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JURISPRUDENCE MODEL OF JUVENILE SENTENCING

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Alison Lynch

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“SOME MOTHER’S CHILD HAS GONE ASTRAY”: NEUROSCIENTIFIC APPROACHES TO A THERAPEUTIC JURISPRUDENCE MODEL OF JUVENILE SENTENCING

Michael L. Perlin and Alison J. Lynch

There is a robust body of evidence that tells us that the juvenile brain is not fully developed by age 18, and this evidence should and does raise important questions about the sentencing of juveniles in criminal cases. This evidence, though, must be considered in the context of public opinion (about certain juvenile crimes that have been subject to saturation publicity) in the context of judges’ decisionmaking (where such judges do not want to be perceived as “soft on crime”). The conflict between what we now know and what (false) “ordinary common sense” demands (in the way of enhanced punishments) flies squarely in the face of therapeutic jurisprudence precepts. If the legal process is to seek to maximize psychological well-being and if it is to coincide with an “ethic of care,” then, it is necessary for those involved in the criminal justice system to speak publicly about this topic, and to “call out” those – be they elected politicians, editorial writers and commentators in the conservative media, or judges – who urge retributive and punitive sentences for adolescents and children. In this paper, we will first give a brief overview about the current neuroscientific findings about juvenile brain development in the context of criminal behavior, and then discuss the current sentencing standards and regulations that are in place. Then, we will discuss the impact of therapeutic jurisprudence as a framework for advocating for juvenile clients, in order to maximize and preserve their psychological well-being and to mitigate trauma. Finally, we will offer recommendations for how experts can work with attorneys who are presenting sentencing arguments, in order to make the most comprehensive, scientifically persuasive case for leniency in juvenile sentencing.

Key Points for the Family Court Community

- It is well-settled that the juvenile brain is not fully developed by age 18.
- Transfer to adult court appears to be counterproductive: transferred youths are more likely to reoffend, and to reoffend more quickly and more often, than those retained in the juvenile justice system.
- Even when an individual turns the age of 18 and is considered to be a legal adult, his brain still has years of development and maturity ahead of it.
- We must think about issues such as race and class in considering the sentencing of juveniles.
- We must consider therapeutic jurisprudence principles in the context of the fact that certain juvenile crimes have been subject to saturation publicity, creating intense pressure of judges who do not want to be perceived as being “soft on crime.”
- Our current juvenile sentencing system in no way values psychological health,” nor advances an “ethic of care,” both essential in a therapeutic jurisprudence analysis.

Keywords: Death Penalty; Juvenile Law; Mental Disability Law; Neuroimaging; Neuroscience; Punishment; Sentencing; Therapeutic Jurisprudence.

I. INTRODUCTION

It is well-settled that the juvenile brain is not fully developed by age 18. This raises critical concerns about the current state of juvenile sentencing standards, especially in instances in which juveniles are tried as adults and sentenced to adult prisons. The implications of such transfer
policies are “profound;” they are inevitably detrimental to the juvenile involved, and are—perhaps counter-intuitively to some, not “in the interest of long-range public safety.” The most comprehensive aggregate analysis of transfer policies yields three findings:

First, transfer appears to be counterproductive: transferred youths are more likely to reoffend, and to reoffend more quickly and more often, than those retained in the juvenile justice system. In addition, research suggests that the differential effects of criminal and juvenile justice processing are not dependent on sentence type or sentence length. That is, the mere fact that juveniles have been convicted in criminal rather than juvenile court increases the likelihood that they will reoffend. Finally, the risk of reoffending is aggravated when a sentence of incarceration is imposed.

While some significant legal strides have been made in cases such as Miller v. Alabama, holding that mandatory life imprisonment without parole for those under the age of 18 at the time of their crimes violates the Eighth Amendment’s prohibition on cruel and unusual punishments, there are still areas in which the law needs — badly — to catch up to what current neuroscience can tell practitioners about the immaturity of the juvenile brain. We define “practitioners” expansively to include lawyers, judges, probation and parole officers, and mental health professionals. Additionally, attorneys working with the juvenile population need to take special care to not only provide their clients with zealous representation, but to ensure that they do not suffer trauma throughout what can be a grueling legal process. The teachings of therapeutic jurisprudence, combined with knowledge of juvenile brain development, can lead to a more complex understanding of appropriate punishment and, in many cases, treatment to ensure ongoing psychological well-being throughout this crucial stage of brain development.

In this paper, we will first give a brief overview of the current neuroscientific findings about juvenile brain development in the context of criminal behavior, and then discuss the current sentencing standards and regulations that are in place, partly due to this enhanced understanding, followed by a brief look at several recent “unknown” state cases that deal with these issues. Then, we will discuss the impact of therapeutic jurisprudence as a framework for advocating for juvenile clients, in order to maximize and preserve their psychological well-being and to mitigate trauma. Finally, we will offer recommendations for how experts can work with attorneys who are presenting sentencing arguments, in order to make the most comprehensive, scientifically persuasive case for leniency in juvenile sentencing.

