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How Courts in Criminal Cases Respond to Childhood Trauma

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HOW COURTS IN CRIMINAL CASES RESPOND TO CHILDHOOD TRAUMA

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Neurobiological and epidemiological research suggests that abuse and adverse events experienced as a child can increase an adult's risk of brain

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dysfunction associated with disorders related to criminality and violence. Much of this research is predictive, based on psychological evaluations of children; few studies have focused on whether or how criminal proceedings against adult defendants consider indicators of childhood trauma. This Article analyzes a subset of criminal cases pulled from an 800-case database created as part of an original, large-scale, empirical research project known as the Neuroscience Study. The 266 relevant cases are assessed to determine the extent to which, and the methods whereby, criminal courts weigh and respond to childhood trauma evidence. This Article first creates a systematic and detailed definition of what constitutes childhood trauma evidence based on 20 factors, including physical and verbal abuse, dysfunctional upbringing, brain damage or injury, and neglect and abandonment. These factors are then examined in the context of the often life-long conditions caused by or related to such trauma, ranging from mental illness and neurological disorders to poor intellectual functioning and behavioral problems. A review of courts' responses indicates that childhood trauma evidence is primarily used for mitigation and can play a significant and persuasive role in claims of ineffective assistance of counsel, especially in death penalty cases. At the same time, findings suggest that courts may offer attorneys a troubling degree of deference by accepting their claims of "strategic" yet empirically unfounded decisions to omit childhood trauma evidence in certain circumstances. This Article provides real-world guidance for attorneys seeking to incorporate childhood trauma evidence into their arguments, emphasizing the value of drawing a distinct nexus between defendants' childhood traumas and their adult criminal behavior. Attorneys who understand the long-term effects of childhood trauma will be better equipped to make such connections and effectively present this evidence in court.

I. INTRODUCTION

The United States Supreme Court has consistently held that defense attorneys are constitutionally obligated in capital cases to rigorously investigate "all reasonably available mitigating evidence" pertinent to a defendant's history and situation.[1] Such individualized mitigation evidence, which is wide-

1. Wiggins v. Smith, 539 U.S. 510, 524 (2003) (emphasis omitted) (quoting AM. BAR ASS'N, ABA GUIDELINES FOR THE APPOINTMENT AND PERFORMANCE OF COUNSEL IN DEATH PENALTY

ranging, includes at its core indications of a defendant's childhood trauma, in all of its various forms.[2] Yet there has been no systematic study of how courts respond to childhood trauma evidence or how they incorporate it in their decision making, despite some excellent analyses of key case law.[3] This gap is all the more significant given that offenders are far more likely to have a history of childhood trauma than non-offenders, and that trauma has severe lifelong consequences.[4]

This Article attempts to fill this gap. It examines childhood trauma information from my "Neuroscience Study," which provides data on every criminal case in the United States that has addressed neuroscientific evidence over the course of two decades.[5] Neuroscience constitutes "the branch of the

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CASES 11.4.1(C) (1989)); *see also* Porter v. McCollum, 558 U.S. 30, 39 (2009) (quoting Williams v. Taylor, 529 U.S. 362, 396 (2000)) (stating that "counsel had an 'obligation to conduct a thorough investigation of the defendant's background.'").

2. *See Wiggins*, 539 U.S. at 524; *Porter*, 558 U.S. at 39 (quoting *Williams*, 529 U.S. at 396).

3. *See* Emad H. Atiq & Erin L. Miller, *The Limits of Law in the Evaluation of Mitigating Evidence*, 45 AM. J. CRIM. L. 167 (2018); Phyllis L. Crocker, *Childhood Abuse and Adult Murder: Implications for the Death Penalty*, 77 N.C. L. REV. 1143 (1999); Bernice B. Donald & Erica Bakies, *A Glimpse Inside the Brain's Black Box: Understanding the Role of Neuroscience in Criminal Sentencing*, 85 FORDHAM L. REV. 481 (2016); Miriam S. Gohara, *In Defense of the Injured: How Trauma-Informed Criminal Defense Can Reform Sentencing*, 45 AM. J. CRIM. L. 1 (2018); Gene Griffin & Sarah Sallen, *Considering Child Trauma Issues in Juvenile Court Sentencing*, 34 CHILD. LEGAL RTS. J. 1 (2013); Michael Mello, *"In the Years When Murder Wore the Mask of Law": Diary of a Capital Appeals Lawyer (1983–1986)*, 24 VT. L. REV. 583 (2000). In addition, some scholars have studied incarcerated adults who experienced childhood trauma. Nancy Wolff & Jing Shi, *Childhood and Adult Trauma Experiences of Incarcerated Persons and Their Relationship to Adult Behavioral Health Problems and Treatment*, 9 INT'L J. ENVTL. RES. & PUB. HEALTH 1908, 1909 (2012) [hereinafter Wolff & Shi, *Childhood and Adult Trauma Experiences*], https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3386595/pdf/ijerph-09-01908.pdf [https://perma.cc/6D7Y-YT3G]; Nancy Wolff, Jing Shi, & Jane A. Siegel, *Patterns of Victimization Among Male and Female Inmates: Evidence of an Enduring Legacy*, 24 VIOLENCE & VICTIMS 469, 477 (2009) [hereinafter Wolff, Shi, & Siegel, *Patterns of Victimization*] https://connect.springerpub.com/content/sgrvv/24/4/469.full.pdf [https://perma.cc/5E95-6TGW].

4. *See* Wolff & Shi, *Childhood and Adult Trauma Experiences*, *supra* note 3, at 1920–21.

5. For earlier analyses of the Neuroscience Study data, see Deborah W. Denno, *The Myth of the Double-Edged Sword: An Empirical Study of Neuroscience Evidence in Criminal Cases*, 56 B.C. L. REV. 493 (2015) [hereinafter Denno, *The Myth*]; Deborah W. Denno, *The Place for Neuroscience in Criminal Law*, *in* PHILOSOPHICAL FOUNDATIONS OF LAW AND NEUROSCIENCE 69 (Dennis Patterson & Michael Pardo eds., 2016); Deborah W. Denno, *How Prosecutors and Defense Attorneys Differ in Their Use of Neuroscience Evidence*, 85 FORDHAM L. REV. 453 (2016); Deborah W. Denno, *Concocting Criminal Intent*, 105 GEO. L.J. 323 (2017); Deborah W. Denno, *Neuroscience and the Personalization of Criminal Law*, 86 U. CHI. L. REV. 359 (2019). Other wide-scale empirical research on neuroscience has also been completed in Canada, England, the Netherlands, the United States, and

life sciences that studies the brain and nervous system,"[6] a topic of direct relevance to childhood trauma because so many youths exposed to trauma face brain and nervous system injuries. Childhood trauma is especially relevant to the criminal justice system because of society's entrenched recognition that "defendants who commit criminal acts that are attributable to a disadvantaged background, or to emotional and mental problems, may be less culpable than defendants who have no such excuse."[7]

Part II of this Article examines definitions and frameworks for delineating childhood trauma as well as the impact of childhood trauma on an individual's later emotional, mental, and physical development, including criminal and violent behavior. Part III describes the impact of childhood trauma in the criminal justice system and also provides an overview of the Neuroscience Study's scope and goals. Additionally, Part III lays out the Neuroscience Study's definitional framework based on twenty categories of childhood trauma. Lastly, Part III analyzes the conditions caused by or related to childhood trauma, with a focus on criminal court cases. Part IV presents the Neuroscience Study's findings of courts' responses to childhood trauma evidence, emphasizing in particular the dominance of the use of such evidence as mitigation (in nearly all of the cases) as well as its significance in claims of ineffective assistance of counsel, especially in capital cases. Moreover, Part IV emphasizes the troublesome degree of deference that courts give to attorneys in ineffective assistance of counsel cases, suggesting that some of the "strategic decisions" that attorneys engage in, especially the omission of such evidence, may not have an empirical foundation. Finally, Parts V and VI detail the wins and losses of ineffective assistance of counsel cases and how attorneys can effectively incorporate childhood trauma evidence into their arguments.

If increasing numbers of studies are showing links between childhood trauma and later cognitive and behavioral problems among defendants, then

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Wales. *See* Paul Catley & Lisa Claydon, *The Use of Neuroscientific Evidence in the Courtroom by Those Accused of Criminal Offenses in England and Wales*, 2 J.L. & BIOSCIENCES 510 (2015) (England and Wales); Jennifer A. Chandler, *The Use of Neuroscientific Evidence in Canadian Criminal Proceedings*, 2 J.L. & BIOSCIENCES 550 (2015) (Canada); Nita A. Farahany, *Neuroscience and Behavioral Genetics in US Criminal Law: An Empirical Analysis*, 2 J.L. & BIOSCIENCES 485 (2016) (the United States); C.H. de Kogel & E.J.M.C. Westgeest, *Neuroscientific and Behavioral Genetic Information in Criminal Cases in the Netherlands*, 2 J.L. & BIOSCIENCES 580 (2015) (the Netherlands).

6. NEUROSCIENCE AND THE LAW: BRAIN, MIND, AND THE SCALES OF JUSTICE 206 (Brent Garland ed., 2004); *see also* OWEN D. JONES, JEFFREY D. SCHALL, & FRANCIS X. SHEN, LAW AND NEUROSCIENCE 762 (2014) (defining neuroscience as "[t]he scientific study of the structure and function of the nervous system; includes experimental and clinical studies of animals and humans").

7. California v. Brown, 479 U.S. 538, 545 (1987) (O'Connor, J., concurring).

some courts' causation limitations for omitting such information may no longer be warranted. Likewise, if empirical research shows that juries and other criminal justice actors view such evidence as predominately mitigating, then attorneys' purported "strategic decisions" to leave it out may, for the most part, no longer be as justified. Indeed, the importance of childhood trauma evidence is not just confined to capital cases. As this Article shows, the evidence is applicable in a broad array of non-capital contexts, and attorneys are using it in court for these purposes. Such ongoing applicability is all the more reason to examine the breadth and pervasiveness of childhood trauma in the United States and bring attention to it.

II. WHAT IS CHILDHOOD TRAUMA EVIDENCE?

There are numerous definitions of childhood trauma, often depending on the source and purpose of the evidence. While these definitions are useful, of course, they do not always translate smoothly into case law or the legal setting, where childhood trauma may exist but never have been fully identified. This Part provides an overview of some of the more known and accepted descriptions of childhood trauma as a background for the factors that my Neuroscience Study explicated.

A. *Definitions and Frameworks*

Some widely recognized health organizations define childhood trauma very broadly. The National Institute of Mental Health, for example, characterizes childhood trauma as "the emotionally painful or distressful experience of an event by a child that may result in lasting mental and physical effects."[8] The National Child Traumatic Stress Network states that "trauma occurs when a child experiences an intense event that threatens or causes harm to his or her emotional and physical well-being."[9] In contrast, the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) concerns one kind of trauma, Posttraumatic Stress Disorder (PTSD), which mandates "[e]xposure to actual or threatened death, serious injury, or sexual violence."[10] DSM-5 lays out four symptoms of the clinical effects of trauma:

8. *See* Griffin & Sallen, *supra* note 3, at 6.

9. *What Is Child Traumatic Stress?*, NAT'L CHILD TRAUMATIC STRESS NETWORK (2003), https://www.nctsn.org/sites/default/files/resources//what_is_child_traumatic_stress.pdf [https://perma.cc/7Q9R-M2DA].

10. AM. PSYCHIATRIC ASS'N, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS 271 (5th ed. 2013) [hereinafter DSM-5].

intrusions (such as nightmares or flashbacks of the trauma), avoidance (such as activities, places, or individuals that may bring memories of the trauma), negative cognitive alterations (such as exaggerated fears or feelings of isolation), and altered arousal and awareness in reactions or perceptions (such as irritability, aggression, or difficulties in sleeping and concentrating).[11] An individual must experience all four symptoms to satisfy DSM-5's definition of PTSD.[12]

There is also a commonly used standard that incorporates a number of different definitions to help identify somewhat more contextually whether a child is suffering from trauma.[13] According to the Substance Abuse and Mental Health Services Administration, a framework called "The Three E's" can pinpoint childhood trauma and trauma in general, based upon three components: the *Event*, the *Experience*, and the *Effects*.[14]

The *Event* component is the "objective action" that is inflicted on a child.[15] There can be many types of events, "includ[ing] abuse (physical, sexual, emotional), neglect, violence (domestic and community), accidents, and acts of terrorism."[16] Events can occur just once (such as a severe injury) or multiple times (such as several, less severe injuries).[17] Research shows that more than 60% of children encounter a traumatic event by age 16, and nearly one-third of those children sustain multiple events.[18]

The second component, the *Experience* of the event, is more subjective, and for unsurprising reasons. Children may experience events in emotionally disparate ways,[19] often depending on their demographics (age and maturity), their particular situation, or vast numbers of other kinds of individual-specific

11. *Id.* at 271–72; Griffin & Sallen, *supra* note 3, at 8.

12. DSM-5, *supra* note 10, at 271–72; Griffin & Sallen, *supra* note 3, at 8.

13. *See* Griffin & Sallen, *supra* note 3, at 6.

14. *See id.*

15. *Id.*

16. *Id.*

17. *Id.* at 6–7.

18. William E. Copeland, Lilly Shanahan, Jennifer Hinesley, Robin F. Chan, Karolina A. Aberg, John A. Fairbank, Edwin J. C. G van den Oord, & E. Jane Costello, *Association of Childhood Trauma Exposure with Adult Psychiatric Disorders and Functional Outcomes*, JAMA NETWORK OPEN, Nov. 9, 2018, at 2 [hereinafter *JAMA Study*] https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2713038 [https://perma.cc/92KW-5WSE].

19. *See* Griffin & Sallen, *supra* note 3, at 7.

variables.[20] For example, one child may suffer intense negative emotions at the time the event occurs, while another may confront negative emotions at a later time in life, once they more fully understand what happened.[21] Regardless of the timing, traumatic experiences "can overwhelm a person's capacity to cope, and elicit intense feelings such as fear, terror, helplessness, hopelessness, and despair."[22]

The third component is the *Effect* of the event and its impact on the child.[23] While some effects, such as an acute emotional response, may occur shortly after the event and often diminish after time, other effects may become more apparent later and persist accordingly.[24] Additional effects may be clinical in nature and, therefore, fit the four DSM-5 symptoms of trauma.[25]

The link between early trauma and long-term negative consequences such as intellectual, psychological, or neurological dysfunction has substantial support in a vast array of research.[26] Indeed, a prospective medical study of

20. CHILD WELFARE INFO. GATEWAY, LONG-TERM CONSEQUENCES OF CHILD ABUSE AND NEGLECT 1 (2019), https://www.childwelfare.gov/pubpdfs/long_term_consequences.pdf [https://perma.cc/5NZX-KR39].

21. *See* Griffin & Sallen, *supra* note 3, at 7.

22. *Id.*

23. *Id.* at 8.

24. *Id.*

25. *Id.*

26. *See* David W. Brown, Robert F. Anda, Henning Tiemeier, Vincent J. Felitti, Valerie J. Edwards, Janet B. Croft, & Wayne H. Giles, *Adverse Childhood Experiences and the Risk of Premature Mortality*, 37 AM. J. PREVENTATIVE MED. 389 (2009); Clara Passmann Carr, Camilla Maria Severi Martins, Ana Maria Stingel, Vera Braga Lemgruber, & Mario Francisco Juruena, *The Role of Early Life Stress in Adult Psychiatric Disorders: A Systematic Review According to Childhood Trauma Subtypes*, 201 J. NERVOUS & MENTAL DISEASE 1007 (2013); Vincent J. Felitti, Robert F. Anda, Dale Nordenberg, David F. Williamson, Alison M. Spitz, Valerie Edwards, Mary P. Koss, & James S. Marks, *Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study*, 14 AM. J. PREVENTATIVE MED. 245 (1998); Jennifer Greif Green, Katie A. McLaughlin, Patricia A. Berglund, Michael J. Gruber, Nancy A Sampson, Alan M. Zaslavsky, & Ronald C. Kessler, *Childhood Adversities and Adult Psychiatric Disorders in the National Comorbidity Survey Replication I: Associations with First Onset of DSM-IV Disorders*, 67 ARCHIVE GEN. PSYCHIATRY 113 (2010); Griffin & Sallen, *supra* note 3, at 6–13; Ronald C. Kessler, Katie A. McLaughlin, Jennifer Greif Green, Michael J. Gruber, Nancy A. Sampson, Alan M. Zaslavsky, Sergio Aguilar-Gaxiola, Ali Obaid Alhamzawi, Jordi Alonso, Matthias Angermeyer, Corina Benjet, Evelyn Bromet, Sonmath Chatterji, Giovanni di Girolamo, Koen Demyttenaere, John Fayyad, Silvia Florescu, Gilad Gal, Oye Gureje, Josep Maria Haro, Chi-yi Hu, Elie G. Karam, Norito Kawakami, Sing Lee, Jean-Piere Lépine, Johan Ormel, José Posada-Villa, Rajesh Sagar, Adley Tsang, T. Bedirhan Üstün, Svetlozar Vassilev, Maria Carmen Viana, & David R. Williams, *Childhood Adversities and Adult Psychopathology in the WHO World Mental Health*

1,420 subjects published in the *Journal of the American Medical Association* (the JAMA study) indicates that "childhood trauma casts a long and wide-ranging shadow," heightening the risk for psychiatric disorders in adulthood, poor health, addiction, behavioral problems, and criminality, as well as financial, educational, and social impairments.[27] In the JAMA study, these kinds of risks held constant while controlling for "(1) childhood psychiatric problems, (2) other family and individual hardships and adversities, and (3) adult exposure to traumatic events."[28] As one psychologist noted, the study "presents high-quality, unequivocal longitudinal data on a large sample, attesting to the profound intertwining of these phenomena."[29] While the extent of this intertwining can vary among individuals, of course, there are clear patterns on how these various connections play out. For example, in the JAMA study, "being exposed to trauma cannot only lead to psychopathology, but can also foster socially deviant careers in the form of criminality and addiction, thereby leading to more interpersonal and community violence, difficulty in holding a badly paid job, and a problem-riddled social life."[30]

Other research suggests that such trauma can impair brain development by disrupting brain cell connections or by damaging the brain's ability to respond to crisis situations.[31] This impairment can in turn heighten the likelihood that an individual will experience an intense reaction to even low-key events and, therefore, partake in continual "flight or fight behaviors."[32] Lastly, a growing area of childhood trauma research is focusing on the transgenerational impact of large-scale cultural traumas—fueled by evidence that negative social,

Surveys, 197 BRIT. J. PSYCHIATRY 378 (2010); K. A. McLaughlin, K. J. Conron, K. C. Koenen, & S. E. Gilman, *Childhood Adversity, Adult Stressful Life Events, and Risk of Past-Year Psychiatric Disorder: A Test of the Stress Sensitization Hypothesis in a Population-Based Sample of Adults*, 40 PSYCHOL. MED. 1647 (2010); Kate M. Scott, Katie A. McLaughlin, Don A. R. Smith, & Pete M. Ellis, *Childhood Maltreatment and DSM-IV Adult Mental Disorders: Comparison of Prospective and Retrospective Findings*, 200 BRIT. J. PSYCHIATRY 469 (2012).

27. *JAMA Study*, *supra* note 18, at 2, 7.

28. *Id.* at 7.

