a substantial percentage of serious offenses.¹⁵⁴ Moreover, young adult offenders have different needs than younger juveniles, and integrating substantial numbers of young adults into the juvenile system could have a negative impact on its ability to serve the needs of the youths who are its primary concern.¹⁵⁵

Young adults themselves are likely to attain greater benefit from institutional reforms in the adult system than from juvenile status. Even if the age of juvenile court jurisdiction were raised, young adults charged with serious crimes predictably would be transferred to an adult system with few programs or policies dedicated to their rehabilitation. Reformers are better advised to concentrate on ameliorative institutional reforms in the adult system. As the youngest offenders within the jurisdiction of the adult system, young adults have a claim to correctional responses that acknowledge their transitional status and potential for reform. More importantly, perhaps, if programs tailored to the needs of young adult offenders reduce crime by giving them the tools to assume conventional adult roles, society may also reap substantial benefits.

Modest extensions of juvenile court jurisdiction are possible. Indeed, many states have extended the jurisdictional age for juvenile court

151. See generally SCOTT & STEINBERG, *supra* note 1.

152. See *id.* at 94–99 (discussing moral panics of the 1990s in response to an increase in juvenile crime); Elizabeth S. Scott, *Miller v. Alabama and the (Past and) Future of Juvenile Crime Regulation*, 31 *LAW & INEQ.* 535 (2013).

153. See generally Scott, *supra* note 152.

154. See generally Perkins, *supra* note 12.

155. See Tamar R. Birckhead, *North Carolina, Juvenile Court Jurisdiction, and the Resistance to Reform*, 86 *N.C. L. REV.* 1143, 1494–500 (2008) (discussing arguments against raising the age of the juvenile system, such as expansion of an already underfunded system); see also Nancy L. Iredale & Paul L. Joffe, *Between Juvenile and Adult Courts: A No Man's Land for the Youthful Offender*, *YALE REV. L. & SOC. ACTION*, Spring 1971, at 49, 52–53 (noting arguments made by a juvenile court judge that the juvenile system's facilities for treating older offenders are inadequate and that raising the age of the juvenile system would dilute the trust and efficacy of the special handling of juveniles by a specialist court).

dispositions to twenty-one or even beyond.¹⁵⁶ This extension allows older juveniles, whose offenses and age warrant more extensive interventions than would be possible if jurisdiction ended at age eighteen, to avoid transfer and the harsh sanctions of the adult system and to benefit as young adults from programs in the juvenile system. A more innovative reform (and an alternative to young offender status)¹⁵⁷ would be the extension of juvenile court jurisdiction to individuals who commit minor crimes as young adults. Adjudication and disposition in the juvenile system of these offenders allows them to avoid the stigma of criminal conviction, without an undue destabilizing impact on the juvenile system.¹⁵⁸

CONCLUSION

At a time when policymakers and the public are likely to be receptive to reforms that reduce crime, developmental and sociological research supports a new approach to young adult offenders. Drawing on lessons from juvenile justice reforms, we argue that individuals in this age cohort should be treated as a discrete and transitional category between juveniles and adults. Tailoring sentencing policies to this group and investing in effective programs to give them the tools to become productive noncriminal adults will serve social welfare, as well as the interests of the most vulnerable young adults.

156. Statutes in thirty-five states extend dispositional jurisdiction beyond age eighteen. See *State Statutes Define Who Is Under Juvenile Court Jurisdiction*, JUV. OFFENDER & VICTIMS NAT'L REP. SERIES BULL. (Office of Juvenile Justice & Delinquency Prevention, Wash. D.C.), June 2003, <https://www.ncjrs.gov/pdffiles1/ojjdp/195420.pdf> [<https://perma.cc/A5EW-MYCJ>].

157. See *supra* notes 126–34 and accompanying text.

158. An alternative is youthful offender status that shields criminal records. See *supra* notes 128–29 and accompanying text.