The start of our title — “Some Mother’s Child Has Gone Astray” — is a lyric from Bob Dylan’s under-appreciated (and virtually never performed) song Dark Eyes. It is followed by these words: “she can’t find him anywhere.” According to the critic Tony Attwood, “the [song’s] image overall is of man dislocated from his surroundings.” The “astray” juveniles about whom we write are similarly “dislocated” from their surroundings, not to be “[found] anywhere.” We hope that what we are speaking about here can somehow potentially ameliorate this situation.

II. CURRENT NEUROSCIENTIFIC STATE OF AFFAIRS

Juvenile brain development has been a “hot topic” in recent years, not just in scientific research but in the criminal justice system as well. As some judges, attorneys and advocates start to better understand the research about juvenile brains, precedent is being routinely set across the country — in some cases by the highest courts — that recognizes distinct brain differences. Professor Laurence Steinberg’s recent statement that “The American legal system’s thinking about the criminal culpability of juveniles has been radically transformed over the past 12 years” is by no means an over-statement.

The adolescent brain may reach its adult volume by age 10; however, that does not mean that the brain is mature. Rather, that brain will take over a decade to reach what can be considered adult maturity. This means that, even when an individual turns the age of 18 and is considered to be a legal adult, his brain still has years of development and maturity ahead of it. As more is understood about this process, it will undoubtedly influence policymakers and legislators when
considering certain rights granted to those deemed to be able to make reasoned, “adult” decisions.\textsuperscript{23} To confuse the issue even further, research has shown that different parts of the brain mature and make connections for a longer period of time than others — the occipital lobe may show a slow-down of these connections by age 20,\textsuperscript{24} but the frontal lobe may continue development into the 30s.\textsuperscript{23} The most recent research suggests that brain development continues until at least the age of 26.\textsuperscript{26}

This development can affect both emotion and cognition, playing a key role in how decisions are made that, in some cases, can put a juvenile into the criminal justice system.\textsuperscript{27} For example, emotional regulation and impulse control may not be adequately developed in the juvenile brain.\textsuperscript{28} Keeping emotions and impulsive actions under control may be the difference between committing a criminal act and remaining out of the juvenile justice system.\textsuperscript{29} If juveniles’ brains are not adequately able to keep their emotions and impulses in check, researchers (and now many attorneys and advocates for children) argue that this warrants different treatment, or at least a reevaluation upon the juvenile justice system currently in place.\textsuperscript{30} In some cases, as we will discuss later, this has happened — juveniles are no longer able to be sentenced to death or life without parole if their instant offense occurred before the age of 18\textsuperscript{31} — but there may be other facets of this system that must be re-evaluated.

While researchers are currently hesitant to offer specific policy changes that could influence the law, they do agree that larger studies focusing on these patterns of development that have emerged need to be continued and refined, with the recognition that the results will likely be used to make more reasoned arguments about juvenile brain development by attorneys looking to mitigate their young clients’ actions.\textsuperscript{32} Not unimportantly, the first draft of the new Restatement of the Law on Children and the Law recognizes the significant role that such research should play in “fashioning appropriate legal rules applicable to children.”\textsuperscript{33}

As we will examine further, therapeutic jurisprudence (TJ) also provides tools to advocates and practitioners to evaluate individual juvenile offenders and apply neurological and psychological tenets in cases where a court may be unduly treating a youthful offender as an “adult” despite the likelihood of brain development playing a significant role in the instant offense.\textsuperscript{34} Recognizing the individuality of the client, both as a whole person and based on individual brain development, will allow for a better-developed case on his or her behalf, and TJ allows for, and advocates for, this kind of investigation.

III. JUVENILE SENTENCING

The Supreme Court’s Eighth Amendment jurisprudence has long stressed that youth must matter in sentencing. This position predates the Court’s decision in \textit{Roper v. Simmons}\textsuperscript{35} — that the Eighth Amendment forbids execution of juvenile offenders\textsuperscript{36} — by more than two decades, and it flows from the Court’s decisions in the importance of mitigation in capital cases. Since the Court decided \textit{Eddings v. Oklahoma},\textsuperscript{37} explaining why an offender’s age and maturity is critical to any assessment of just punishment, and stressing that, “youth is more than a chronological fact” and that, “minors often lack the experience, perspective, and judgment expected of adults,”\textsuperscript{38} youth has become relevant — or, at the least, should have become relevant — to sentencing decisions.