29. Marc Gelkopf, *Social Injustice and the Cycle of Traumatic Childhood Experiences and Multiple Problems in Adulthood*, JAMA NETWORK OPEN, Nov. 9, 2018, at 1, https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2713032 [https://perma.cc/3ZDG-7Y4N].

30. *Id.*

31. Griffin & Sallen, *supra* note 3, at 9.

32. *Id.* at 10.

psychological, neurobiological, and perhaps even genetic effects can be passed on through families in myriad ways that have yet to be fully understood.[33]

B. *Links to Criminal Behavior*

The vast array of research on childhood trauma, then, including the JAMA Study, indicates links, either direct or indirect, between the effects of such trauma and long-term psychiatric and behavioral difficulties, including criminality. Consistent with the JAMA Study, earlier research has shown that these difficulties can range from mood, behavioral, and substance abuse disorders,[34] to schizophrenia, psychosis, and psychotic-like behaviors as well as bipolar disorder.[35] Physical abuse, interpersonal trauma, and community-created trauma are also associated with later-life aggression.[36] In turn, aggression, depression, anxiety,[37] and behavioral difficulties are often

33. *See* Brent Bezo & Stefania Maggi, *Living in "Survival Mode:" Intergenerational Transmission of Trauma from the Holodomor Genocide of 1932–1933 in Ukraine*, 134 SOC. SCI. & MED. 87 (2015); Yael Danieli, Fran H. Norris, Jutta Lindert, Vera Paisner, Brian Engdahl, & Julia Richter, *The Danieli Inventory of Multigenerational Legacies of Trauma, Part I: Survivors' Posttrauma Adaptational Styles in Their Children's Eyes*, 68 J. PSYCHIATRIC RES. 167 (2015); Pierre Fossion, Christophe Leys, Caroline Vandeleur, Chantal Kempenaers, Stéphanie Braun, Paul Verbanck, & Paul Linkowski, *Transgenerational Transmission of Trauma in Families of Holocaust Survivors: The Consequences of Extreme Family Functioning on Resilience, Sense of Coherence, Anxiety and Depression*, 171 J. AFFECTIVE DISORDERS 48 (2015); Yaakov Hoffman & Amit Shrira, *Shadows of the Past and Threats of the Future: ISIS Anxiety Among Grandchildren of Holocaust Survivors*, 253 J. PSYCHIATRY RES. 220 (2017); Mihaela Minulescu, *Approaching Trans-Generational Trauma in Analytical Psychotherapy*, 217 PROCEDIA – SOC. & BEHAV. SCI. 1112 (2016); Nathaniel Vincent Mohatt, Azure B. Thompson, Nghi D. Thai, & Jacob Kraemer Tebes, *Historical Trauma as Public Narrative: A Conceptual Review of How History Impacts Present-Day Health*, 106 SOC. SCI. & MED. 128 (2014).

34. *See* Terrie E. Moffitt & The Klaus-Grawe 2012 Think Tank, *Childhood Exposure to Violence and Lifelong Health: Clinical Intervention Science and Stress-Biology Research Join Forces*, 25 J. DEV. & PSYCHOPATHOLOGY 1619, 1625 (2013).

35. *See* Allison M. R. Lee, Igor I. Galynker, Irina Kopeykina, Hae-Joon Kim, & Tasnia Khatun, *Violence in Bipolar Disorder*, PSYCHIATRIC TIMES (Dec. 16, 2014), https://www.psychiatrictimes.com/bipolar-disorder/violence-bipolar-disorder [https://perma.cc/TAB9-KLBX].

36. *See* Tania Josiane Bosqui, Ciarán Shannon, Bridget Tiernan, Nicola Beattie, John Ferguson, & Ciaran Mulholland, *Childhood Trauma and the Risk of Violence in Adulthood in a Population With a Psychotic Illness*, 54 J. PSYCHIATRIC RES. 121, 121 (2014).

37. *See id*; *JAMA Study*, *supra* note 18, at 5.

predictors of criminal behavior and early encounters with the police.[38] Most significantly, childhood trauma victims are at a heightened risk of suffering multiple mental health conditions,[39] which can potentially enhance the likelihood of aggression and recidivism.[40] Overall, then, children who endure trauma are more likely to engage in criminality and violent conduct.[41]

There have been some proposed explanations for why these links exist. Neurobiological research suggests that early life stress events can disrupt the normal development of brain systems, potentially leading to deficits in learning, memory, and cognition.[42] These associations perhaps explain why some studies have found that some victims of childhood trauma display below-average IQs as adults.[43] Other studies have reported impairments in specific brain systems[44]—for example, those systems that regulate an individual's fear response, impulse control, reasoning, planning, and academic learning.[45] Presumably, more precise explanations are down the research road; regardless, the connections between trauma and crime are substantial and compelling.

Additional research, which has focused on incarcerated populations, shows that over half of male and female inmates have experienced some form of childhood physical trauma before they turned eighteen (56% and 54% for males

38. *See* Laurie Ross & Samantha Arsenault, *Problem Analysis in Community Violence Assessment: Revealing Early Childhood Trauma as a Driver of Youth and Gang Violence*, 62 INT'L J. OFFENDER THERAPY & COMP. CRIMINOLOGY 2726, 2734 (2018).

39. *See* Moffitt & Klaus-Grawe, *supra* note 34, at 1625.

40. *See* Merih Altintas & Mustafa Bilici, *Evaluation of Childhood Trauma With Respect to Criminal Behavior, Dissociative Experiences, Adverse Family Experiences and Psychiatric Backgrounds Among Prison Inmates*, 82 COMPREHENSIVE PSYCHIATRY 100, 100–01 (2018).

41. *See id.*

42. *See* Julian D. Ford, John F. Chapman, Josephine Hawke, & David Albert, *Trauma Among Youth in the Juvenile Justice System: Critical Issues and New Directions*, NAT'L CTR. FOR MENTAL HEALTH & JUV. JUST., June 2007, at 1–2, https://www.ncmhjj.com/wp-content/uploads/2013/07/2007_Trauma-Among-Youth-in-the-Juvenile-Justice-System.pdf [https://perma.cc/VPE3-G2MF].

43. *See* Moffitt & Klaus-Grawe, *supra* note 34, at 1625.

44. *See* Rasmus M. Birn, Barbara J. Roeber, & Seth D. Pollak, *Early Childhood Stress Exposure, Reward Pathways, and Adult Decision Making*, 114 PROC. NAT'L ACAD. SCI. U.S. 13549, 13551 (2017).

45. *See* Ross & Arsenault, *supra* note 38, at 2736 (explaining that early childhood trauma victims suffer detrimental effects on brain development in areas that regulate fear response, impulse control, reasoning, planning, and academic learning).

and females, respectively).[46] Childhood sexual abuse is rarer, having been reported by less than 10% of male inmates relative to 47% of female inmates.[47] In turn, over 25% of incarcerated men were abandoned during childhood or adolescence.[48] The statistics go on, but the end of the story is that such types of abuse are strong predictors of violence, criminality, and mental disorders in adulthood as well as a sequelae of cognitive problems such as delayed memory, emotional control, and negative responses to stress.[49]

In the legal setting, sophisticated attorneys will introduce childhood trauma evidence if it is relevant to explain an array of disorders and behaviors that are associated with their client's criminality. Likewise, knowledgeable courts will recognize these kinds of accumulative inter-linkages when they consider a defendant's background. In *James v. Ryan*,[50] for example, the Ninth Circuit stressed that "[i]t is well established that early childhood trauma, even if it is not consciously remembered, may have '*catastrophic and permanent effects* on those who . . . survive it.'"[51] The court also noted how trauma can influence an individual across their lifetime. Not only does trauma have "a severe impact on the child's mental development and maturation," but also "[s]ustained *feelings of terror, panic, confusion, and abandonment* as a child have *long term consequences for adult behavior*."[52] Thus, for instance, "[p]sychosis, dissociative states, depression, disturbed thinking, and alcohol and drug dependency are directly linked to child victimization."[53] The next Part considers these linkages in the context of an original, large-scale, empirical research project on the associations between childhood trauma, neuroscience, and the criminal justice system.

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46. Wolff, Shi, & Siegel, *Patterns of Victimization*, *supra* note 3, at 477; Wolff & Shi, *Childhood and Adult Trauma Experiences*, *supra* note 3, at 1909–10.

47. Wolff, Shi, & Siegel, *Patterns of Victimization*, *supra* note 3, at 477.

48. Wolff & Shi, *Childhood and Adult Trauma Experiences*, *supra* note 3, at 1909.

49. *Id.* at 1909–10; Donald & Bakies, *supra* note 3, at 482–86.

50. 679 F.3d 780 (9th Cir. 2012).

51. *Id.* at 815 (emphasis added) (quoting Hamilton v. Ayers, 583 F.3d 1100, 1132–33 (9th Cir. 2009)).

52. *Id.* (emphasis added).

53. *Id.*

III. THE NEUROSCIENCE STUDY'S FRAMEWORK OF CHILDHOOD TRAUMA EVIDENCE

Childhood trauma evidence is widely used in the criminal justice system in a broad range of ways in both capital and non-capital cases. This Article's focus is primarily on capital cases because, in that realm, the evidence can be particularly impactful as mitigation. At the same time, such evidence can be amorphous, ill-defined, and overwhelming to legal actors, therefore creating special challenges for attorneys in attempting to investigate it and properly present it before a judge and jury.[54]

A. *The Neuroscience Study's Methodology*

In 2012, I completed a study (the Neuroscience Study) that investigated how courts assess the mitigating and aggravating strength of neuroscientific evidence.[55] I examined every criminal law case which addressed neuroscientific evidence in any capacity over a two-decade period (between 1992—2012). These cases, which totaled to 800, produced a broad range of variables relevant to the criminal justice system that were coded by trained law school graduates.[56] With respect to the Neuroscience Study's operational definition of the term "neuroscience," that umbrella term included both imaging tests (such as the MRI and PET scans) and non-imaging standardized tests (such as the Wechsler test).[57]

While the 800 cases included a portion of cases that pertained to victims' injuries, this Article focuses only on the 553 cases that concerned defendants' conditions.[58] Out of these 553 cases, 266 cases—or nearly half (48.10%)—included evidence of childhood trauma.[59] This composition is not surprising given the strong connections between childhood trauma and a large array of

54. *See* Crocker, *supra* note 3, at 1146.

55. Denno, *The Myth*, *supra* note 5, at 493.

56. A discussion of the process for selecting and coding variables as well as the strengths and weaknesses of the methodology is provided in detail elsewhere. *Id.* at 505.

57. *Id.*

58. *Id.* at 501. The Neuroscience Study's 800 cases fall into three categories: 247 cases (30.88%) concern neuroscientific evidence as it pertains to the victim, primarily to prove the extent of a victim's brain injury; 514 cases (64.25%) concern neuroscientific evidence as it pertains to the defendant; and thirty-nine cases (4.88%) concern neuroscientific evidence as it pertains to both the defendant and the victim because the brain capacity of one or more individuals in both the "victim" and "defendant" categories were relevant. This Article's major focus are these latter two categories—"defendant" and "both victim and defendant"— totaling 553 cases.

59. *See infra* Chart 1.

brain and behavioral disorders associated with criminality, especially violence. Indeed, as I have reported previously, in the Neuroscience Study neuroscientific evidence was presented more often by the defense for purposes of mitigation than by the prosecution to show that a defendant should be imprisoned for a long time or to receive the death penalty.[60] The same differentiation is true of childhood trauma evidence.[61]

The overall goal of my project on childhood trauma was threefold: to analyze the various types of childhood trauma evidence that were introduced in court,[62] to show how this evidence was presented in terms of the conditions caused by or related to childhood trauma,[63] and to demonstrate how courts responded to such evidence.[64] The following sections start by describing the

60. *See* Denno, *The Myth*, *supra* note 5, at 544.

61. *See infra* Charts 2, 3, 4, & 11.

62. *See infra* Charts 2, 3, & 4. **Types of Childhood Trauma**, includes the following categories: (a) physical abuse, (b) sexual abuse or molestation or rape, (c) verbal or emotional abuse, (d) neglect or abandonment, (e) traumatic experience, (f) dysfunctional family life, (g) mental disorder/illness or impairment developed during childhood, (h) neurological impairment or disorder developed during childhood, (i) brain damage, (j) suffered head or brain injury during childhood, (k) prenatal issue or issue at birth, (l) developmental issue, (m) physical illness or injury during childhood, (n) poverty or financial trouble, (o) disadvantaged in some way, (p) suicide attempt before age 18, (q) been arrested and/or in juvenile detention, (r) exposed to violence or bad influence outside of home, (s) exposure to toxic substance, (t) substance abuse during childhood, (u) childhood only described as "difficult" or "poor."

63. *See infra* Chart 6. **Conditions that were Caused by or Related to Childhood Trauma**, includes the following categories: (a) neurological impairment or disorder, (b) mental illness or psychiatric symptoms, (c) poor intellectual functioning, (d) physical handicap, (e) mental retardation, (f) emotional issues, (g) problems in school, (h) limited or lack of education, (i) PTSD, (j) low-IQ, (k) ADD or ADHD, (l) learning disability (or "slow learning"/special education), (m) behavioral problems.

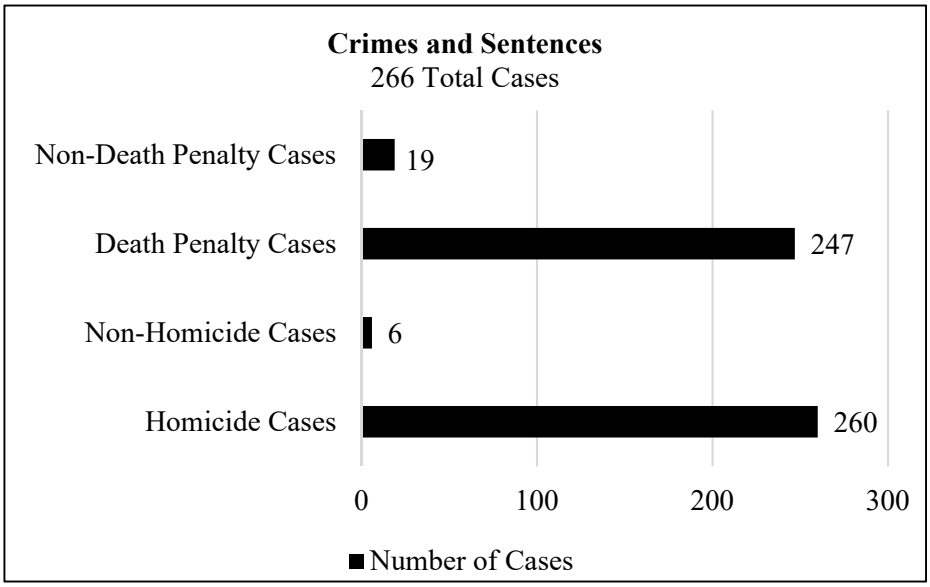
64. *See infra* Charts 11 & 15. **Purpose of Evidence of Childhood Trauma and Courts' Responses**, includes the following categories: (a) defendant presented (or argued should have been presented) evidence as mitigating evidence, (b) evidence related to insanity defense, (c) evidence related to diminished capacity defense or claim, (d) evidence related to claim of incompetence, (e) evidence related to defense of not guilty by reason of mental disease or defect, (f) evidence related to claim of mental retardation, (g) evidence related to claim of guilty but mentally ill, (h) evidence related to sufficiency of the evidence claim, (i) defendant sought funds for additional childhood trauma investigation, (j) claim of prosecutorial misconduct in regard to evidence, (k) issue of malingering related to childhood trauma evidence, (l) some or all of childhood trauma evidence rejected by court, (m) some or all of childhood trauma evidence rejected by court, (n) defendant argued there was error in court's treatment of evidence, (o) IAOC claim regarding childhood trauma evidence, (p) IAOC claim successful, (q) IAOC claim unsuccessful, (r) IAOC claim not ruled on, (s) defendant argued against the presentation of childhood trauma evidence.

defendants' crimes and sentences to provide context for how defense attorneys used childhood trauma evidence.

B. *Crimes and Sentences*

Nearly all (98%) of the Neuroscience Study's 266 childhood trauma cases involved defendants who were convicted of murder, as Chart 1 of this Article indicates. Similarly, most (93%) of those cases began as a capital case even if that death sentence was reduced to a non-capital case. Only 7% of defendants received a sentence of life without the possibility of parole or a less serious level of incarceration.

CHART 1



Overall, then, childhood trauma evidence is typically introduced in cases where defendants face the death penalty, a life sentence, or a decades-long prison sentence. While most of the Neuroscience Study's 800 cases were comparably serious,[65] the cases involving childhood trauma were even more so, representing some of the most violent crimes that the project examined. Given the recognized linkages between childhood trauma and brain development, the Neuroscience Study offers an unprecedented opportunity to consider how

65. Denno, *The Myth*, *supra* note 5, at 501–02.

childhood trauma evidence fits into the framework of the legal system from multiple and diverse perspectives.

C. *The Neuroscience Study's Definitional Framework*

Most experts and organizations define or depict childhood trauma very broadly,[66] including the different facets that may fall under a more structured framework such as "The Three E's"—the traumatic Event, the child's Experience, and the Effects to that child that may follow.[67] Yet, a thorough discussion of how childhood trauma plays out in the courtroom requires a definition more relevant to how criminal cases present the evidence, as opposed to a detailed but medically-oriented account, such as that presented in the JAMA Study.[68] In addition, a legally-oriented definition enables researchers to better identify different types of trauma and measure its impact in the legal system.

In the Neuroscience Study, in order to be included as childhood trauma, the evidence identified had to be discussed in the context of the defendant's background, family history, or childhood, and it needed to have occurred before the defendant turned eighteen years old. Using the childhood trauma literature as a guide, especially the JAMA Study, this Article identified twenty different types of childhood trauma and categorized them generically in three different ways, as Charts 2–4 illustrate: Family Trauma, Developmental Trauma, and External Trauma.

The twenty categories of childhood trauma in Charts 2–4 range from the most common types of trauma (dysfunctional family life,[69] physical abuse,[70]

66. *See supra* Section II.A (providing major definitions of childhood trauma).

67. *See* Griffin & Sallen, *supra* note 3, at 6.

68. *See supra* notes 27–30 (discussing the JAMA Study).

69. A dysfunctional family life could include anything from an abusive parent to neglect to general turmoil in the household. *See, e.g.*, People v. Ray, 914 P.2d 846, 855 (Cal. 1996) (stating that the defendant's parents fought violently and drank heavily, and the defendant's mother worked as a prostitute).

70. Physical abuse was often inflicted by a parent, foster parent, or other adult member of the defendant's family. *See, e.g.*, People v. Beeler, 891 P.2d 153, 162 (Cal. 1995) (stating that the defendant was subjected to extreme physical abuse at the hands of his stepmother throughout his childhood).

neglect,[71] brain damage,[72] substance abuse,[73] head injury,[74] traumatic experience[75]), to the least common (verbal abuse,[76] disadvantaged in some way,[77] physical illness,[78] exposure to violence,[79] suicide attempt,[80] and exposure to a toxic substance[81]). The additional factors include mental illness,[82]

71. Neglect refers to any neglect or abandonment a defendant suffered at the hands of a parental figure.

72. Brain damage refers only to brain damage that was organically caused either by a prenatal injury or developmental issue. Brain damage caused by a head injury due to a parent's beating of the child, for example, is not included in this category. For example, in *Bean v. Calderon*, one expert, Dr. Blunt, testified that, "after performing five neurological tests, she was convinced that Bean was organically brain damaged from three lesions on the brain." 163 F.3d 1073, 1088 (9th Cir. 1998).