Later cases — beginning with \textit{Roper} and continuing through \textit{Montgomery v. Louisiana}\textsuperscript{39} — made clear that, “children are constitutionally different from adults for purposes of sentencing;”\textsuperscript{40} penological justifications for the harshest adult punishments thus, “collapse in light of ‘the distinctive attributes of youth.’”\textsuperscript{41} In \textit{Graham v. Florida}, for example, the Court emphasized, relying on \textit{Roper}, that the “case for retribution is not as strong with a minor as with an adult.”\textsuperscript{42}

These conclusions are further buttressed by the state-of-the-art scientific research.\textsuperscript{43} \textit{First}, there is little doubt that adolescents “are less capable decision makers than adults in ways that are relevant to their criminal choices.”\textsuperscript{44} Youths’ generic difference from adults in knowledge and
experience, time perspective, risk proclivity, and impulsivity render their bad choices categorically less blameworthy.\textsuperscript{45} They are less likely to perceive potential risks,\textsuperscript{46} and less able to exercise self-control.\textsuperscript{47} Also, they are more susceptible to peer pressure than are adults,\textsuperscript{48} and often “lack the freedom that adults have to extricate themselves from a criminogenic setting.”\textsuperscript{49} Most importantly, for the purposes of this paper, neuroscientific research shows that the areas of the brain responsible for higher-order cognitive functions such as planning ahead, weighing risks and rewards, and making complicated decisions are simply not fully developed during adolescence and young adulthood.\textsuperscript{50} As Prof. Thomas Grisso and a colleague have noted, “Miller and Montgomery will require sentencing practices in juvenile homicide cases nationwide that take into account developmental maturation.”\textsuperscript{51}

This must be read in the context of the reality that much of the literature that focuses on all the issues that comprise “criminological evidence”\textsuperscript{52} makes no mention of neuroscientific tests of evidence.\textsuperscript{53} The impact of this lack of attention on juveniles accused of a crime, convicted, and often sentenced as if they were adults\textsuperscript{54} should be patently clear.\textsuperscript{55}

It is also time to start thinking seriously about what actual impact cases such as Miller and Montgomery have on practice “on the ground.”\textsuperscript{56} A recent study in Philadelphia found that, contrary to “ordinary common sense,”\textsuperscript{57} the release of juvenile lifers has had an extremely low impact in terms of public safety; of 269 re-sentenced juvenile lifers there, only six were subsequently arrested, and in only two of those cases (less than 1%) was there a conviction, compared to a national 30% recidivism rate for those released after homicide convictions.\textsuperscript{58} Another recent study by researchers at Duke University and a prisoners’ rights legal aid office in North Carolina tells us that life without parole (LWOP) sentences had been concentrated in a small number of counties, and that, in the six-plus years since Miller was decided, just 42 of the group of 94 juvenile offenders that had been sentenced to LWOP have since been re-sentenced to non-LWOP sentences.\textsuperscript{59} Of particular interest: Over one third of the juveniles who had been sentenced to LWOP, or 32 individuals, were not the killers, but were convicted under a felony murder theory.\textsuperscript{60} Importantly, the authors note that in Miller rehearings, “[e]xpert psychological and psychiatric evaluations may need to be done, as well as, where applicable, assessments regarding child trauma, sexual and physical abuse, neurological development, substance abuse, traumatic brain injury, and other conditions.”\textsuperscript{61}

Notwithstanding the fact that “direct references to neuroscience in the Supreme Court’s opinions about adolescent culpability became increasingly more frequent after the Roper decision,”\textsuperscript{62} there is little question that “the high court’s acknowledgment that adolescent brain development is relevant to sentence severity has largely gone unheeded by state courts.”\textsuperscript{63}

It is also critical that we think about issues such as race and class in this context. A recent study of the 185 prisoners in Tennessee sentenced as juveniles to life imprisonment (including seven sentenced at the age of 14, and 14 still serving unmodified life without parole sentences) revealed that nearly 75\% were African-Americans.\textsuperscript{64} Research studies confirm “the unmistakable conclusion … that while African American youths comprise far less than half of the population of youths eligible to be sentenced to life without parole, approximately half or more of the youths sentenced to life without parole are African American.”\textsuperscript{65} The rate for black youth sentenced to life without parole exceeds that of white youth in every state with juvenile life without parole,\textsuperscript{66} and the per capita rate of African American youths serving life-without-parole sentences is 6.6 per 10,000 youths, almost four times the national average of 1.8, and 10 times the per capita rate of 0.6 for white youths.\textsuperscript{67}

There is a constellation of other social issues as well.\textsuperscript{68} One study revealed that, of juveniles sentenced to life in prison, 79\% witnessed violence in their homes regularly, 32\% grew up in public housing, 40\% had been enrolled in special education classes, fewer than half were attending school at the time of their offense, 47\% were physically abused, 80\% of girls reported histories of physical abuse and 77\% of girls reported histories of sexual abuse.\textsuperscript{69} These are issues we must keep in mind at all times.

We also must take into account the position of the organized prosecutorial bar. Notwithstanding the fact that some states have started training for prosecutors in matters related to adolescent brain development,\textsuperscript{70} Professor Terry Maroney has pointed out the “extreme skepticism” that is reflected
in that bar’s publications about this topic,

Also, although not directly related to questions of sentencing, it is critical to assess the relevance of these neurological findings to issues involving a juvenile’s ability to raise the incompetency status or plead insanity. As to competency, it is striking that the criminal justice system has not made substantial efforts to clarify the application of the incompetency status to juveniles awaiting trial. Although the standard is generally the same as is that for adults, in one jurisdiction, at least, it has been suggested that, given the inherently reduced ability of juveniles to understand legal proceedings and to cooperate with counsel, the standard for competency in juvenile court might be lower than the applicable adult standard. While this case has been cited approvingly in at least two other jurisdictions, there is, at this time, no national consensus on this point. A turn to the neurological information that we share here may, we hope, bring our focus on this issue more in the future.

On the question of insanity, while there is some case law to the contrary, the majority of courts that have considered the issue have allowed entry of a plea of not guilty by reason of insanity in juvenile cases. Writing recently about this, one of the co-authors (MLP) concluded, “[i]t is reasonable to expect that this issue will grow in importance in the future as evidence continues to accumulate that the juvenile justice system is generally failing in its primary, articulated rehabilitative goals.” Certainly, the neurological data we discuss here will (or, at least, should) accelerate this importance.

IV. THERAPEUTIC JURISPRUDENCE

Therapeutic jurisprudence recognizes that, as a therapeutic agent, the law can have therapeutic or anti-therapeutic consequences. It asks whether legal rules, procedures, and lawyer roles can or should be reshaped to enhance their therapeutic potential while not subordinating due process principles. Professor David Wexler clearly identifies how the inherent tension inherent in this inquiry must be resolved: “the law’s use of mental health information to improve therapeutic functioning [cannot] impinge upon justice concerns.” As one of the presenters (MLP) has written elsewhere, “An inquiry into therapeutic outcomes does not mean that therapeutic concerns ‘trump’ civil rights and civil liberties.” Therapeutic jurisprudence “look[s] at law as it actually impacts people’s lives,” and TJ supports “an ethic of care.” It attempts to bring about healing and wellness, and to value psychological health.

Recently, the two co-authors posed this question: “In those instances in which criminal sentencing decision-making considers neuroscientific tests and evidence, to what extent does it comport with therapeutic jurisprudence principles?” In answering the question, we concluded that, “courts have regularly ignored the potential role of therapeutic jurisprudence in sentencing decisions.” It is necessary, we emphasize, for courts to start taking this role seriously.

Although there is, to be sure, a robust therapeutic jurisprudence literature on sentencing in general and thoughtful critics have focused on the “value in welcoming the perspective of therapeutic jurisprudence in ... sentencing advocacy,” startlingly little has been written about TJ and the issues we are considering in this paper. In one of the few pieces, Professor Mark Fondacaro and his colleagues have argued that TJ demands “evidence-based intervention strategies that draw on social-ecological theories of human behavior to not only understand the social, psychological, and biological drivers of crime, but to identify intervention strategies that are effective in preventing crime and reducing recidivism.” And Professor Tamar Birckhead has underscored how TJ can “encourage and facilitate the child’s sense of individual autonomy, self-determination, and choice.”

In another paper, Professor Georgia Zara has called for the study of “integrative approaches” to help “young offenders to change in the direction of where they can realize themselves and their aspirations, without being in need of recycling their previous delinquent means.” Certainly, if the positions articulated by Professors Fondacaro and his colleagues, Professor Birckhead and Professor...
Zara, were to be universally accepted, we would have made great progress. We are, however, puzzled and troubled by the general lack of attention TJ scholars are paying to this important area of law and social policy.\textsuperscript{97}

In a recent TJ-focused article with another colleague, one of the co-authors (MLP) concluded that it was “imperative to ensure that lawyers working with individuals with trauma-related mental disabilities are sensitive to the rights and needs of such individuals by utilizing a trauma-informed approach to lawyering.”\textsuperscript{98} Again, the population with which we are concerned has inevitably suffered significant trauma from its involvement in the legal system;\textsuperscript{99} we believe that only a TJ approach can possibly remediate this reality.\textsuperscript{100}

This must also be considered in the context of this reality: certain juvenile crimes have been subject to saturation publicity, creating intense pressure on judges who do not want to be perceived as being “soft on crime.”\textsuperscript{101} The conflict between what we now know and what (false) “ordinary common sense”\textsuperscript{102} demands (in the way of enhanced punishments) flies squarely in the face of therapeutic jurisprudence precepts.