73. Substance abuse includes abuse of any type of drug, illegal or prescription, and alcohol.

74. Head injury refers to defendants who suffered a non-organic brain injury that lead to some form of brain damage or abnormality. For example, in *Correll v. Ryan*, the defendant incurred a brain injury at age seven when a brick wall fell on him, 539 F.3d 938, 952 (9th Cir. 2008), and "was diagnosed with a subgaleal hematoma, which is a bruise or collection of blood under the scalp, but above the skull." *Id.* at 961–62 (O'Scannlain, J., dissenting).

75. Traumatic experiences can include the death of a loved one, exposure to violence, abuse, and more. For example, the court in *Middlebrooks v. Bell* described the defendant's history of sexual torture, forced prostitution, and early exposure to drugs as "traumatic childhood experiences." 619 F.3d 526, 537 (6th Cir. 2010).

76. Verbal abuse includes forms of communication that can constitute psychological abuse and emotional abuse.

77. Disadvantaged in some way is intentionally broad and served as a catch-all for cases that may not have fit into some of the other categories listed or as an additional category for those cases that did. For example, in *Stankewitz v. Wong*, the defendant had a disadvantaged upbringing due to the fact that his parents were unable to care for him and he spent his childhood being shuffled from one foster home or mental institution to another. 659 F. Supp. 2d 1103, 1108 (E.D. Cal. 2009).

78. Physical illness includes any bodily illness that did not involve a mental illness or brain damage. *See, e.g.*, Bible v. Ryan, 571 F.3d 860, 866 (9th Cir. 2009) (stating that, as a child, the defendant suffered from continuous illnesses such as allergies, fevers, and upper respiratory infections).

79. Exposure to violence includes exposure to any violence or serious negative influence that occurred outside of the home, including gang or cultural violence.

80. Any suicide attempt that occurred prior to the defendant turning age 18 was included in this category.

81. The toxic substances referred to in this category do not include commonly used drugs or alcohol. Rather, such toxic substances include pesticides, carbon monoxide, pollution, lead, asbestos, and more. *See, e.g.*, Commonwealth v. Lesko, 15 A.3d 345, 420 (Pa. 2011) (stating that from an early age, the petitioner started huffing over-the-counter toxic substances and eating paint chips).

82. Mental illness includes mental illness and mental disorders (such as schizophrenia, personality disorders, depression, and more) as well as mental impairment (any form of cognitive dysfunction or cognitive disability—what some courts still call by the outmoded term, "mental

poverty,[83] developmental issue,[84] neurological disorder,[85] sexual abuse,[86] prenatal issue,[87] and juvenile detention.[88] Substantial numbers of defendants experienced some kind of head or brain injury or mental disorder and illness during childhood, if not brain damage specifically (Chart 3). In addition, there was a considerable amount of trauma and neglect in the family that was measured in a range of different ways (such as poverty, neglect, or child abuse). While the categories in Charts 2–4 are broken down in an effort to offer greater precision, it is clear overall that this is a highly traumatized group.

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retardation"). For example, in *People v. Smith*, the defendant's IQ was around 85, and he was diagnosed as being moderately "mentally retarded." 107 P.3d 229, 234 (Cal. 2005).

83. Poverty is defined as financial difficulty, lack of food and necessities, or poor environment and living situation.

84. Developmental issues are defined as any problem that hindered or negatively affected the mental, intellectual, or emotional development of a defendant.

85. Neurological disorder includes circumstances when the defendant suffered from a neurological disorder or illness. *See, e.g.*, People v. Thornton, 161 P.3d 3, 18 (Cal. 2007) (stating that one doctor examined the defendant and "identified significant pediatric neurological difficulties, eating and walking problems, a low intelligence quotient.").

86. Sexual abuse is a broad category that also includes rape and molestation.

87. Prenatal issues include complications during pregnancy or birth, a birth defect or illness, Fetal Alcohol Syndrome, and more. For example, in *Pike v. State*, the defendant's mother testified that the defendant was born prematurely via Caesarean and "with a condition known as hyaline membrane disease where the lungs are not fully developed and had bilateral hip dysplasias, which occurs when the hip sockets are not fully formed." No. E2009-00016-CCA-R3-PD, 2011 WL 1544207, at *10 (Tenn. Crim. App. Apr. 25, 2011).

88. Juvenile detention includes when the defendant had been arrested during their childhood and/or spent time in juvenile detention.

CHART 2

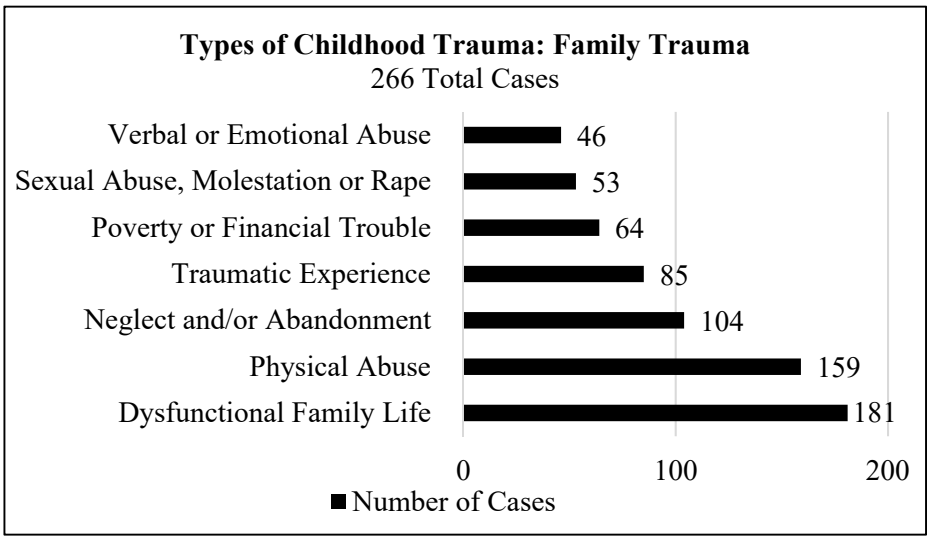


CHART 3

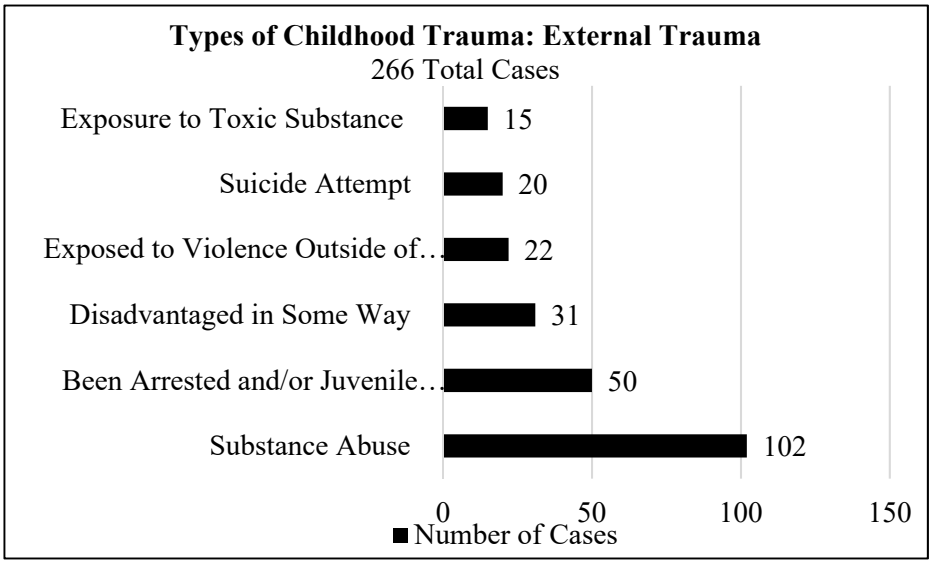
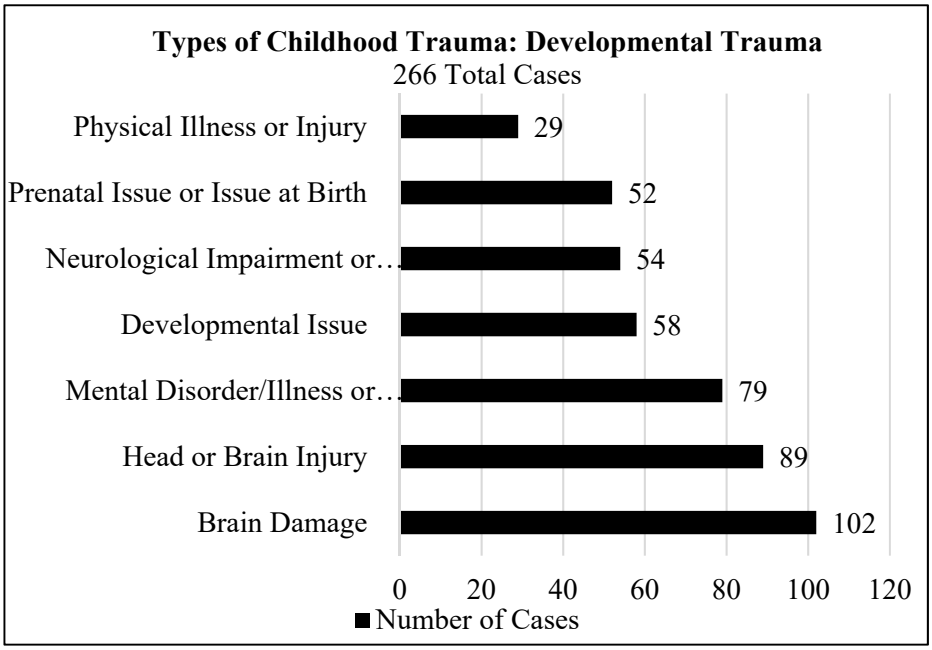


CHART 4

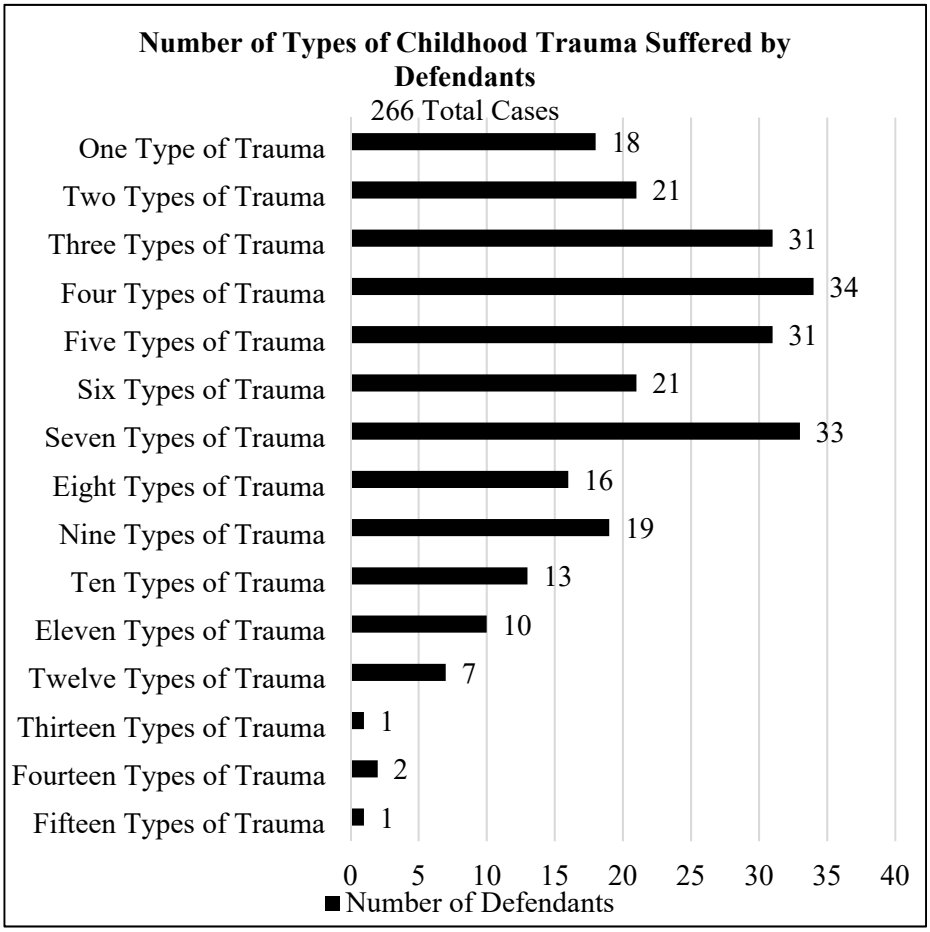


Most defendants in the Neuroscience Study experienced multiple types of abuse, as Chart 5 shows. The greatest cluster of cases involved defendants who have suffered between three-to-seven different types of trauma. But 13% of defendants experienced ten or more types of trauma and nearly half (123 cases or 46%) experienced five or more types. In *People v. Beeler*,[89] for example, Rodney Beeler, who was convicted of first-degree murder and armed burglary and sentenced to death,[90] introduced during the penalty phase numerous family members and medical experts who testified that for some years Beeler's stepmother subjected him "to extreme psychological, physical, verbal, and sexual abuse."[91] Not only would she beat him with various objects and throw him down the stairs with his hands tied,[92] she would also chain him to a basement post for days, "forc[ing] him to urinate and defecate in his underpants,

89. 891 P.2d 153 (Cal. 1995).
90. *Id.* at 153.
91. *Id.* at 162.
92. *Id.*

and then beat[ing] him for that as well."[93] In addition she would smear his feces on his face and hold his hands over flames.[94] "She once pulled his thumbs from their sockets. She forced him to eat fruit preserves until he vomited."[95]

CHART 5



Beeler's stepmother also subjected him to extreme sexual abuse, forcing him to dress in female clothing (which he did not want to wear) and tying his

93. *Id.*
94. *Id.*
95. *Id.* at 162–63.

penis down so that he could not see it "and telling him he looked better that way."[96] A psychologist testified in detail concerning other kinds of extreme sexual abuse,[97] stressing that, due to the experiences of his childhood, Beeler "suffered a variety of mental maladies, including schizophrenia and disassociation, which in general might best be described as comparable to but more severe than posttraumatic stress syndrome."[98] Beeler argued that his death sentence was "inappropriate and 'shock[ed] the conscience' in light of his horrible childhood, his brain damage, his efforts to provide for his family, and the fact that his most recent prior conviction was [nearly a decade] old."[99] Yet, the Court remained unpersuaded, emphasizing the appropriateness of the death penalty for Beeler's "innocent victim" and questioning whether Beeler actually suffered from organic brain damage.[100] Regardless, by concluding that "evidence of brain damage would not *necessarily* render the death penalty cruel or unusual,"[101] the court left open the possibility that it certainly could. In sum, Beeler might have avoided the death penalty had the court fully accepted his brain damage evidence.

As the next Sections show, evidence of brain damage may not be sufficient, but it does enable courts to better perceive childhood trauma as mitigating if they accept its validity. The discussion focuses on how childhood trauma connects to an individual's later adolescent and adult development.

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96. *Id.* at 163.

97. *Id.* According to the expert, Beeler's stepmother gave him

> enemas, using Vaseline and taking a tampon, at first just a clean tampon, and then she would use her own soiled, bloody tampons and insert them in his anus. . . . In addition, she would make him insert tampons in her vagina so she was having him touch her as well, and she would make him fondle her vagina area and have him lick her vagina area so she could reach a climax. . . . She would also masturbate him at that age—as he got older, some of it is progressing as he got older—between the two-year period of time of 10 and 12, but not allow him to reach an orgasm. When he was a little older and he would reach an orgasm, she would take the semen and smear it all over his face and he would be punished for that. In addition, in order to prevent him from reaching a climax, she would squeeze his testicles, and he remembers that being done with great pain to him. Later on, she would have intercourse with him and insert his penis in her vagina but not allow him to reach an orgasm.

Id.

98. *Id.*

99. *Id.* at 178.

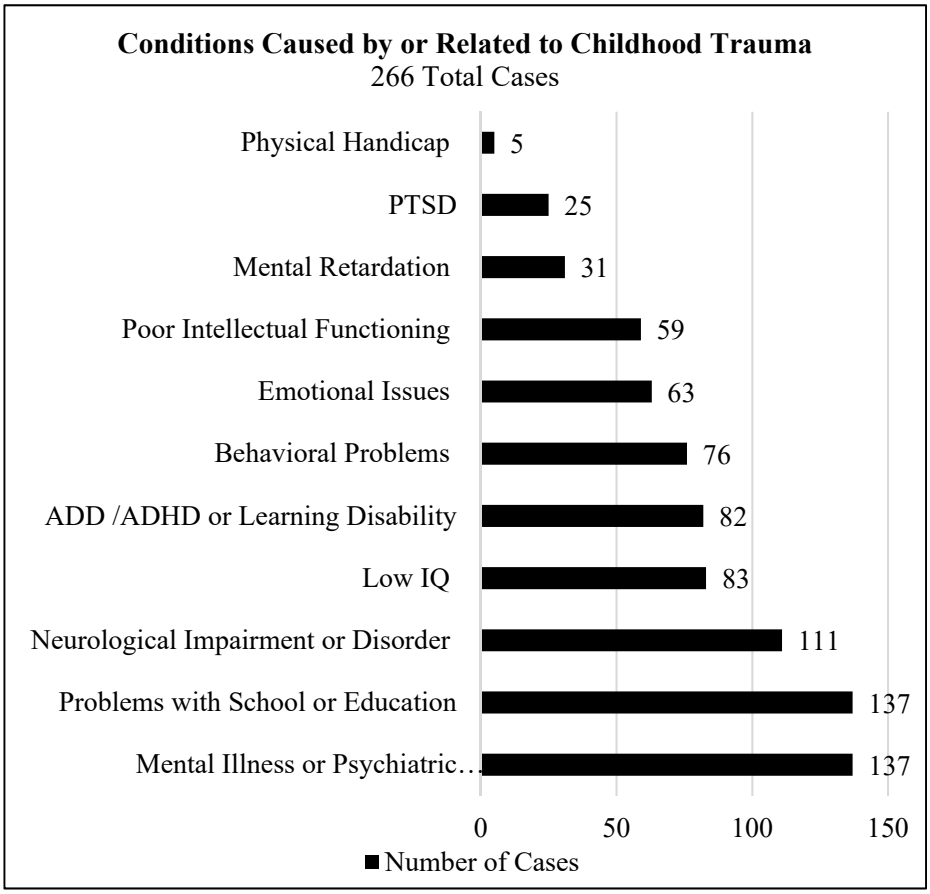
100. *Id.*

101. *Id.*

D. *Conditions Caused by or Related to Childhood Trauma*

Another step in determining courts' responses to childhood trauma cases is to identify the various conditions that were either caused by or related to the childhood trauma evidence that was introduced into court, as Chart 6 indicates. There is some overlap between the types of childhood trauma listed in Charts 2–4 and the conditions listed in Chart 6, in part because it can be difficult to determine whether a defendant's issue was being presented as evidence of childhood trauma or as a condition that was caused by childhood trauma. For example, in Chart 6, the categories of Mental Illness and Neurological Disorder were also included in Chart 3. Generally, for a mental illness or neurological disorder to have been included in the "Types of Childhood Trauma" list (Charts 2–4), the illness or disorder must have been developed during childhood. In order to be included in the "Conditions Caused by or Related to Childhood Trauma" list (Chart 6), however, the illness or disorder may have developed during childhood or later in life, and it must be described in the court's opinion as something that was directly caused by childhood trauma.