Certainly, the current system in no way “value[s] psychological health,”\textsuperscript{103} nor does it advance an “ethic of care.”\textsuperscript{104} The conditions that institutionalized juveniles face — especially when they are housed in adult prisons — have been documented on countless occasions.\textsuperscript{105} Some 5 years ago, one of the co-authors (MLP) quoted an article Professor Barry Feld wrote on this matter 20 years ago — “[c]riminological research, judicial opinions, and investigative studies report staff beatings of inmates, the use of medications for social control purposes, extensive reliance on solitary confinement, and a virtual absence of meaningful rehabilitative programs.”\textsuperscript{106} To suggest that there is any attention paid to an “ethic of care” is fatuous. If the legal process is to seek to maximize psychological well-being and if it is to coincide with an “ethic of care,” then, it is necessary for those involved in the criminal justice system to speak publicly about this topic, and to “call out” those — be they elected politicians, editorial writers and commentators in the conservative media, or judges — who urge retributive and punitive sentences for children and adolescents.

In short, our current system mocks therapeutic jurisprudence principles and flies in the face of the most important and relevant scientific research.

\textbf{V. CONCLUSION}

We think, as should be fairly clear from what we have said, that both attorneys and expert witnesses must keep all these developments — the scientific ones and the legal ones — in mind when working on cases involving juveniles in the criminal justice system.\textsuperscript{107} Much here will be cognitively dissonant to jurors and judges as it will not comport with their flawed self-referential “ordinary common sense”\textsuperscript{108} about juveniles who violate the criminal law, especially in cases involving violent crime.\textsuperscript{109} The late Dr. Robert Sadoff — the best expert witness with whom co-author MLP has ever worked — has written about how an expert must be an educator on the witness stand.\textsuperscript{110} Certainly, it is obligatory that the expert in cases such as we are discussing must do that at all times.\textsuperscript{111}

As this field of developmental neuroscience continues to grow and as it becomes more and more entwined with our criminal justice system, attorneys must also learn not just how to work with experts, but how to get at information that an expert can provide that is also scientifically valid for the proposition that is being put forth. As attorneys, we know that there are nuances in the law and in evidentiary rules that we must use to build a case for various parts of the criminal trial. However, attorneys are not necessarily familiar with the ways in which scientific advancements progress from the laboratory into the “real world” — there are equal amounts of nuance in scientific research that make it necessary for experts to educate attorneys in what may or may not be appropriate to introduce as evidence for a particular proposition, such as what we are discussing in this article.\textsuperscript{112} As we noted in a prior paper, “Scientific discovery moves faster than the law.”\textsuperscript{113} Experts need to be
prepared to discuss with attorneys not only why a particular test or evaluation may help the client, but why that test or evaluation is appropriate to administer in each individual situation.

We hope and expect that, if this is done, the law will finally begin to catch up with what we have learned about the juvenile brain, and it will begin to apply that knowledge responsibly to matters in which juveniles are before the court. The critic Oliver Trager refers to Dark Eyes (the song from which we drew the beginning of our title) as “filled with grace notes that sound like cries for help.”¹¹ We believe that therapeutic jurisprudence and authentic common sense are the only palliatives that might answer these, “cries for help.”

ENDNOTES

1. One of the co-authors (AJL) presented a version of this paper at the American College of Forensic Psychology conference in San Diego CA, March 2019, and at the biennial Congress of the International Academy of Law and Mental Health in Rome, Italy, July 2019.


6. Perlin, supra note 2, at 320, citing, inter alia, Jeffrey Fagan, The Comparative Advantage of Juvenile Versus Criminal Court Sanctions on Recidivism Among Adolescent Felony Offenders, 18 Law & Pol’y 77 (1996), and Jeffrey Fagan, Separating the Men From the Boys: The Comparative Advantage of Juvenile Versus Criminal Court Sanctions on Recidivism Among Adolescent Felony Offenders, in SERIOUS, VIOLENT, CHRONIC JUVENILE OFFENDERS: A SOURCEBOOK 238, 245 (James C. Howell et al. eds., 1995). See also, Jarod K. Hofacket, Justice or Vengeance: How Young Is Too Young For A Child To Be Tried and Punished as an Adult?, 34 Tex. Tech. L. Rev. 159, 165–66 (2002) (juveniles who have served in adult prisons are more likely to reoffend than their counterparts in juvenile facilities who committed comparable crimes). On how the prosecutor’s right to seek such transfer is a basic due process violation, see Sally T. Green, Prosecutorial Waiver into Adult Criminal Court: A Conflict of Interests Violation Amounting To The States’ Legislatively Abrogation of Juveniles’ Due Process Rights, 110 Penn St. L. Rev. 233, 235 (2005).

7. 567 U.S. 460 (2012) (But see People v. Generally, 90 N.E.3d 991, 995 (Ill. Ct. App. 2017)) (judge’s statement that “[h] the age of 18, individuals have already formed in some cases indelibly the attitudes and outlook toward life that they will carry with them for the rest of their lives” does not violate Miller in sentencing the defendant).

8. At the time of the Miller decision, 28 states had mandatory life-without-parole sentencing laws for juveniles. See Richard H. Hubbard, Juvenile Life Without Parole: Where Are We Now? And Where Do We Go from Here? 45 ACJS Today (Nov. 2019).

9. See infra Part I.


11. See Perlin & Lynch, supra note 1, at 81 (“Both the civil and criminal legal processes to which juveniles are subject are rife with policies and procedures that expose them to shame and humiliation, causing unnecessary trauma”). On shame and humiliation in the context of the legal system in general, see generally, Michael L. Perlin & Naomi M. Weinstein, “Friend to the Martyr, a Friend to the Woman of Shame”: Thinking About the Law, Shame and Humiliation, 24 So. Cal. Rev. L. & Soc’y Just. 1 (2014); see also, Michael L. Perlin & Alison J. Lynch, “To Wander Off in Shame”: Deconstructing


13. In an article arguing that states should create juvenile-specific clemency boards (what the author characterizes as “Miller Commissions”) to implement Miller v. Alabama, supra note 6), Professor Cara Drinan has underscored that “there should be members of the Commission who have who have a working knowledge of juvenile brain development.” Cara H. Drinan, Juvenile Sentencing Post-Miller: Preventive and Corrective Measures, 2015 Wis. L. REV. 203, 216 (2015).


15. BOB DYLAN, DARK EYES (Special Rider Music 1985).


19. Id. at 410.

20. Importantly, the counter-argument (“Well, if this is so, what about all the juveniles who do not commit crimes?”) is responded to carefully in Susan Frelich Appleton, Deanna M. Barch & Anneliese M. Schafer, The Developing Brain: New Directions in Science, Policy, and Law, 57 WASH. U. J. L. & POL’Y 1, 5 (2018), positing “a dynamic framework in which brain development and social context, including peer associations, interact.”


22. See e.g., Sarah-Jayne Blakemore & Suparna Choudhury, Development of the Adolescent Brain: Implications for Executive Function and Social Cognition, 47 J. CHILD PSYCHOL. & PSYCH. 296, 301–302 (2006) (executive function skills such as “inhibitory control…, processing speed…, working memory[,] and [decisionmaking] … continue[,] to develop during adolescence,” changing “what is perceived as important in the social world”). See also Kevin W. Saunders, A Disconnect Between Law and Neuroscience: Modern Brain Science, Media Influences, and Juvenile Justice, 2005 Utah L. REV. 695, 703–12 (neuroscience developments have led to the recognition that cranial development during adolescent years can affect “response inhibition, emotional regulation, planning and organization”).


28. There is important evidence that impulse control is the last aspect of brain development to develop. See Victor L. Streib, Standing Between the Child and the Executioner: The Special Role of Defense Counsel in Juvenile Death Penalty Cases, 31 AM. J. CRIM. L. 67, 102 (2003).


34. See infra text accompanying notes 42–49.

35. Roper, 543 U.S. 551.

36. In a recent article, Professor John Blume and his colleagues argue that, following Roper, the ban on execution should be extended to those under 21. See John H. Blume et al., Death by Numbers: Why Evolving Standards Compel Extending Roper’s Categorical Ban Against Executing Juveniles From 18 to 21, 98 TEX. L. REV. 921 (2020). See also Hollis Whitson & Eric Samler, Execution of Youth under Age 21 on the Date of Offense: Ending with a Bang or a Whimper?, accessible at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3453830.

37. Eddings v. Oklahoma, 455 U.S. 104 (1982). Eddings was decided 4 years after the Court’s decision in Lockett v. Ohio, 438 U.S. 586, 604 (1978), that had held that “the Eighth and Fourteenth Amendments require that the sentence, in all but the rarest kind of capital case, not be precluded from considering, as a mitigating factor, any aspect of a defendant’s character or record. . .that defendant profers as a basis for a sentence less than death.”

38. Eddings, 455 U.S. at 115–16.


40. Id. at 733 (quoting Miller v. Alabama, 567 U.S. 460, 471 (2012)).

41. Id. at 733–34 (quoting Miller, 567 U.S. at 472).

42. Compare Jones v. Mississippi, 141 S. Ct. 1307 (2021) (sentencer is not required to make a separate factual finding of permanent incorrigibility before imposing a discretionary sentence of life without parole on a juvenile homicide offender).

43. Graham, 560 U.S. at 71, quoting Roper, 543 U.S. at 571.

44. Much of this research is discussed in an Amicus Curiae brief of criminal-sentencing scholars in Support of Appellant’s Petition for Rehearing En Banc in United States v. Briones, # 16–10150 (9th Cir. 2018) (on file with authors).


47. See also Christine Fitch, Emerging Adulthood and the Criminal Justice System: #Brainnotfullycooked #Can’tadulthood #Yolo, 58 SANTA CLARA L. REV. 325 (Aug. 8, 2018).