CHART 6



As Chart 6 shows, most conditions caused by or related to childhood trauma pertain to some kind of mental illness or psychiatric symptoms or problems in school, followed by neurological impairment or disorder, low IQ, or learning disability. The least frequent conditions relate to a limited education, PTSD, or a physical handicap.

Pike v. State[102] exemplifies a defendant who experienced several different types of childhood trauma including verbal, emotional, and physical abuse, a dysfunctional family life, and other traumatic experiences that resulted in severe behavioral issues and neurological problems. Her claim, however, was

102. No. E2009-00016-CCA-R3-PD, 2011 WL 1544207, *1 (Tenn. Crim. App. Apr. 25, 2011).

that her attorney did not sufficiently investigate evidence of her mental illness and psychiatric symptoms—specifically brain damage and bipolar disorder.[103]

Christa Gail Pike was found guilty of first degree murder and conspiracy to commit first degree murder and was sentenced to death.[104] During the sentencing phase, the defense called Pike's aunt, Carrie Ross, to testify in mitigation.[105] According to Ross, Pike lacked "maternal bonding" because she was premature and raised by her paternal grandmother.[106] Pike's own family had a history of substance abuse and a maternal grandmother who was alcoholic and verbally abusive.[107] When Pike's paternal grandmother died, Pike "was shuffled between her mother and father," experiencing "very dirty" living conditions and few rules,[108] conditions that led her to attempt to commit suicide after her grandmother's death and engage in problematic behavior.[109] Starting at age nine, Pike was growing marijuana in her home and, at age fourteen, was allowed to have a live-in boyfriend who had been arrested for physically abusing her.[110] Pike also evidenced mental challenges during early childhood and overdosed on Tylenol in the third grade.[111] Additional testimony indicated sexual abuse: Pike's mother reported that Pike had been raped at school and later sexually molested when she was sixteen years old.[112]

According to Pike, her trial counsel was ineffective because he failed to sufficiently investigate evidence that she suffered from brain damage and bipolar disorder and also failed to bring forward an array of lay witnesses who could have bolstered her defense.[113] Pike based her claims on the testimony of two experts who documented her problems—a history of seizures since infancy, an abnormal EEG when she was fourteen months, and a traumatic head injury at age fourteen as well as her mother's alcoholism while she was pregnant with Pike.[114] As Pike stated, "despite all this evidence which suggested brain

103. *Id.* at *52.
104. *Id.* at *1.
105. *Id.* at *8.
106. *Id.*
107. *Id.*
108. *Id.*
109. *Id.* at *9.
110. *Id.*
111. *Id.* at *11.
112. *Id.*
113. *Id.* at *52.
114. *Id.*

damage, the defense team conducted no neurological investigation" and, "[a]s such, counsel failed to discover [Pike's] neurological disabilities, namely, an abnormality in the brain that impairs her impulse control."[115] Pike also argued that her psychological evaluation conducted by one of her experts was insufficient and that her trial diagnosis of borderline personality disorder was incorrect.[116]

The appellate court rejected Pike's claim, however, determining that the ineffective assistance of counsel issue was properly denied because counsel need not know more psychology or neurology than the experts he hired.[117] "Lead counsel was asked at the post-conviction hearing if any of the retained experts had recommended additional testing, and he answered in the negative . . . [and that] if such recommendation had been made, he would have pursued it."[118]

In essence, then, in the court's eyes, Pike's counsel did what he was supposed to do, and the court's denial of ineffectiveness was viewed as understandable. At the same time, a different court could have provided an alternative viewpoint. The issue should not have been whether counsel knew "more *psychology or neurology* than the experts he hired," but rather whether he knew *more law* than his experts—specifically, the bounds of what would be considered acceptable indications of a "strategic decision" for admitting evidence. Experts need information and guidance from the attorneys who hire them—they do not operate in a vacuum. Attorneys must be sufficiently versed in other kinds of disciplines to make sound requests and offer knowledgeable arguments, especially in the wide-ranging area of childhood trauma.

E. *Tests for Measuring Childhood Trauma*

Cases in the Neuroscience Study relied on a range of different tests to confirm the diagnoses of brain damage and mental illness that comprise components of the definition of childhood trauma in Charts 2–4 as well as the conditions caused by or related to childhood trauma in Chart 6. These tests included imaging and non-imaging techniques, both of which are used in cases, and to beneficial effect, since they can measure different types of damage.[119]

115. *Id.*
116. *Id.* at *53.
117. *Id.* at *54.
118. *Id.*
119. Denno, *The Myth*, *supra* note 5, at 505.

CHART 7

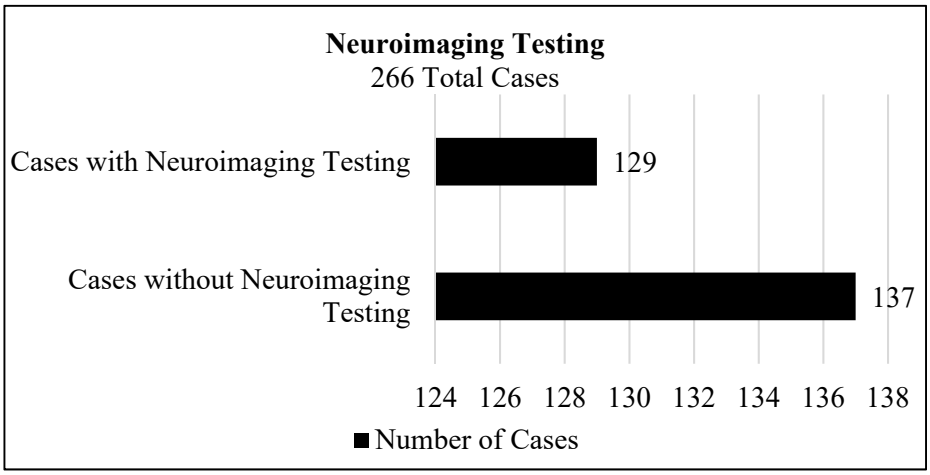
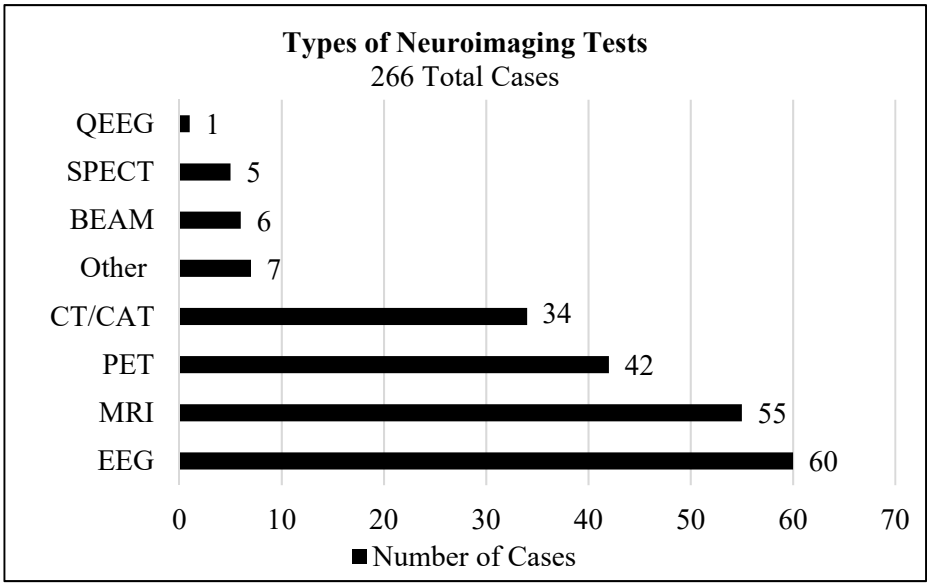
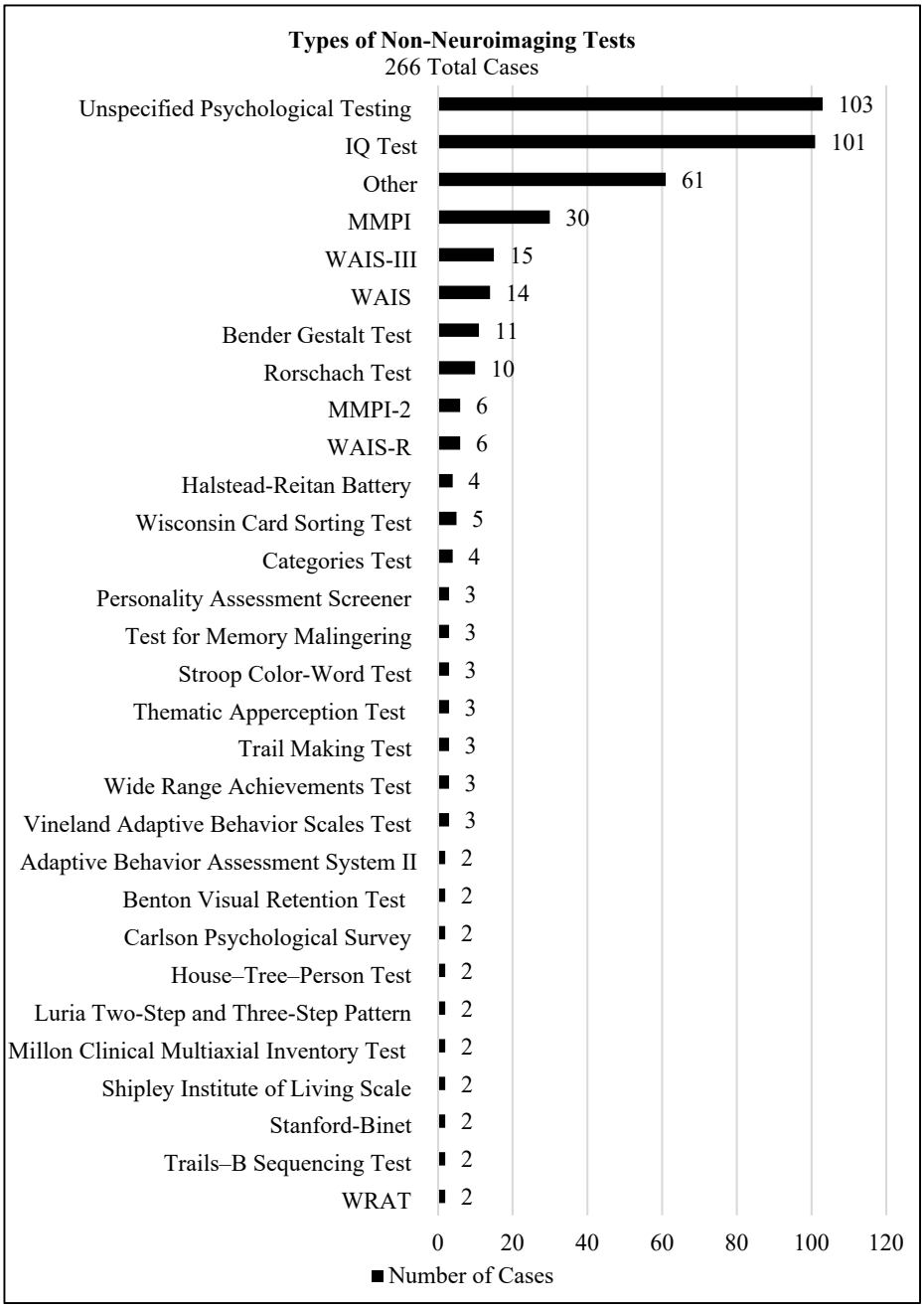


CHART 8



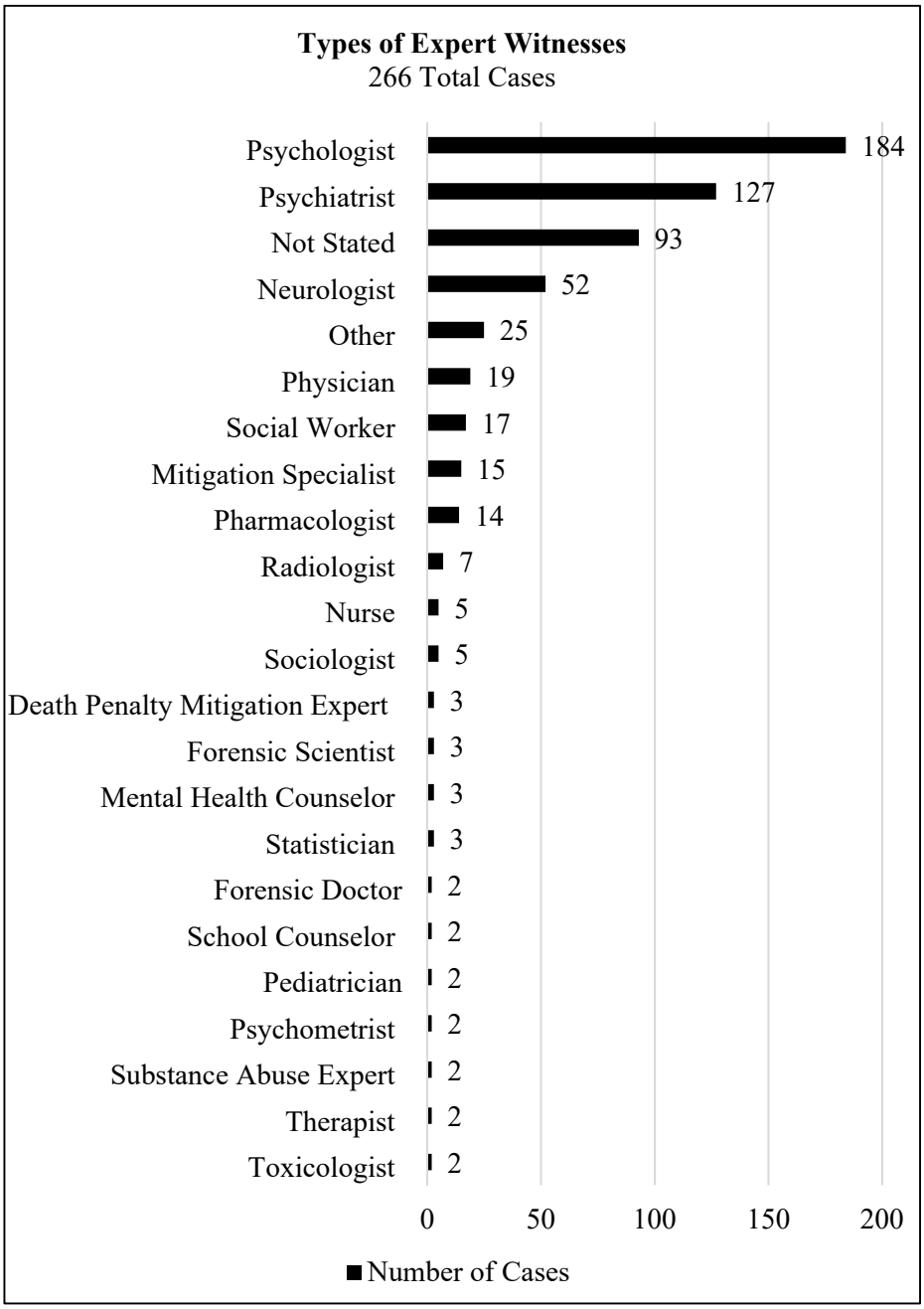
These techniques are also reflected in the subsample of 266 childhood trauma cases, as Charts 8 and 9 demonstrate. The techniques are not mutually exclusive, and a number of different types of tests can be applied to evaluate one defendant. As Chart 7 shows, at least one type of brain imaging test was used in nearly half of the cases (129 cases or 48.50%), although, on the whole, most major tests were represented: the CT scan, PET scan, MRI, and EEG. Likewise, as Chart 9 shows, some cases involved a substantially broader range of non-neuroimaging tests. Such expansiveness is not surprising since neuroimaging tests are a relatively recent phenomenon and non-imaging tests measure additional facets of brain activity as well as an array of disorders, ranging from low IQ, to tests for impaired fine and gross motor skills, to clinical tests for psychiatric disorders and so on.

CHART 9


Types of Non-Neuroimaging Tests
266 Total Cases
Unspecified Psychological Testing 103
IQ Test 101
Other 61
MMPI 30
WAIS-III 15
WAIS 14
Bender Gestalt Test 11
Rorschach Test 10
MMPI-2 6
WAIS-R 6
Halstead-Reitan Battery 4
Wisconsin Card Sorting Test 5
Categories Test 4
Personality Assessment Screener 3
Test for Memory Malingering 3
Stroop Color-Word Test 3
Thematic Apperception Test 3
Trail Making Test 3
Wide Range Achievements Test 3
Vineland Adaptive Behavior Scales Test 3
Adaptive Behavior Assessment System II 2
Benton Visual Retention Test 2
Carlson Psychological Survey 2
House–Tree–Person Test 2
Luria Two-Step and Three-Step Pattern 2
Millon Clinical Multiaxial Inventory Test 2
Shipley Institute of Living Scale 2
Stanford-Binet 2
Trails–B Sequencing Test 2
WRAT 2
0 20 40 60 80 100 120
Number of Cases

Overall, then, the Neuroscience Study shows that courts admit many different types of neuroscientific evidence in cases involving childhood trauma. In addition, attorneys representing either the prosecution or the defense must learn about medical and psychiatric conditions and the cutting-edge techniques that experts use to measure them. Chart 10 indicates that, unsurprisingly, there is a wide variety of experts who testify and provide evidence in childhood trauma cases. The witnesses are dominated by mental health experts—psychologists and psychiatrists—yet, many of the other kinds of experts who are listed could cover mental health issues as well, including physicians and pediatricians. These latter two categories are overlapping, of course. While the Neuroscience Study errs on the side of presenting as much detail as possible and abides by the designation provided by courts so as to not read in broader (and possibly erroneous) interpretations, readers can combine Chart 10's categories to get a sense of the extent to which mental health experts control these cases.

CHART 10


Types of Expert Witnesses
266 Total Cases
Psychologist 184
Psychiatrist 127
Not Stated 93
Neurologist 52
Other 25
Physician 19
Social Worker 17
Mitigation Specialist 15
Pharmacologist 14
Radiologist 7
Nurse 5
Sociologist 5
Death Penalty Mitigation Expert 3
Forensic Scientist 3
Mental Health Counselor 3
Statistician 3
Forensic Doctor 2
School Counselor 2
Pediatrician 2
Psychometrist 2
Substance Abuse Expert 2
Therapist 2
Toxicologist 2
0 50 100 150 200
Number of Cases

Charts 11 and 12 indicate why there are advantages to retaining specific types of experts to assist in the defense's case. As would be expected, Chart 11 shows that mitigation evidence is the most widely used category in which attorneys relied on experts in court. At the same time, Charts 11 and 12 together demonstrate that neuroscientific evidence is incorporated for numerous types of arguments and purposes. Some of these purposes are strategic; for example, to support or rebut a claim of ineffective assistance of counsel or to support or rebut the use of a brain scan (Chart 11). But the breadth of a claim of childhood trauma covers many different kinds of injuries and disorders, as Chart 12 lays out—spanning from broad categories, such as a history of childhood abuse or trauma and mental illness or disorder, to far more specific categories, such as fetal alcohol syndrome or a suicide attempt.

CHART 11

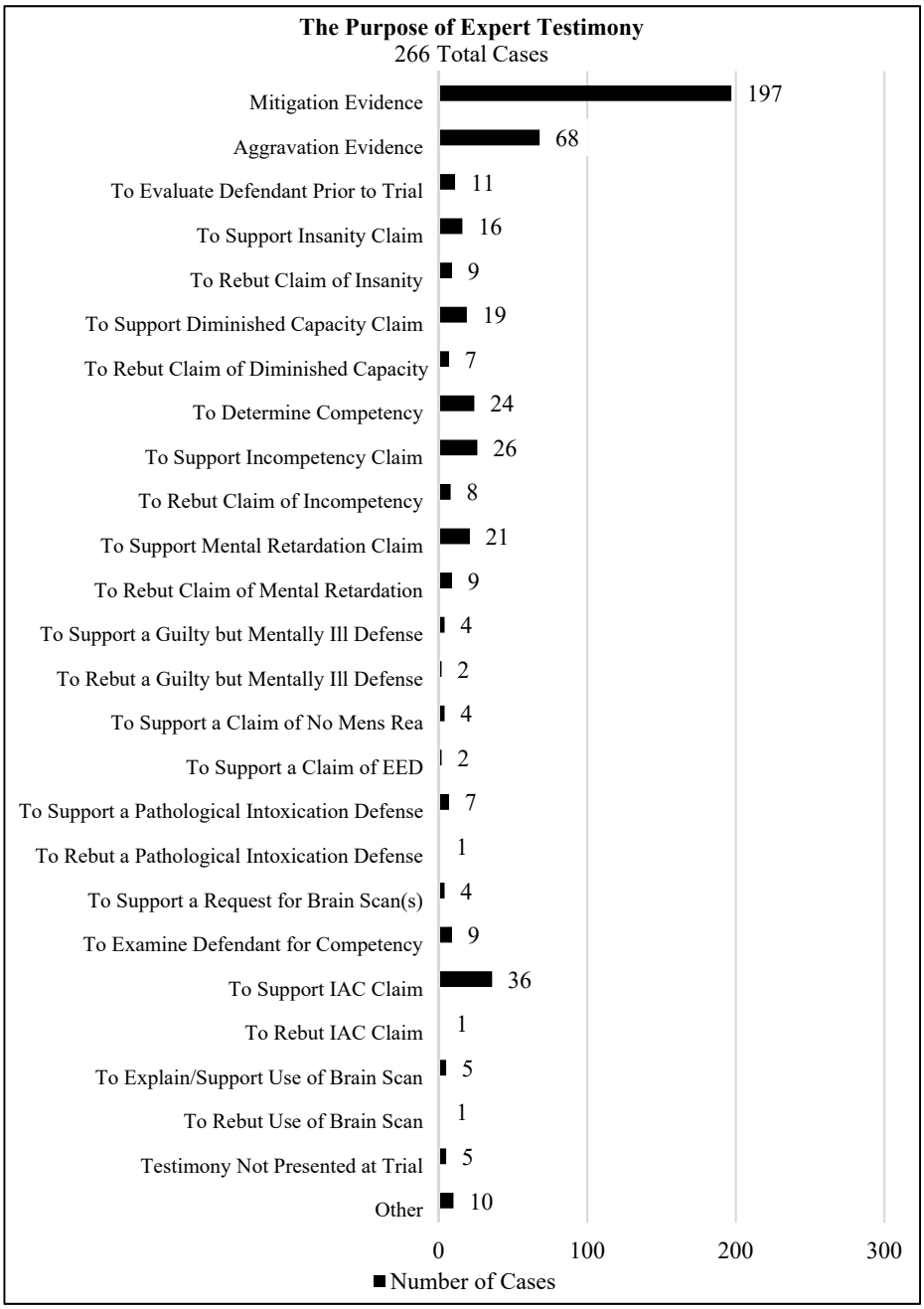
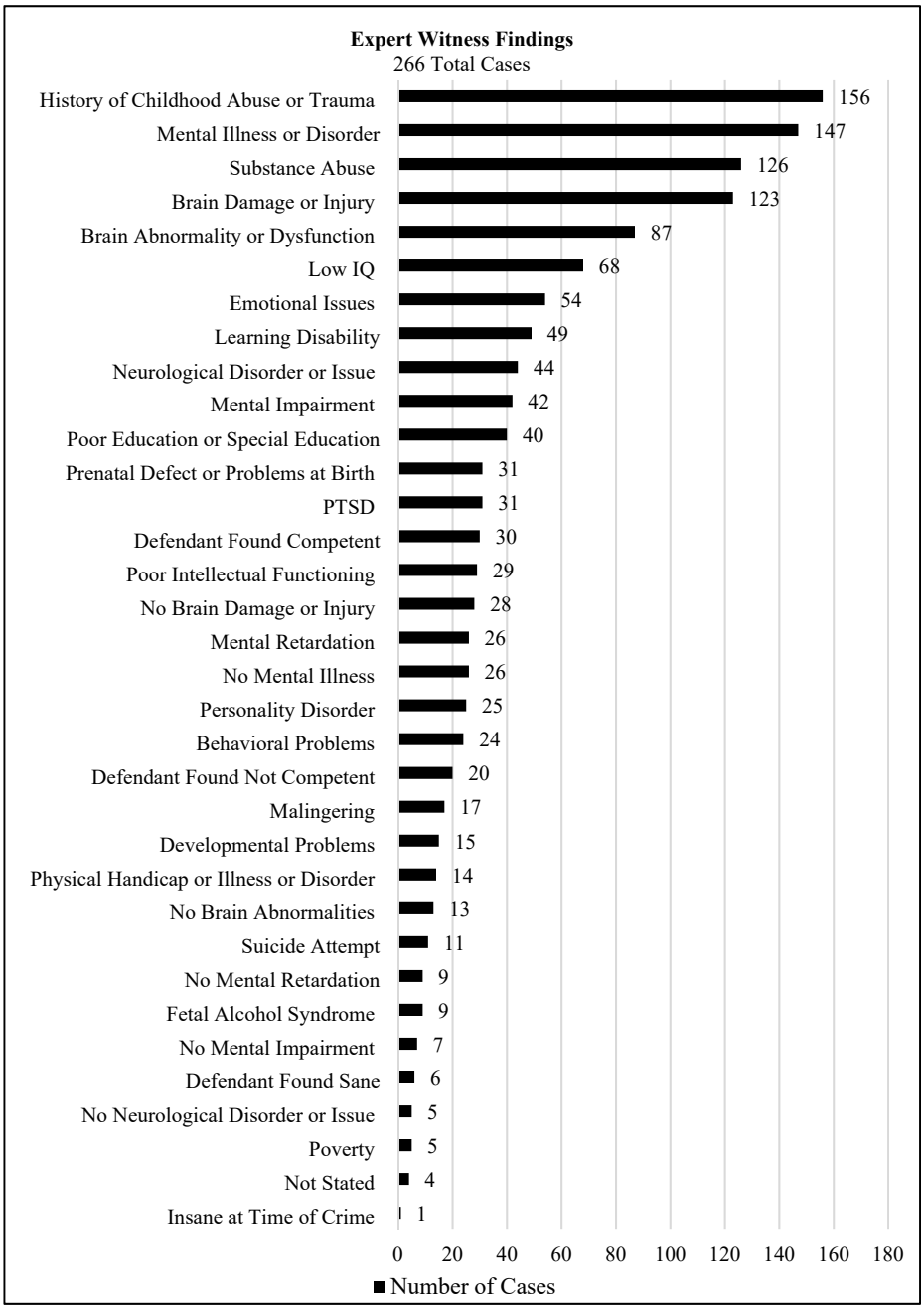

The Purpose of Expert Testimony
266 Total Cases
Mitigation Evidence 197
Aggravation Evidence 68
To Evaluate Defendant Prior to Trial 11
To Support Insanity Claim 16
To Rebut Claim of Insanity 9
To Support Diminished Capacity Claim 19
To Rebut Claim of Diminished Capacity 7
To Determine Competency 24
To Support Incompetency Claim 26
To Rebut Claim of Incompetency 8
To Support Mental Retardation Claim 21
To Rebut Claim of Mental Retardation 9
To Support a Guilty but Mentally Ill Defense 4
To Rebut a Guilty but Mentally Ill Defense 2
To Support a Claim of No Mens Rea 4
To Support a Claim of EED 2
To Support a Pathological Intoxication Defense 7
To Rebut a Pathological Intoxication Defense 1
To Support a Request for Brain Scan(s) 4
To Examine Defendant for Competency 9
To Support IAC Claim 36
To Rebut IAC Claim 1
To Explain/Support Use of Brain Scan 5
To Rebut Use of Brain Scan 1
Testimony Not Presented at Trial 5
Other 10
0
100
200
300
Number of Cases

CHART 12


Expert Witness Findings
266 Total Cases
History of Childhood Abuse or Trauma 156
Mental Illness or Disorder 147
Substance Abuse 126
Brain Damage or Injury 123
Brain Abnormality or Dysfunction 87
Low IQ 68
Emotional Issues 54
Learning Disability 49
Neurological Disorder or Issue 44
Mental Impairment 42
Poor Education or Special Education 40
Prenatal Defect or Problems at Birth 31
PTSD 31
Defendant Found Competent 30
Poor Intellectual Functioning 29
No Brain Damage or Injury 28
Mental Retardation 26
No Mental Illness 26
Personality Disorder 25
Behavioral Problems 24
Defendant Found Not Competent 20
Malingering 17
Developmental Problems 15
Physical Handicap or Illness or Disorder 14
No Brain Abnormalities 13
Suicide Attempt 11
No Mental Retardation 9
Fetal Alcohol Syndrome 9
No Mental Impairment 7
Defendant Found Sane 6
No Neurological Disorder or Issue 5
Poverty 5
Not Stated 4
Insane at Time of Crime 1
0 20 40 60 80 100 120 140 160 180
Number of Cases

Charts 11 and 12 also reveal that the evidence is presented by both sides—the defense's efforts to indicate a disorder or claim of ineffective assistance of counsel and the prosecution's efforts to rebut such arguments entirely. The use of experts and the different types of abnormalities about which they testify will become further apparent in the following accounts of the cases and arguments that attorneys make when presenting such evidence in court.

IV. PRESENTATION OF CHILDHOOD TRAUMA EVIDENCE AND COURTS' RESPONSES

Attorneys incorporate childhood trauma evidence in a broad range of ways in criminal proceedings, which correspond with the many types of conditions that children suffer. In criminal cases, childhood trauma evidence is often used for death penalty mitigation in an effort by defendants to attempt to reduce a potential death sentence to a lesser sentence.[120] Death penalty defendants have a constitutional right to present mitigating evidence, and the jury may not refuse to consider mitigating evidence during their deliberations.[121]

A. *How Attorneys Use Childhood Trauma as Mitigation Evidence*

Most cases evaluating childhood trauma evidence for purposes of mitigation relied on many of the factors listed in Charts 2–4; therefore, part of the courtroom battle over evidentiary or mitigation issues in individual cases would apply to some factors more than others. In *United States v. Hammer*,[122] for example, the jury was presented with several possible mitigating factors to consider, including the following five: (1) "Mr. Hammer suffers from cognitive deficits;" (2) "Mr. Hammer is the product of a violent, abusive and chaotic childhood;" (3) "As a child, Mr. Hammer was a victim of sexual abuse;" (4) "As a young person, Mr. Hammer attempted to seek help for mental difficulties;" and (5) "Mr. Hammer presently suffers from a major mental disease or defect."[123]

All twelve jurors found by a preponderance of the evidence that mitigating factors (2) and (4) existed, and six found that mitigating factor (3) existed.[124] Eleven jurors concluded that Hammer failed to prove mitigating factor (1), and

120. *See* Crocker, *supra* note 3, at 1156.

121. *Id.* at 1150.

122. 404 F. Supp. 2d 676 (M.D. Pa. 2005).

123. *Id.* at 685.

124. *Id.* at 686.

all twelve jurors concluded that Hammer failed to prove mitigating factor (5).[125] The jury determined, however, that the aggravating factors outweighed the mitigating factors and recommended a death sentence for Hammer for the first degree murder of his cellmate while he was incarcerated.[126]

Hammer appealed, making several claims, including a claim of erroneous findings relating to mitigating circumstances.[127] For example, during closing arguments, the prosecution asserted that "Mr. Hammer has no cognitive disorders"; yet there was no evidence presented that rebutted the expert's testimony stating that Hammer demonstrated "cognitive disorders or deficits."[128] In addition, although the prosecution never rebutted evidence presented at the trial showing that Hammer was sexually abused as a child, six jurors determined that Hammer failed to prove by a preponderance of the evidence that he was a child abuse victim.[129]

In this appeal, the court engaged in very detailed findings of fact which included an extensive look at the evidence of childhood trauma that was presented at trial. One defense expert testified, for example, that "Hammer's family history includes a history of alcoholism, depression, prescription drug abuse, seizures and Attention Deficit Disorder. Instability was also a family trademark throughout Mr. Hammer's childhood evidenced in part by the fact that he attended many different schools before dropping out at the tenth grade."[130] Hammer told the expert of several instances of abuse, including times when his mother used to give him enemas with hot sauce, genitally molest him, and inflict extreme physical and emotional abuse.[131] The expert diagnosed Hammer with PTSD with dissociative symptoms and Borderline Personality Disorder.[132] Another expert also testified for the defense and determined that, based on MRI results, the abnormally small size of Hammer's brain was the result of dystrophy, "consistent with organic causes such as pre-natal maternal alcohol use and failure to thrive, as well as external causes, such as abuse and neglect."[133]

125. *Id.* at 685–86.
126. *Id.* at 680, 686.
127. *Id.* at 790–91.
128. *Id.*
129. *Id.* at 791.
130. *Id.* at 716.
131. *Id.* at 716–17.
132. *Id.* at 718.
133. *Id.* at 723.

With regard to Hammer's erroneous findings related to mitigating circumstances, the court determined that, "many of the jury's findings relating to mitigating circumstances . . . are erroneous, including the finding of 12 jurors that at the time of trial Mr. Hammer did not suffer from a major mental disease or defect, the finding of 11 jurors that he did not suffer from cognitive deficits, and the finding of 6 jurors that as a child he was not the victim of sexual abuse."[134] Based on this determination, the court concluded that Hammer was justified in receiving a new penalty-phase trial.[135]

In *Hammer*, it appears significant that the primary appellate court battle concerned a range of childhood trauma evidence including, most particularly, brain trauma evidence. The next Section on ineffective assistance of counsel accentuates the importance of this multiplicity of approaches in terms of the numbers of factors and conditions that are examined.

B. *Standards for Ineffective Assistance of Counsel*

Central to the arguments presented in the Neuroscience Study's 266 childhood trauma cases are claims that a defense attorney was ineffective because of a failure to present mitigation evidence or to present it sufficiently. The U.S. Supreme Court has stated that an attorney's performance is determined by a standard of "prevailing professional norms,"[136] which, for capital cases, entails a "thorough investigation"[137] of "all reasonably available mitigating evidence"[138] relevant to a defendant's history and circumstances.[139] The Court has stressed repeatedly that a key part of this mitigation inquiry requires attorneys to investigate defendants' cognitive and intellectual deficiencies because such evidence has a particularly pronounced impact on mitigation, especially in death penalty cases.[140]

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134. *Id.* at 800.

135. *Id.*

136. Strickland v. Washington, 466 U.S. 668, 688 (1984).

137. Porter v. McCollum, 558 U.S. 30, 39 (2009) (quoting Williams v. Taylor, 529 U.S. 362, 396 (2000)).

138. Wiggins v. Smith, 539 U.S. 510, 524 (2003) (emphasis omitted) (quoting AM. BAR ASS'N, ABA GUIDELINES FOR THE APPOINTMENT AND PERFORMANCE OF COUNSEL IN DEATH PENALTY CASES 11.4.1(C) (1989)).

139. *Porter*, 558 U.S. at 39.

140. These deficiencies cover a broad span. *See* Sears v. Upton, 561 U.S. 945, 946 (2010) (frontal lobe damage); *Porter*, 558 U.S. at 36 (brain damage and cognitive defects in reading, writing, and memory); Rompilla v. Beard, 545 U.S. 374, 392 (2005) (organic brain damage and significant cognitive impairments); Tennard v. Dretke, 542 U.S. 274, 287 (2004) (impaired intellectual

According to the Court, an attorney's failure to conduct such an investigation hinders the attorney's ability to make reasonable strategic decisions about how and when to present evidence that may benefit their client.[141] Furthermore, those attorneys open themselves up to defendants' appeals claiming prejudicially deficient counsel in violation of the Sixth Amendment, known as an "ineffective assistance of counsel" (IAC) or *Strickland* claim.[142]

In 1984, the U.S. Supreme Court established a two-pronged test to assess the validity of ineffective assistance of counsel challenges in *Strickland v. Washington*.[143] First, counsel's performance must actually be "deficient," and second, this deficient performance must have "prejudiced" the defendant.[144] To be "prejudiced," counsel must not only be of poor quality but must also be the "but for" cause of the resulting conviction.[145] The Neuroscience Study revealed that defendant-petitioners who met the *Strickland* standard were often provided relief in three primary ways: a new penalty phase, a new trial (based on a reversal of their conviction), or a new evidentiary hearing (based on a remand).[146]

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functioning); *Wiggins*, 539 U.S. at 535 (diminished mental capacities); *Williams*, 529 U.S. at 396 (borderline mental retardation). The American Bar Association Guidelines also advise attorneys to conduct an investigation into a defendant's neurological history as part of a death penalty defendant's mitigation claim. Specifically, the comment to Guideline 4.1 states: "Counsel must compile extensive historical data, as well as obtain a thorough physical and neurological examination. Diagnostic studies, neuropsychological testing, appropriate brain scans, blood tests or genetic studies, and consultation with additional mental health specialists may also be necessary." Am. Bar Ass'n, *ABA Guidelines for the Appointment and Performance of Defense Counsel in Death Penalty Cases*, 31 HOFSTRA L. REV. 913, 956 (2003). Indeed, scholars have suggested that the ABA's guidelines provide more protection for defendants than the *Strickland* test. *See* Ellen G. Koenig, *A Fair Trial: When the Constitution Requires Attorneys to Investigate Their Clients' Brains*, 41 FORDHAM URB. L.J. 177, 204 (2013) ("[U]nder the ABA Guidelines approach, neuroscience evidence should be a real part of counsel's reasonable investigation, and, specifically in capital cases, defense counsel may be ineffective for failing to comply with this duty.").

141. *See Sears*, 561 U.S. at 954 (quoting *Williams*, 529 U.S. at 396) ("We rejected any suggestion that a decision to focus on one potentially reasonable trial strategy . . . [can be] 'justified by a tactical decision' when 'counsel did not fulfill their obligation to conduct a thorough investigation of the defendant's background.'").

142. *See* Strickland v. Washington, 466 U.S. 668, 687–92 (1984) (establishing and discussing the *Strickland* test for ineffective assistance of counsel).

143. *Id.* at 687.

144. *Id.*

145. *Id.* at 694.