48. Roper, 543 U.S. at 569.


50. supra note 29. On the other hand, adolescents’ cognitive capacities do reach adult levels prior to their psychosocial maturity. See Grace Ignogle et al., Adolescents’ Cognitive Capacity Reaches Adult Levels Prior to Their Psychosocial Maturity: Evidence for a “Maturity Gap” in a Multinational, Cross-Sectional Sample, 43 LAW & HUM. BEHAV. 69 (2019).

52. E.g., Predictor variables, and recidivism predictions, while considering criminal companions, criminogenic needs, criminal history, race, age, substance abuse history, family structure and criminality, gender, socio-economic status, and a host of other variables.

53. See Perlin & Lynch, supra note 11, at 357.

54. On the counter-productivity of such transfer policies, see Perlin, supra note 2, at 320. On the question of the health care needs of a juvenile placed in an adult prison, see Ratliff v. Cohn, 693 N.E.2d 530 (Ind. 1998), reh. denied (1998). For a radically-different approach to juvenile transfer statutes, see Thomas J. Mescall II, Legally Induced Participation and Waiver of Juvenile Courts: A Therapeutic Jurisprudence Analysis, 68 REV. JUR. U.P.R. 707, 719 (1999) (“From a therapeutic jurisprudence perspective, states should enact juvenile-centered waiver statutes that allow juveniles to rebut presumptive waiver by proving they are suited to juvenile rehabilitation”).

55. On the related questions of gender and ethnicity in these contexts, see Stephanie M. Shepherd et al., Gender and Ethnicity in Juvenile Risk Assessment, 40 CRIM. JUST. & BEHAV. 388 (2013).


For the provocative parallel question of what neuroimaging tells us about the decisionmaking of judges in coming to legal judgments, see Qun Yang et al., When Morality Opposes the Law: An fMRI Investigation into Punishment Judgments for Crimes with Good Intentions, 127 NEUROPSYCHOLOGIA 195 (2019). For a broader inquiry on the impact of “science-based crime policy” on high-risk juveniles, see Skeem, Scott & Mulvey, supra note 15, at 731–34.

57. See infra note 107, discussing the fallacies of this mode of thinking.


60. Finholt et al., supra note 58, at 154–57.

61. Id. at 168 (emphasis added).

62. Steinberg, supra note 17, at 411.


64. See Wadhwani, Tamburin & Gang, supra note 30.


67. Sterling, supra note 64, at 1063, citing The Rest of Their Lives, supra note 65, at 2.


71. See, e.g., Terry Maroney, The False Promise of Adolescent Brain Science in Juvenile Justice, 85 NOTRE DAME L. REV. 89, 172 (Jan. 2009), see also Id. at n. 329, citing AM. PROSECUTORS RESEARCH INST., A PROSECUTOR’S GUIDE TO PSYCHOLOGICAL EVALUATIONS AND COMPETENCY CHALLENGES IN JUVENILE COURT 1, 18, 42–45 (2006) (presenting data with goal of disputing “sham mental defenses” and countering “disturbing” trend of using “expert testimony to excuse the dangerous and harmful behavior of youth”).

72. See supra notes 20–25.


76. See e.g., In re T.S., 796 N.W.2d 649, 655 (N.D. 2011); SWM v. State, 299 P.3d 673, 682 (Wyo. 2013).


78. Perlin & Cucolo, supra note 72, § 14–1.8.1, at 14–141.


84. Winick, supra note 13, at 535.


86. Id., citing Bruce Winick, A Therapeutic Jurisprudence Model for Civil Commitment, in INVOLUNTARY DETENTION AND THERAPEUTIC JURISPRUDENCE: INTERNATIONAL PERSPECTIVE ON CIVIL COMMITMENT 23, 26 (Kate Diesfeld & Ian Freckleton eds., 2003).

87. Id.

88. Perlin & Lynch, supra note 11, at 351.

89. Id. at 353.


93. In the context of sentencing, see Deborah W. Denno, What Real-World Criminal Cases Tell Us about Genetics Evidence, 64 HASTINGS L.J. 1591 (2013).
94. Fondacaro et al., supra note 1, at 698.
97. Compare David Katner, Eliminating the Competency Presumption in Juvenile Delinquency Cases, 24 CORNELL J.L. & PUB. POL’Y 403, 433–44 (2015) (discussing the therapeutic jurisprudence implications of a model system that would provide intensive case management for juveniles as they mature into the status of being competent to stand trial).
100. For other inquiries into the application of therapeutic jurisprudence to cases involving trauma in the legal system, see e.g., Carolyn S. Salisbury, From Violence and Victimization to Voice and Validation: Incorporating Therapeutic Jurisprudence in a Children’s Law Clinic, 17 ST. THOMAS L. REV. 623 (2005); Kate Aschenbrenner, In Pursuit of Calmer Waters: Managing the Impact of Trauma Exposure on Immigration Adjudicators, 24 KAN. J.L. & PUB. POL’Y 401 (2015).
103. See supra text accompanying note 86.
104. See supra text accompanying note 84.
105. See e.g., Perlin, supra note 2.
107. See e.g., Cassandra M. Lamb, Behavioral Biology: The Impact of Neuroimaging and Brain Dysfunction on the Sentencing of Sexual Offenders, 35 NEW ENG. J. ON CRIM. & CIV. CONFINEMENT 421, 435 (2009) (it is “appropriate to admit “expert testimony regarding neuroimaging, PET scans, CAT scans, and MRIs of the defendant and their results”).