146. Denno, *The Myth*, *supra* note 5, at 506–07.

As commentators have long noted, however, the *Strickland* standard "is notoriously difficult for defendants to meet," and the percentage of successful claims is small.[147] Overwhelmingly, courts presume that attorneys are adequate, and even if defendants can surmount this presumption with a show of an attorney's deficiency, defendants can still fall short of meeting the prejudice prong.[148]

Yet *Strickland* claims are particularly significant when neuroscientific evidence is at issue, given the U.S. Supreme Court's emphasis on the mitigating value of neuroscientific evidence in criminal cases. Indeed, earlier analyses of the Neuroscience Study demonstrated that nearly all of the successful *Strickland* claims derived from an attorney's failure to properly investigate, collect, or comprehend neuroscientific evidence."[149]

The 266 childhood trauma cases that this Article discusses were based on the Neuroscience Study's Defendant Cases and, therefore, already have a more heightened likelihood than is typical of being ineffectively represented. In addition, research on childhood trauma reveals the extent of the effect of all sorts of trauma on brain functioning, either directly or indirectly. The following Sections discuss the Neuroscience Study's findings concerning how attorneys present childhood trauma evidence in court, the strengths and weaknesses of their arguments, and how courts respond to such arguments and evidence.

C. *How Attorneys Present Childhood Trauma Evidence*

In the great majority of the Neuroscience Study's 266 cases (92.48%), childhood trauma evidence was used by the defense for mitigation purposes in a death penalty case, as Chart 13 indicates. In nearly two-thirds of the cases (161 cases or 60.53%), the evidence was also introduced to suggest that an attorney was ineffective for not presenting it. The other reasons for introducing the evidence were far less common—to show that the defendant suffered from a cognitive deficiency (what the courts still label as "mental retardation"), that

147. Carissa Byrne Hessick, *Ineffective Assistance at Sentencing*, 50 B.C. L. REV. 1069, 1074 (2009); Stephanos Bibas, *The Psychology of Hindsight and After-the-Fact Review of Ineffective Assistance of Counsel*, 2004 UTAH L. REV. 1, 1 (2004).

148. *See* Hessick, *supra* note 147, at 1074 (discussing *Strickland* claims generally and observing historical criticisms of the prejudice prong as overly difficult to satisfy); s*ee also* Nancy J. King, *Enforcing Effective Assistance After* Martinez, 122 YALE L.J. 2428, 2431 (2013) (noting that prior to the U.S. Supreme Court's decision in *Martinez v. Ryan*, 132 S. Ct. 1309 (2012), "less than 1% of noncapital habeas petitions were granted for *any* claim" and that *Martinez* will be unlikely to alter this outcome).

149. Denno, *The Myth*, *supra* note 5, at 507.

the evidence was related to a request for funding, or, for thirty-three cases, that the evidence was admitted to support a defense.

CHART 13

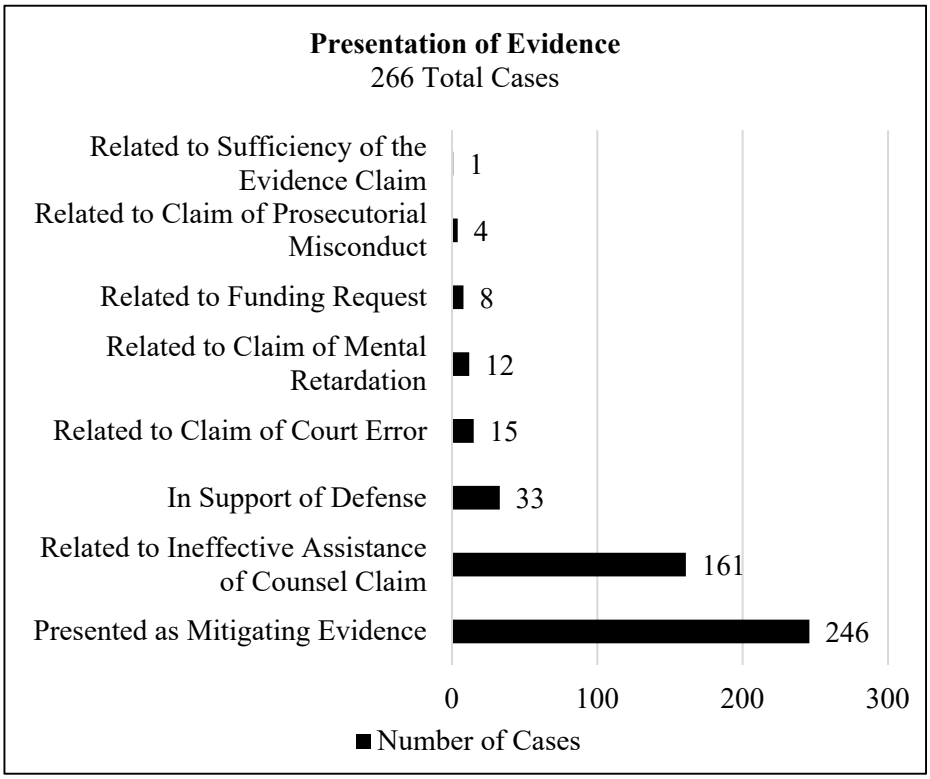


Chart 14 examines in more detail these thirty-three cases in which childhood trauma evidence was used to support a defense. Many cases (13 cases or 40%) suggest that the defendant was incompetent to stand trial, while nearly one-third of the cases (10 cases or 30%) support an insanity defense. The evidence is used less commonly still for associated arguments (such as claims of diminished capacity or mental illness).

CHART 14

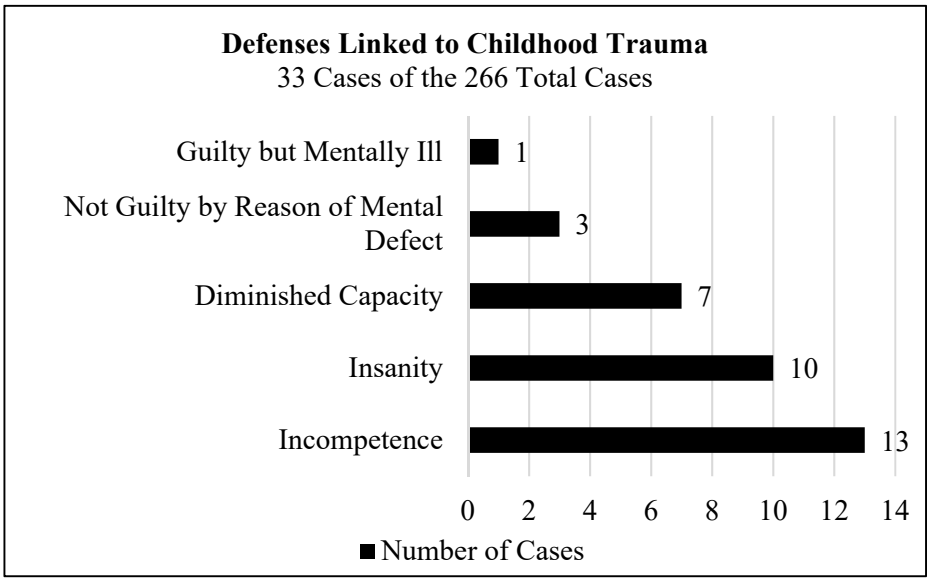
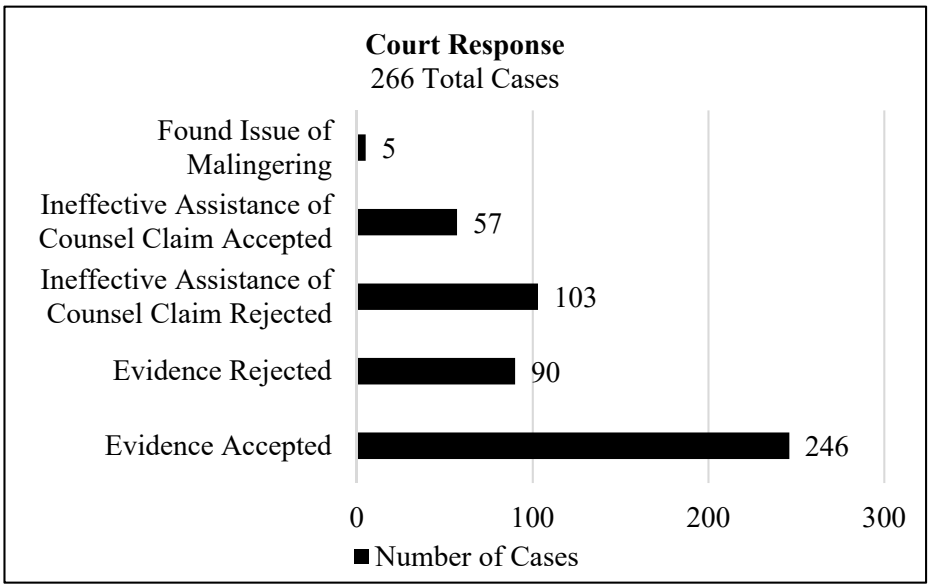


Chart 15 focuses on how courts respond to the presentation of this evidence. Notably, while Charts 13 and 15 show that childhood trauma evidence was part of a defendant's ineffective assistance of counsel claim in close to two-thirds of the cases (161 cases or 60.53%), Chart 15 further reveals the breakdown of wins and losses. Strikingly, among those 161 cases, the defendant's claim was successful over one-third of the time (57 cases or 35.40%). My prior research has shown that neuroscientific evidence generally is a bonus in claims of ineffective assistance of counsel, and cases involving childhood trauma evidence are no different.

CHART 15



In addition, Chart 15 indicates the willingness of courts to accept childhood trauma evidence. While some or all of the childhood trauma evidence was rejected by the court in one-third of the cases (90 cases or 33.83%), some or all of such evidence was accepted by the court in the great majority of the cases (246 cases or 92.48%). Therefore, courts were willing to accept at least some of this evidence the great majority of the time.

D. *How Attorneys Are Failing the* Strickland *Test*

An attorney's representation will often be found ineffective if they neglect their duty to investigate a defendant's background. In several cases in the Neuroscience Study, the attorney did not attempt any meaningful investigation, even though multiple instances of childhood trauma could have easily been discovered.[150]

150. *See, e.g.*, Jackson v. Calderon, 211 F.3d 1148, 1162–64 (9th Cir. 2000) (vacating defendant's death sentence because counsel's failure to present evidence of defendant's physical abuse from both parents, defendant's father's absence during his upbringing, and defendant's diagnosis of schizophrenia, could have impacted the outcome); Loyd v. Whitley, 977 F.2d 149, 154–57, 161 (5th Cir. 1992) (granting the requested writ of habeas corpus after determining that counsel failed to develop and present evidence of the defendant's pre-natal issues, history of abuse and head injuries, and childhood behavioral problems); Hurst v. State, 18 So. 3d 975, 1009–11, 1013 (Fla. 2009) (vacating

Attorneys can also be rendered deficient for failing to work with defendants, lay witnesses, or experts to fully develop and present evidence. For example, in *Commonwealth v. Keaton*, the attorney's performance was found deficient because he neglected to question family members about the defendant's childhood and did not adequately prepare them for their testimony at trial.[151]

In addition, an attorney's failure to understand the long-term effects of childhood trauma and its impact on future behavior can have a detrimental influence on the defendant's case, especially if the attorney neglects to draw connections between past trauma and the crimes committed. For example, in *Poindexter v. Mitchell*, the court determined that had the defense attorney conducted a thorough investigation, he would have found that the defendant's troubled upbringing and resulting psychological issues were a direct cause of the behavior that resulted in the defendant's triple murder.[152] Lastly, poor investigation or a misunderstanding of the importance of the evidence can prompt an attorney to utilize a misguided strategy at trial or present the evidence in a way that hinders the defendant's case or results in a harsher sentence than the defendant deserves.[153]

There are many challenges attorneys face when dealing with evidence of childhood trauma, however, that may impede their ability to render effective assistance. If a defendant has committed multiple crimes in the same case or has committed the same type of crime several times in the past, a harsh sentence will likely be unavoidable if the court views the sentence as a way to prevent

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defendant's death sentence because of counsel's failure to investigate and present evidence of the defendant's poor childhood development, low IQ, intellectual deficiencies, and fetal alcohol syndrome); *see also infra* note 216 and accompanying text.

151. *See* 45 A.3d 1050, 1083 (Pa. 2012).

152. *See* 454 F.3d 564, 580 (6th Cir. 2006).

153. *See, e.g.*, Sinisterra v. United States, 600 F.3d 900, 905 (8th Cir. 2010) (stating that even though counsel was aware of the defendant's childhood head injuries and a neuropsychologist's report stating that the defendant "likely suffered brain damage," counsel chose to follow a pre-trial psychiatrist's determination that defendant had "no mental problems" and, therefore, decided not to introduce any evidence of childhood trauma); Correll v. Ryan, 539 F.3d 938, 944, 956 (9th Cir. 2008) (reversing the denial of the requested writ of habeas corpus after determining that, although defense counsel was aware that potential mitigating evidence existed, including defendant's troubled childhood, counsel did not explore any avenues that might lead to development of that evidence); Smith v. Mullin, 379 F.3d 919, 939 (10th Cir. 2004) (granting the defendant's petition for writ of habeas corpus due to defense counsel's failure to understand "that Mr. Smith's 'borderline mental retardation, mental illness, and organic brain impairment' constituted mitigating evidence to be presented at the penalty stage of Mr. Smith's capital trial").

future criminal behavior. In some cases, the defendant's crimes are just too heinous to mitigate, at least in the eyes of those determining the sentence. For example, in *Pike v. State*, despite the defendant's history of birth defects, severe child abuse, suicide attempts, and psychological issues, the court found that her torturous and particularly heinous murder of a fellow college student was too aggravating to be overcome.[154]

Sometimes attorneys face a situation where facts about a defendant's childhood trauma are too vague or remote to be considered by the court. If witnesses are unavailable to provide detailed testimony of the trauma or the trauma was minimal or occurred many years in the past, attorneys may find it difficult to fully articulate the evidence to the court or connect it to the crime. For example, in *Stafford v. Saffle*, the court determined that the defendant's weak evidence of childhood trauma was too vague and remote to be considered relevant to the crimes committed when the defendant was age twenty-seven.[155]

In addition, defendants who are unable to remember certain childhood events or have repressed traumatic events can be challenging to an attorney's representation. In some instances, defendants do not want their attorney to investigate their background out of fear of potentially humiliating evidence being presented at trial.[156]

Attorneys can also face difficulties when dealing with witnesses who provide conflicting accounts of the defendant's history or are unwilling to cooperate. In one case, the defendant's family only wanted to present evidence that the defendant was from a good and loving family, even though the evidence showed that as a child, the defendant suffered from learning disabilities, substance abuse and neurological problems, poverty, and had a father in prison for homicide.[157]

Lastly, a defense attorney's case can be threatened by strong or convincing arguments presented by the prosecution. If certain mitigating evidence has a double-edged sword nature,[158] the prosecution can use it to support their case in aggravation or to open the door to other aggravating evidence.[159] These circumstances occur infrequently, but attorneys must be aware of them.

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154. *See* Pike v. State, No. E2009-00016-CCA-R3-PD, 2011 WL 1544207, at *1 (Tenn. Crim. App. Apr. 25, 2011).

155. *See* Stafford v. Saffle, 34 F.3d 1557, 1565 (10th Cir. 1994).

156. *See, e.g.*, Simmons v. State, 105 So. 3d 475, 507, 509 (Fla. 2012).

157. *Id.* at 504–09.

158. For a discussion of the meaning, strength, and significance of "double-edged sword" arguments, see Denno, *The Myth*, *supra* note 5, at 596–97.

159. *See, e.g.*, Evans v. Sec'y, Dep't of Corr., 681 F.3d 1241, 1268–69 (11th Cir. 2012).

E. *Reasons for Successful Ineffective Assistance of Counsel Claims*

In an effort to more closely examine the fifty-seven childhood trauma cases involving successful claims of ineffective assistance of counsel, it was helpful to divide these cases into smaller groups based on their court responses. When analyzing this group, I looked at the reasons the claims were successful, the trial attorney's defense or reasoning regarding why their performance was deficient, as well as several other important aspects of these claims.

As Chart 16 shows, all but one of the fifty-seven cases were based on an attorney's failure to present mitigating evidence. Additional reasons pertained primarily to counsel's neglect in handling experts properly, either not presenting a defense expert at all or not obtaining necessary neurological or psychological testing. Likewise, some counsel neglected to call additional witnesses to testify or failed to consult with and prepare an expert properly. Clearly, courts expect attorneys to have a certain standard of expertise and preparation when introducing childhood trauma evidence.

CHART 16

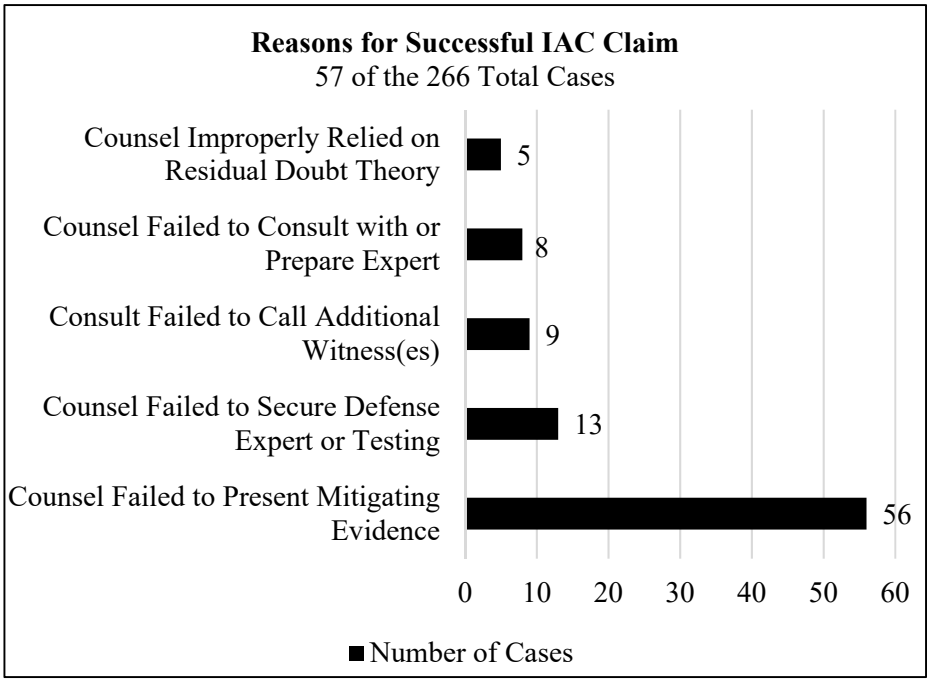


Chart 17 lists the various defenses or reasoning counsel provided to explain why the allegedly deficient performance occurred. In the majority of cases (40 cases or 70.17%), counsel explained that neglecting to introduce evidence or handling experts in the way that they reported was a "reasonable trial strategy" under *Strickland* and therefore acceptable in their eyes. "Reasonable trial strategy" can often be a successful defense in cases where the court determines the attorney was not deficient, since courts are prone to give great deference to an attorney's strategic choices.[160] Seemingly, then, in the Chart 17 cases, the court viewed the attorney's conduct as particularly egregious. Other errors pertained to the mishandling of evidence or ignorance about it, incompetence, inexperience, or ignorance about the law, and, in a lesser number of cases, episodes where the client hindered the investigation.

CHART 17

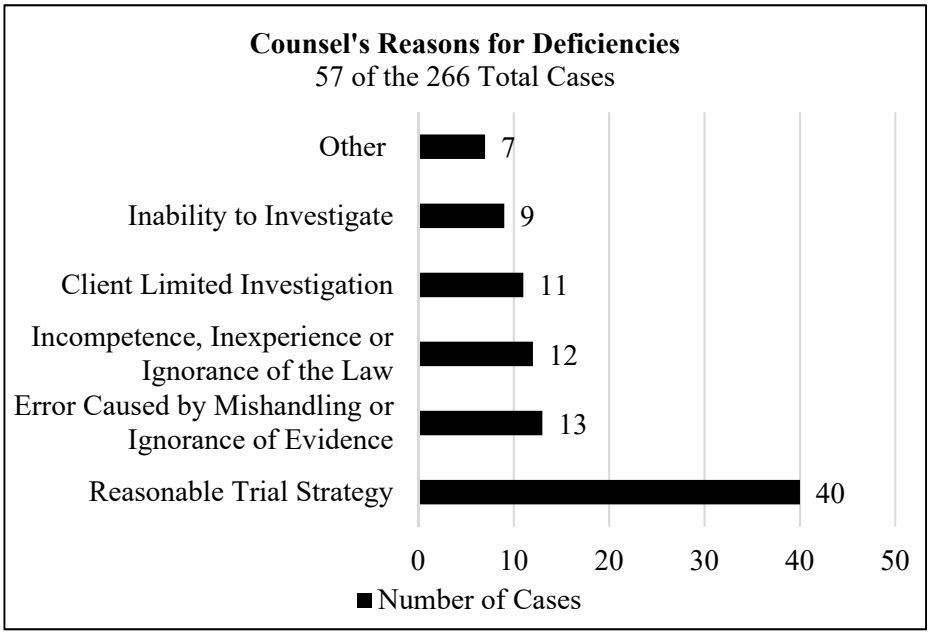
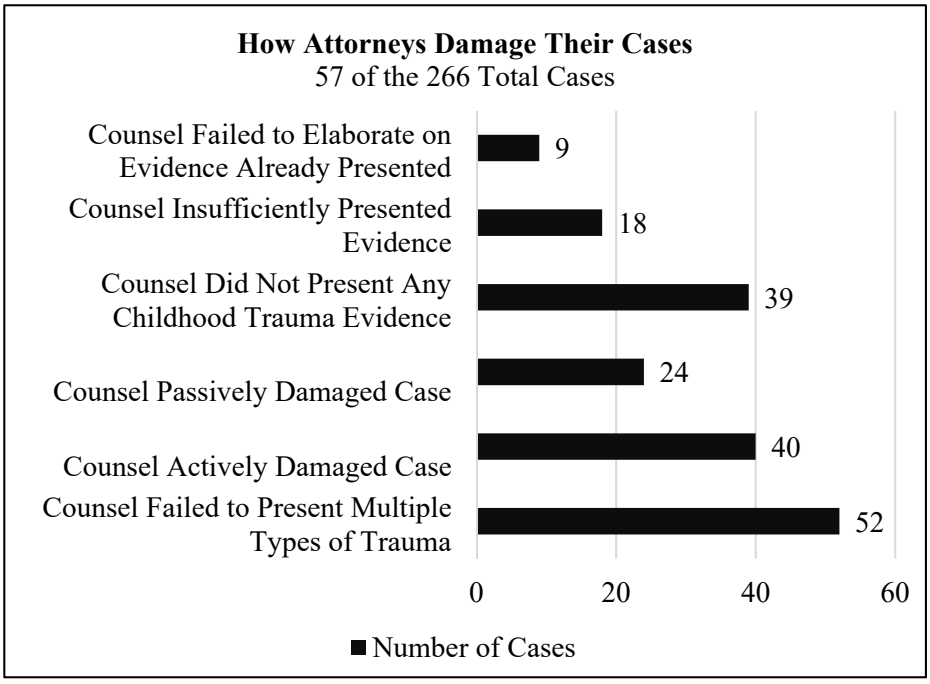


Chart 18 details more specifically how attorneys damaged their cases. For most cases (52 cases or 91.23%), counsel failed to investigate the multiple types of trauma that a defendant had experienced. In a majority of cases (40 cases or 70%), counsel "actively" damaged their cases in the sense that they chose not

160. *See* Strickland v. Washington, 466 U.S. 668, 690–91 (1984).

to pursue an investigation or claimed that not presenting evidence was a "strategic decision." In turn, in nearly the same number of cases (39 cases or 68%), counsel did not present any evidence of childhood trauma. Likewise, in other cases (24 cases or 42.10%), counsel "passively" damaged their cases in the sense that counsel was not aware that certain evidence existed or did not actively choose to disregard a defendant's background evidence. In the remaining circumstances in Chart 18, counsel simply did not perform an adequate job of presenting or preparing the evidence that they did decide to submit on their client's behalf.

CHART 18



V. CASE STUDIES OF EFFECTIVE AND INEFFECTIVE USES OF CHILDHOOD TRAUMA EVIDENCE

The Neuroscience Study provides empirical results indicating how courts assess attorney performance as well as the varying approaches that attorneys take toward childhood trauma evidence. The data suggests that such evidence is not as impactful in the courtroom as might be expected given the existence of extensive medical and psychological research on the lasting effects of

childhood trauma. This Part presents individual case studies to further contextualize these findings, emphasizing in particular the complexity of the cases' procedural histories and the long-term multi-traumatic nature of defendants' backgrounds.

A. *Case Studies of Successful Claims of Ineffective Assistance of Counsel*

There are innumerable factors that affect whether a court will conclude that trial counsel provided ineffective assistance of counsel and, if so, change a defendant's original sentence. While Section B examines a range of unsuccessful cases hindered by the strict requirements of both of *Strickland*'s prongs, this Part briefly discusses six case studies of successful claims. The focus is on the kinds of connections attorneys have created to make a difference in terms of a defendant's final sentence.

1. Steven James

Steven James and a co-defendant were tried in separate cases for the murder of a man in Arizona in 1981.[161] James was found guilty and sentenced to death.[162] The court determined that defense counsel was ineffective for failing to conduct even the most basic investigation into James's childhood, drug history, and mental illness,[163] noting that there were "obvious indications that James had suffered emotional and psychological trauma during his childhood."[164] James's attorney possessed hard evidence of James's mental illness and disturbed childhood, and one expert alerted the attorney to scars on James's wrists from James's past suicide attempts.[165]

Despite this evidence, the defense attorney did not investigate James's past and was therefore unfamiliar with the large amount of mitigating information that could have been presented.[166] The court stated that, "[t]he meager mitigation evidence presented at sentencing bore no resemblance to the detailed narrative of James's life and mental health constructed by habeas counsel,"[167] and found it reasonably probable that, if presented with this powerful mitigating

161. James v. Ryan, 679 F.3d 780, 785 (9th Cir. 2012).
162. *Id.* at 786.
163. *Id.* at 815.
164. *Id.* at 808.
165. *Id.* at 808–10.
166. *Id.* at 810.
167. *Id.* at 815.

evidence, a sentencing court would not have returned a death sentence.[168] (The end result was that the court reversed the lower court's denial of James's habeas corpus petition.)[169]

2. Samuel Morgan

Samuel Morgan was convicted of the murder of two men, and the kidnapping and rape of one woman, and was sentenced to death.[170] At trial, Morgan's defense counsel did not present any mitigation evidence, despite being aware of its existence.[171] The trial court judge noted that imposing the death penalty in this case was "very distasteful" but that he was obligated by state law to sentence Morgan to death since no sufficient mitigation factors were found.[172]

On appeal, Morgan argued that his defense counsel was ineffective for failing to investigate and introduce evidence of the brain damage he experienced after being afflicted with encephalitis at twenty months old, as well as a history of being abused as a child.[173] Morgan presented the testimony of two experts who stated that there was a definite link between Morgan's brain damage and his criminal conduct.[174] The court determined that Morgan's defense counsel was ineffective for failing to present evidence of this link and therefore vacated Morgan's death sentence, noting in particular the trial judge's statement that the death penalty was solely imposed due to the lack of mitigating evidence.[175]

3. Wydell Evans

Shortly after being released from prison, Wydell Evans shot and killed his brother's girlfriend during an argument stemming from her alleged unfaithfulness to Evans's brother.[176] Evans was convicted of murder and sentenced to death.[177] On appeal, Evans claimed his counsel failed to

168. *Id.* at 820.
169. *Id.* at 821.
170. People v. Morgan, 719 N.E.2d 681, 686–87 (Ill. 1999).
171. *Id.* at 704.
172. *Id.* at 708.
173. *Id.* at 710–11.
174. *Id.* at 711.
175. *Id.* at 708, 712.
176. Evans v. Sec'y, Dep't of Corr., 681 F.3d 1241, 1244 (11th Cir. 2012).
177. *Id.* at 1245.

investigate his troubled background and brain damage.[178] Evans had suffered a closed-head injury at the age of three, had several developmental and learning disabilities, and engaged in alcohol abuse and violent behavior as a teenager.[179]

The court determined that while some of this evidence, including Evans's teenage behavior, may have been a double-edged sword, evidence of Evans's brain damage and developmental problems would have been more helpful than harmful if presented.[180] The court concluded that Evans's trial counsel was ineffective since this missing evidence was undisputed by the prosecution and would have painted a strikingly different picture of Evans to the jury.[181] (The court reversed the lower court's denial of Evans's habeas corpus petition.)[182]

4. Anthony Bean

In this case, the defendant, Anthony Bean, was convicted of the first-degree murder, robbery, and burglary of two women, on separate occasions, in their homes.[183] He was sentenced to death.[184] On appeal, Bean argued that he received ineffective assistance of counsel at the sentencing phase of his trial.[185] To support this claim, Bean introduced abundant new mental health evidence showing that he was mentally disabled, suffered from PTSD caused by childhood experiences, and had brain damage.[186]

The court noted that Bean's penalty-phase defense was "disorganized and cursory" and that counsel ignored for months two experts' strong recommendations for further neuropsychological testing.[187] The court found counsel ineffective, noting that: "The jury which committed Bean to death had no knowledge of the indisputably sadistic treatment Bean received as a child, including repeated beatings which left a permanent indentation in his head."[188] In addition, the court stressed that, "[a]long with numerous other potentially mitigating factors, his developmental delays, including placement in classes for

178. *Id.* at 1250.
179. *Id.* at 1248–49, 1255.
180. *Id.* at 1269.
181. *Id.* at 1270.
182. *Id.*
183. Bean v. Calderon, 163 F.3d 1073, 1074–76 (9th Cir. 1998).
184. *Id.* at 1074–75.
185. *Id.* at 1078.
186. *Id.* at 1079.
187. *Id.* at 1078.
188. *Id.* at 1081.

the 'educable mentally retarded,' were reported to the jury only in the vaguest of terms."[189] (Thus, the court remanded the case and affirmed the lower court's grant of Bean's habeas relief.)[190]

5. Eric Simmons

Eric Simmons was convicted of the kidnapping, sexual battery, and murder of a woman who was found dead in a wooded area in Sorrento, Florida.[191] Simmons claimed that his trial counsel never introduced evidence of his history of being abused as a child, brain damage from loss of oxygen as a toddler, poor intelligence, and substance abuse problems.[192] School records revealed that Simmons suffered learning disabilities and began using marijuana at age nine.[193] By high school, Simmons was drinking about a dozen beers a day and this level of substance abuse continued into his adult years.[194] Experts believed that his criminal behavior as an adult resulted from the extensive brain damage he suffered in his early childhood, which impaired his ability to learn and function socially.[195]

At trial, Simmons's attorney decided to humanize Simmons by presenting only positive mitigation evidence.[196] Jurors heard "almost nothing" about Simmons's troubled childhood.[197] The court determined that this trial strategy was ineffective and that counsel neglected to conduct a thorough investigation of Simmons's background.[198] The court rejected counsel's explanation that Simmons requested that no embarrassing or negative evidence about him be presented to the jury,[199] stating that counsel should have advised Simmons of the importance of presenting such evidence rather than accept his uninformed request.[200] (The court vacated Simmons's death sentence.)[201]

189. *Id.*
190. *Id.* at 1081, 1087.
191. Simmons v. State, 105 So. 3d 475, 483 (Fla. 2012).
192. *Id.* at 504–05.
193. *Id.* at 505.
194. *Id.*
195. *Id.*
196. *Id.* at 507.
197. *Id.*
198. *Id.*
199. *Id.* at 508.
200. *Id.*
201. *Id.* at 503–04.

6. Angela Johnson

Angela Johnson was convicted of five counts of capital murder after she aided and abetted her boyfriend in the brutal murder of three adults and two children who witnessed her boyfriend's drug trafficking activities.[202] In 2005, Johnson received a death sentence which, at the time, made her the first woman to be sentenced to death by a federal jury since the 1950s.[203] On appeal, Johnson claimed that her trial counsel neglected to present mitigation evidence that would have explained her mental state during the crime.[204]

The court reviewed the evidence presented during the penalty phase and noted that Johnson's attorney did present evidence of Johnson's dysfunctional family, history of abuse, drug use, and mental impairments.[205] However, the court found that counsel failed to connect Johnson's troubled history to her conduct at the time of the offense[206] and ignored defense experts' reports of such a connection.[207] According to the court, "[t]his is not just a case of failure to present additional mental health evidence that was merely cumulative, or a case in which counsel reasonably declined to provide further documentation to support and explain trial experts' opinions."[208] Rather, the court considered it evidence "of substantial failure to present a viable mental health mitigation case that was different in scope, content and *connection* to the offenses."[209] (The court vacated Johnson's death sentence.)[210]

B. *The Two Prongs of Ineffective Assistance of Counsel: A Closer Look*

I have noted elsewhere that the Neuroscience Study's data set of cases contained an unusually high number of successful ineffective assistance of counsel claims regarding the omission or misuse of neuroscientific evidence.[211] Childhood trauma cases reflect a similar trend. To review, in total, there was

202. Johnson v. United States, 860 F. Supp. 2d 663, 663 (N.D. Iowa 2012).

203. Trish Mehaffey, *Prosecutors Give Up Pursuit of Death Penalty for Angela Johnson*, THE GAZETTE (Dec. 17, 2014), https://www.thegazette.com/subject/news/prosecutors-give-up-pursuit-of-death-penalty-for-angela-johnson-20141217 [https://perma.cc/9GBM-FMJB].

204. *Johnson*, 860 F. Supp. 2d at 881.

205. *Id.* at 887.

206. *Id.*

207. *Id.*

208. *Id.* at 891.

209. *Id.*

210. *Id.* at 920.

211. *See* Denno, *The Myth*, *supra* note 5, at 508.

an ineffective assistance of counsel claim regarding childhood trauma evidence in 161 (60.53%) of the 266 cases. In about one-third of those cases (57 cases, 35.40%), the defendant's ineffective assistance of counsel claim was successful. This Section examines more precisely the different prongs of an ineffective assistance of counsel claim and provides examples of its use and effect in the context of childhood trauma evidence.

1. *Strickland* Prongs 1 and 2

Courts evaluate cases based upon the two-prong *Strickland* test.[212] First, defendants must show that their trial counsel's performance falls short of an objective standard of reasonableness.[213] Second, defendants must show that the deficient performance prejudiced their defense such that the resulting sentence was unreliable.[214]

The Neuroscience Study found a substantial number of instances where both prongs of the *Strickland* standard were satisfied by counsel's lack of introduction of, or investigation into, childhood trauma evidence during the penalty phase of trial. This outcome was especially prevalent in cases where the attorney did little or nothing to uncover evidence that, during childhood, defendants experienced significant physical and emotional abuse by parents or guardians.[215] Courts tend to deem such mitigating evidence necessary to provide the sentencing judge with a more complete picture of the defendant's life.

For example, in *Jackson v. Calderon*, the trial court was never provided evidence that the defendant was repeatedly beaten by both parents during childhood, that the defendant's father was absent during much his life growing up, and that the defendant once was diagnosed with schizophrenia.[216] The Ninth Circuit noted that the trial court "would have been presented with a different medical picture of Jackson's state of consciousness than the one [it]

212. Strickland v. Washington, 466 U.S. 668, 687 (1984).

213. *Id.* at 687–88.

214. *Id.* at 687.

215. *See, e.g.*, Cooper v. State, 739 So. 2d 82, 84–86 (Fla. 1999) (vacating the death penalty sentence when trial counsel failed to present evidence of severe childhood abuse inflicted by the defendant's father—including head trauma, whipping with a gun, and verbal threats); *see also* Correll v. Ryan, 539 F.3d 938, 952–56 (9th Cir. 2008) (holding that evidence of childhood abuse, substance abuse during childhood, and time spent in state institutions are weighty mitigating circumstances during the penalty phase of trial).

216. Jackson v. Calderon, 211 F.3d 1148, 1162–64 (9th Cir. 2000).

received, which was no picture at all."[217] Likewise, in *Sinisterra v. United States*,[218] the court concluded that a remand was required in order to determine whether counsel was ineffective based on counsel's omission and apparent unawareness of a wide range of factors that could have had a bearing on the defendant's life trajectory: defendant's parents were illiterate and violent, his father abandoned the family, four teenagers gang-raped him and his brother sexually abused him, he never learned to read or write, and he experienced two head injuries.[219] Counsel also ignored the assessment of a neuropsychologist who concluded that the defendant "had a low range of intellectual abilities" and "likely suffered brain damage and was at risk for poor judgment and impulsivity," choosing instead to follow a pre-trial psychiatrist's determination that defendant had "no mental problems."[220]

Of course, childhood mitigation evidence will not always influence the sentencing judge or jury.[221] The degree to which courts consider evidence of childhood trauma to be mitigating varies significantly from case to case. At the same time, the extent to which attorneys can connect childhood trauma evidence to their clients' crimes appears to affect the likelihood that courts may find both prongs of *Strickland* to be satisfied. While childhood trauma mitigation evidence can provide a compelling narrative which could sway a sentencing judge or jury, trial counsel can also follow numerous paths that do not meet the *Strickland* standard.[222]

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217. *Id.* at 1164; *see also* Perkins v. Hall, 708 S.E.2d 335, 342–44 (Ga. 2011) (vacating defendant's death sentence because of counsel's failure to present evidence of defendant's rape by a neighbor at age eight as well as physical abuse from defendant's father, including giving defendant bottles of Jack Daniels and marijuana at age thirteen and urinating on him; the court concluded that there was a reasonable probability that the jury would have reached a different outcome in the sentencing phase).

218. 600 F.3d 900 (8th Cir. 2010).

219. *Id.* at 905, 912.

220. *Id.* at 905.

221. A judge or a jury may decide, for example, that aggravating factors far outweigh non-statutory mitigating factors like an abusive childhood. *See* Baker v. State, 71 So. 3d 802, 812, 823 (Fla. 2011) (upholding the trial court's determination that, despite expert testimony that defendant's parents were neglectful and physically abusive towards him and that his mother used drugs and alcohol during pregnancy, such evidence was insufficient to vacate the death penalty sentence); *see also* McLaughlin v. State, 378 S.W.3d 328, 352–53 (Mo. 2012) (holding that there was no basis to think that additional evidence of defendant's troubled and abusive childhood would have made a difference at trial).