“Ordinary common sense” (OCS) is a ‘powerful unconscious animator of legal decision making.’ It is a psychological construct that reflects the level of the disparity between perception and reality that regularly pervades the judiciary in deciding cases involving individuals with mental disabilities. OCS is self-referential and non-reflective: ‘I see it that way, therefore everyone sees it that way; I see it that way, therefore that’s the way it is.”

109. See Emily M. Steiner, When Psychology Answers Constitutional Questions: The Eighth Amendment and Juvenile Sentencing, 46 U. BALTIMORE L. REV. 353, 372 (2017): “Despite the depiction of juveniles as irreparably violent, neuropsychological research from the past three decades has disproved this notion.”

One of the co-authors (MLP) has recently argued for a new policy in which multiple experts may be needed in cases where the sort of dissonance discussed here is likely, and as a means for best combatting “the current state of affairs in which credible expert evidence is often ignored, succumbing to heuristic reasoning and false ‘ordinary common sense’ in ways that are infused with sanism and pretextuality.” See Michael L. Perlin, “Deceived Me into Thinking/I Had Something to Protect”: A Therapeutic Jurisprudence Analysis of When Multiple Experts Are Necessary in Cases in which Fact-Finders Rely on Heuristic Reasoning and “Ordinary Common Sense,” 13 L.J. SOC’L JUST. 88 (2020) (Perlin, Deceived Me)

“Sanism” is an irrational prejudice of the same quality and character of other irrational prejudices that cause (and are reflected in) racism, sexism, homophobia, and ethnic bigotry. Perlin, Harmon & Chatt, supra note 107, at 279. It is “largely invisible and largely socially acceptable,” Michael L. Perlin, “And My Best Friend, My Doctor, Won’t Even Say What It Is I’ve Got”: The Role and Significance of Counsel in Right to Refuse Treatment Cases, 42 SAN DIEGO L. REV. 735, 750 (2005) and it “infests both our jurisprudence and our lawyering practices.” Michael L. Perlin, “Everybody Is Making Love/Or Else
Expecting Rain”: Considering the Sexual Autonomy Rights of Persons Institutionalized Because of Mental Disability in Forensic Hospitals and in Asia, 83 U. WASH. L. REV. 481, 486 (2008).

Pretextuality describes the ways in which courts accept testimonial dishonesty—especially by expert witnesses—and engage similarly in dishonest (and frequently meretricious) decision-making. Perlin, Harmon & Chatt, supra note 107, at 280; See Perlin & Weinstein, supra note 107, at 85.


111. If the recommendations suggested in Perlin, Deceived Me, supra note 108, are adopted, it will be more likely that this can actually happen.

112. On how expert testimony based on the brain imaging of adolescents in criminal cases involving what has been characterized as the “infancy defense” should be admissible, see Sally Terry Green, The Admissibility of Expert Witness Testimony Based on Adolescent Brain Imaging Technology in the Prosecution of Juveniles: How Fairness and Neuroscience Overcome the Evidentiary Obstacles To Allow for Application of a Modified Common Law Infancy Defense, 12 N.C. J. L. & TECH. 1 (2010).

113. Perlin & Lynch, supra note 11, at 312.


Michael L. Perlin is Professor of Law Emeritus at New York Law School (NYLS), where he was director of NYLS’s Online Mental Disability Law Program, and director of NYLS’s International Mental Disability Law Reform Project in its Justice Action Center. He is co-founder of Mental Disability Law and Policy Associates, and is currently Adjunct Professor of Law, Emory University School of Law, and Instructor, Loyola University New Orleans, Department of Criminology and Justice. He has written 33 books and nearly 300 articles on all aspects of mental disability law. He has litigated at every court level from police court to the US Supreme Court, and has done advocacy work on every continent. He is the honorary life president of the International Society for Therapeutic Jurisprudence and a member of that society’s current Board of Trustees. He is also a member of the Lawrence Township (NJ) Community Concert Band and the board of directors of the Washington Crossing (NJ) Audubon Society.

Alison J. Lynch is an attorney working in the intersection of mental health, criminal justice, and institutionalization. Prior to attending law school, she studied neuroscience and psychology. She graduated from New York Law School with a JD in 2013, and with a Masters in Mental Disability Law Studies in 2015, and has spent her career advocating for individuals with mental illness.