222. *See, e.g.*, *In re* Visciotti, 926 P.2d 987, 1001 (Cal. 1996) (noting that, while trial counsel was put on notice of possible family discord, presentation of a "family sympathy" defense was

2. *Strickland* Prong 1 Cases: Performance

As would be expected, the Neuroscience Study generally found that the first prong of *Strickland* is not satisfied if the court determines that the attorney's investigation into the defendant's background is sufficient. For example, in *Fleenor v. Farley*, the court was satisfied that "[t]he trial lawyers interviewed several family members and presented testimony tending to show a troubled childhood in terms of physical abuse."[223] Similarly, in *Commonwealth v. Lesko*, the court held that trial counsel's investigation was reasonable and extensive presentation of social history was sufficient; the court emphasized that the jury was aware of the defendant's childhood trauma due to the testimony of a forensic social worker and found it to be mitigating, but still voted for death.[224]

Courts have determined that the first prong of *Strickland* is not satisfied in cases where the defendant made it difficult for counsel to obtain mitigating information or insisted that certain information not be presented. In *Davis v. Greer,* the court found that although counsel wanted to present testimony of Davis's mental illness starting in childhood and a head injury that resulted in brain damage, after being informed of his options, Davis chose not to have the evidence provided to the jury.[225] The question of whether the defendant made an informed decision appears to be pivotal.

The first prong of *Strickland* is not satisfied when the court holds that counsel made a strategic decision not to present mitigating evidence of childhood trauma. The court in *Edwards v. Ayers* disagreed with Edwards that counsel was ineffective in failing to introduce evidence that Edwards began suffering from mental illness in childhood: "counsel's investigation discover[ed] little that is helpful and much that is harmful" and therefore "reasonably decide[d] to forego presenting evidence of the defendant's background."[226] Similarly, in *Smith v. Workman*, the court held that counsel "was understandably reluctant to . . . open the door to Petitioner's lifetime propensity for fighting," also noting that "the question is not whether [counsel] could have done more, but rather whether [counsel's] decision not to do more

preferable over mitigating evidence); *see also* Turner v. State, 953 So. 2d 1063, 1075 (Miss. 2007) (finding that trial counsel's decision not to present good character evidence, in order to avoid risking cross-examination about bad character proof, was justified).

223. 47 F. Supp. 2d 1021, 1043 (S.D. Ind. 1998).

224. 15 A.3d 345, 381 (Pa. 2011).

225. 13 F.3d 1134, 1139 (7th Cir. 1994).

226. 542 F.3d 759, 772 (9th Cir. 2008).

was objectively reasonable, applying heavy deference to the counsel's judgments."[227]

The first prong of *Strickland* is normally satisfied, however, if counsel failed to investigate the defendant's background or if the investigation was so minimal that any mitigating evidence that was discovered and presented is inadequate compared to what a reasonable investigation would have revealed.[228] In *Morales v. Mitchell*, the court agreed with Morales that evidence of childhood trauma, which was not presented by counsel, was "significant and not cumulative."[229] This evidence included alcohol consumption starting at an early age, a "mentally retarded" brother, the suicide of his sister, abuse by his brother, lack of supervision by his parents, and pressure from his community to drink alcohol.[230] According to the court in *Hamblin v. Mitchell,* the fact that "counsel does not know what an investigation will reveal is no reason not to conduct the investigation."[231] Thus, the court held that "[c]ounsel was obligated

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227. 550 F.3d 1258, 1271 (10th Cir. 2008). In *Miller v. State,* Miller argued that trial counsel did not present his psychological history which incorporated information about child abuse. This abuse included "Miller witnessing his cousins raping his sisters and his father beating him for reporting what he had witnessed, as well as his emotional deprivation from his father's alcoholism and his mother's withdrawal." 926 So. 2d 1243, 1251 (Fla. 2006). The court found counsel's decisions to be reasonable. *Id.* In articulating its decision, the court stated:

> Trial counsel testified that he chose not to present certain mental health records because he believed they contained detrimental information. . . . Moreover, the records contain a report that tends to refute Miller's claim that he was remorseful after his first murder, and they indicate that Miller's recounting of his childhood and possible sexual abuse was inconsistent. Trial counsel was concerned that the introduction of these records would have opened the door to damaging cross-examination and possible rebuttal witnesses. Finally, trial counsel was confident that by presenting family members, he was able to present mitigating evidence regarding Miller's dysfunctional family, including physical abuse, and also to present testimony regarding the deaths of close family members.

Id.; *see also* Montez v. Czerniak, 239 P.3d 1023, 1032–33 (Or. Ct. App. 2010) (finding that defense counsel's decision not to pursue evidence of sexual abuse and brain injury was reasonable in light of the fact that defendant failed to disclose a history of sexual abuse and a neurological screening revealed no signs of brain injury).

228. Similarly, in *Laird v. Horn*, Laird argued that potentially mitigating circumstances were not discovered. 159 F. Supp. 2d 58, 109 (E.D. Pa. 2001). These included "his traumatic childhood" and "severe childhood physical and sexual abuse." *Id.* The court agreed with Laird, holding, "[t]here is no evidence that trial counsel conducted any inquiry into petitioner's background and medical history in connection with the penalty phase." *Id.* at 115.

229. 507 F.3d 916, 933 (6th Cir. 2007).

230. *Id.* at 932–33.

231. 354 F.3d 482, 492 (6th Cir. 2003).

to find out the facts, not to guess or assume or suppose some facts may be adverse."[232]

Counsel in *Williams v. Taylor* did not request juvenile and social services records because they mistakenly believed such information was not allowed by state law.[233] The Court held, however, that "[w]hether or not those omissions were sufficiently prejudicial to have affected the outcome of sentencing, they clearly demonstrate that trial counsel did not fulfill their obligation to conduct a thorough investigation of the defendant's background."[234]

3. *Strickland* Prong 2 Cases: Prejudice

If counsel's performance was found to be ineffective, the court then considers whether this deficient performance prejudiced the defendant. If the court does not believe that the introduction of childhood trauma evidence could have resulted in a different outcome, then the defendant has not established prejudice. For example, in *Bible v. Ryan*, the court concluded that any evidence of childhood trauma was "speculative" and held that its confidence in the outcome of the sentencing hearing was not undermined.[235] In *Samayoa v. Ayers*, counsel was found to be likely ineffective for not conducting a proper inquiry into potentially mitigating evidence, including the defendant's

232. *Id.*

233. 529 U.S. 362, 373 (2000).

234. *Id.* at 396. The Court noted that if counsel had conducted an investigation,

> the jury would have learned that Williams' parents had been imprisoned for the criminal neglect of Williams and his siblings, that Williams had been severely and repeatedly beaten by his father, that he had been committed to the custody of the social services bureau for two years during his parents' incarceration (including one stint in an abusive foster home), and then, after his parents were released from prison, had been returned to his parents' custody.

Id. at 395. The first prong of *Strickland* can also be satisfied even if the defendant resisted having certain information presented although this circumstance is typically persuasive only when the defendant was not informed of their options. In *Stafford v. Saffle*, for example, there was evidence "that Stafford had been physically abused as a child, been locked in a closet by his father for days at a time, shot his father in the stomach to stop him from beating his mother, spent time in juvenile facilities, and had a tumor removed from his brain." 34 F.3d 1557, 1563 (10th Cir. 1994). Although Stafford insisted that his childhood evidence be withheld, the court determined that it was the attorney's "responsibility to advise Stafford that the mitigating evidence of his personal background was not inconsistent with his claim that he did not commit the murders." *Id.* Likewise, in *Walker v. State*, the court held that "even if Walker was resistant to defense counsel's efforts, defense counsel's failure to *attempt* to collect background records and testimony from available family members and friends supports the conclusion that counsel's performance was deficient." 88 So. 3d 128, 141 (Fla. 2012).

235. 571 F.3d 860, 872 (9th Cir. 2009).

numerous head injuries and physical, emotional, and sexual abuse in childhood.[236] However, given the brevity of jury deliberations, the court doubted that the mitigation evidence might have convinced a juror to "[strike] a different balance between life and death."[237]

Similarly, in *Sochor v. State*, Sochor argued that counsel was ineffective for failing to investigate and present mitigating background evidence, especially of severe beatings by both parents.[238] While the court determined that counsel's performance was deficient, it still held that "Sochor failed to show a reasonable probability that absent counsel's errors, he would not have been sentenced to death."[239] Furthermore, "even if defense counsel had adequately investigated Sochor's background and prepared for the penalty phase, he would not have been able to present at the penalty phase any evidence significantly different from the evidence actually presented."[240] As the court concluded, "Sochor has not demonstrated that but for counsel's deficient performance the result of the penalty phase would have been different."[241]

The second prong of *Strickland* is also not satisfied when the court states that the aggravating circumstances outweigh any mitigating circumstances, including evidence of childhood trauma.[242] In *People v. Ray,* for example, Ray presented evidence of childhood trauma during the penalty phase of trial.[243] Ray's parents were both alcoholics and fought often.[244] While Ray's father was absent from his life, Ray's mother worked as a prostitute, brought customers into the room where she and her children slept, and had Ray steal money from

236. 649 F. Supp. 2d 1102, 1132–33 (S.D. Cal. 2009).

237. *Id.* at 1135.

238. 883 So. 2d 766, 771 (Fla. 2004).

239. *Id.* at 774.

240. *Id.*

241. *Id.* at 784; *see also* Wiles v. Bagley*,* 561 F.3d 636, 639 (6th Cir. 2009) (finding that the defendant did not show that there was a reasonable probability that, but for his counsel's deficient performance, the result of his mitigation hearing would have been different).

242. *See, e.g.*, *In re* Visciotti, 926 P.2d 987, 1005 (Cal. 1996) (concluding that it was not probable that, in the eyes of the jury, evidence of Visciotti's troubled family background would have outweighed the aggravating evidence presented by the state); *see also* Turner v. State, 953 So. 2d 1063, 1076–77 (Miss. 2007) (finding that the aggravating factors involved, including the brutal and gruesome nature of the crime, outweighed the mitigating evidence of the defendant's dysfunctional childhood and mental illness and warranted a death sentence).

243. 914 P.2d 846, 854–55 (Cal. 1996).

244. *Id.* at 855.

her customers.[245] His mother also physically abused him.[246] A psychiatrist determined that Ray suffered from "fetal alcohol syndrome" and "severe parental deprivation, including likely sexual abuse."[247] Nevertheless, the court affirmed the judgment of the trial court that "any sympathetic inferences that could be drawn from evidence of defendant's troubled childhood, mental defects, and religious conversion were far 'outweighed' by the calculated nature of the capital crimes and by his extensive criminal history."[248]

The second prong of *Strickland* is satisfied, however, if the court feels that the potentially mitigating evidence could have resulted in a different outcome. In *James v. Ryan,* evidence of childhood trauma was presented by James's federal habeas counsel.[249] James's biological father was a drug addict, his stepfather was physically abusive, and his biological parents were neglectful and exposed him to dangerous conditions, including extensive time with a child molester.[250] The court noted that the mitigation evidence presented at sentencing did not scratch the surface of what was available and concluded "that there is a reasonable probability that a sentencing court confronted with the powerful mitigating evidence developed by James's habeas counsel would not have returned a death sentence."[251]

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245. *Id.*

246. *Id.*

247. *Id.* at 856.

248. *Id.* at 875. In *San Martin v. State*, San Martin claimed counsel was ineffective for not conducting a proper investigation into his background. 995 So. 2d 247, 255 (Fla. 2008). San Martin pointed to potentially mitigating evidence that his father was a physically abusive alcoholic. *Id.* at 255–56. The court held that, "[g]iven the abundance of aggravation in this case, we find no prejudice. Even assuming counsel was deficient in failing to present the additional mitigation evidence, our confidence in the outcome is not undermined. The additional mitigating evidence would be insufficient to outweigh the significant aggravation." *Id.* at 259. Similarly, in *Stafford v. Saffle*, although counsel's performance was deficient, the court held that Stafford failed to establish prejudice. 34 F.3d 1557, 1565 (10th Cir. 1994). Finally, in *State v. Henretta,* the court held that, "[i]n mitigation of the . . . aggravating circumstances, Mr. Henretta presented evidence that he was abused and neglected during his childhood [and] that he has brain damage. . . . The evidence supports the jury's finding that the aggravating circumstances outweighed these mitigating circumstances beyond a reasonable doubt." 325 S.W.3d 112, 146 (Tenn. 2010).

249. 679 F.3d 780, 801 (9th Cir. 2012).

250. *Id.* at 810–13.

251. *Id.* at 820; *see also* Libberton v. Ryan*,* 583 F.3d 1147, 1168–69 (9th Cir. 2009); Hamblin v. Mitchell*,* 354 F.3d 482, 490–91 (6th Cir. 2003); Walker v. State, 88 So.3d 128, 140–41 (Fla. 2012); People v. Ruiz*,* 686 N.E.2d 574, 582–83 (Ill. 1997).

C. *Courts' Overall Characterization of Childhood Trauma*

In this particular group of cases, there was not a clear indication that any one type of childhood trauma was more persuasive to a court. However, in cases where the trauma was viewed as isolated in time, the court was less likely to find it a persuasive mitigating factor. For example, in *Miller v. State,* Miller claimed he was abused as a child by his father.[252] The trial court gave "no weight" to the child abuse because Miller's father died when Miller was thirteen, and the Supreme Court of Florida found no error.[253] Similarly, in *Stafford v. Saffle*, the court characterized evidence of childhood trauma as "conclusory and remote."[254] The court noted that "Stafford was 27 years old at the time of this crime, and these childhood events were remote in time by then. . . . Stafford presented no evidence that these events had any continuing effect on his ability to conform his conduct to noncriminal behavior."[255]

VI. WHAT SHOULD ATTORNEYS DO IN CHILDHOOD TRAUMA CASES?

While courts often accept evidence of childhood trauma in mitigation arguments, this outcome does not imply such evidence will successfully mitigate or lessen a defendant's sentence. In fact, in most cases in the Neuroscience Study, the court, jury, or both found that this evidence was outweighed by aggravating factors and affirmed the defendant's sentence.

A. *Drawing Connections*

In general, if childhood trauma evidence is found to be vague, remote, or irrelevant, courts are likely to reject it for the purposes of mitigating a sentence. In *Adanandus v. Johnson*, for example, the defendant argued that his childhood medical records describing head injuries should be included as mitigating evidence.[256] The court, however, was not convinced that the records were relevant, since they did not establish that the defendant's criminal conduct was attributable to the injuries.[257]

In addition, courts often assume defendants have personal responsibility, even if this assumption contradicts psychological and medical knowledge about

252. 926 So. 2d 1243, 1251 (Fla. 2006).
253. *Id.* at 1258.
254. Stafford v. Saffle, 34 F.3d 1557, 1565 (10th Cir. 1994).
255. *Id.*
256. 947 F. Supp. 1021, 1035 (W.D. Tex. 1996).
257. *Id.* at 1052.

the consequences of child abuse.[258] For example, in two cases discussed in another study, *Elledge v. Dugger* and *State v. Steffen*, the courts discounted the long term effects of physical abuse on the defendants when their siblings, who experienced the same abuse, appeared to be unaffected.[259]

That said, defense attorneys should be fulfilling their constitutional duty to thoroughly investigate the defendant's background and family history. Since the U.S. Supreme Court has repeatedly stated that this information is relevant mitigating evidence during capital proceedings, there is no excuse for an attorney to shun it.

Defense attorneys also need to effectively communicate with their clients about the importance of providing such evidence. As mentioned previously, some defendants are wary of presenting evidence about their past out of fear of embarrassment. In these situations, attorneys need to stress that revealing information about the defendant's history may lessen their sentence, a reality that can possibly outweigh a defendant's fears.

Attorneys and judges should seek education regarding the effects of childhood trauma and how such trauma can impact adult behavior and cognition. This knowledge should also be conveyed to juries to allow them to make informed decisions when it comes to convictions and sentencing.

Not only should attorneys investigate and present this evidence, it is vital that they draw connections between childhood trauma and the defendant's offenses and criminal behavior. If juries are made aware of such connections, they will be able to better understand the defendant's actions and decision-making processes.

B. *An Exemplar Case of Drawing Connections*

Blue v. Cockrell exemplifies a circumstance where the attorney did make a connection between the defendant's history of trauma and the offense committed in his presentation of mitigating evidence.[260] Michael Lynn Blue was convicted of the robbery and murder of a cab driver in Texas and was sentenced to death.[261] Blue confessed to hitting the man's head with a claw

258. Crocker, *supra* note 3, at 1182.

259. *Id.* at 1182 n.160 (first citing Elledge v. Dugger, 823 F.2d 1439, 1447 (11th Cir. 1987); and then citing State v. Steffen, 509 N.E.2d 383, 397 (Ohio 1987)).

260. *See* Blue v. Cockrell, 298 F.3d 318, 321 (5th Cir. 2002).

261. *Id.* at 319.

hammer and taking his wallet.[262] His accomplice shot the man in the head twice, and the two then burglarized the man's house.[263]

At trial, Blue's attorney presented evidence of his childhood, including the physical and sexual abuse he endured, his mental disability, and his antisocial personality disorder.[264] On appeal, Blue claimed that the instructions the jury received prevented the jury from fully considering this mitigating evidence.[265] In order to determine the validity of Blue's claim and whether additional instruction was needed, the Court had to decide if the evidence presented was relevant to the offense committed.[266]

The court found that the severity of the mitigating evidence, as well as the fact that Blue's attorney showed a definite nexus between the evidence and the criminal conduct, qualified the evidence as highly relevant.[267] Thus, the court concluded that an additional instruction was needed to allow the jury to fully consider this nexus.[268] Ultimately, the court affirmed the District Court's grant of relief on Blue's federal habeas corpus petition.[269]

This Article has provided other examples in which attorneys successfully connected childhood trauma evidence to the crimes their clients committed. While this Article has also considered in detail the challenges that attorneys face in their attempts to present and connect such evidence, the increasing availability of research on this topic demonstrates the existence of strong and convincing patterns if attorneys decide to avail themselves of childhood trauma evidence and courts decide to accept it.

VII. CONCLUSION

The introduction of childhood trauma evidence is an important part of a defense attorney's representation of a criminal defendant. An attorney's failure to uphold their duty to investigate and present this evidence to a judge or jury could have detrimental effects on the defendant's case and could result in their client receiving a death penalty or prolonged incarceration.

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262. *Id.*
263. *Id.*
264. *Id.* at 319–20.
265. *Id.* at 319.
266. *Id.* at 321.
267. *Id.*
268. *Id.* at 322.
269. *Id.*

Childhood trauma evidence is most compelling when a nexus is shown between the trauma and the criminal behavior. An attorney who understands the long-term effects of childhood trauma will be better equipped to make such connections.

The increasing sophistication of research indicating associations among defendants' childhood trauma and their later cognitive and behavioral problems may not be sufficiently used or recognized in criminal court cases, by either judges or attorneys. While capital cases allow for the introduction of a broad array of mitigating evidence, the strength of some of that evidence may be dampened by the standards for claims of ineffective assistance of counsel, which are highly deferential to attorney discretion. Yet increasingly, attorneys' "strategic decisions" and courts' acceptance of them may reflect more of a willful blind eye to scientific advances than a protection for the decisions that attorneys make in criminal cases each day, wisely or not.