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Spring 2007

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Citation:

Jane Rutherford, Community Accountability for the Effect of Child Abuse on Juvenile Delinquency in the Brave New World of Behavioral Genetics, 56 DePaul L. Rev. 949 (2007) Provided by: Rinn Law Library

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COMMUNITY ACCOUNTABILITY FOR THE EFFECT OF CHILD ABUSE ON JUVENILE DELINQUENCY IN THE BRAVE NEW WORLD OF BEHAVIORAL GENETICS

Jane Rutherford*

INTRODUCTION

The Biblical admonition that the sins of the fathers will be passed on to subsequent generations¹ can be interpreted to mean that parents may set bad examples for their children, who then replicate their behavior. It can also be interpreted to mean that wrongful behavior is passed down through a more direct form of inheritance, such as bloodline. Recent research in behavioral genetics has suggested that a combination of inherited characteristics and exposure to violent examples may contribute to inappropriate aggression.

The impact of this scholarship will depend in large part on how it is interpreted in light of the different theories of juvenile justice. Five of these theories will be discussed below. But regardless of one's theoretical approach, recent findings of behavioral genetics imply an imperative need for society and the courts to shield juveniles from the effects of child abuse and domestic violence, as well as a need to provide appropriate mental health treatment to juvenile offenders.

II. FIVE MODELS OF JUVENILE JUSTICE

At least five different models of juvenile justice exist today: (1) punitive, (2) rehabilitative, (3) assimilative, (4) restorative, and (5) preventive. Although most juvenile courts combine aspects of more than one model, it helps to analyze each approach separately for clarity. The way that courts will respond to emerging issues in behavioral genetics may depend on the philosophy they favor.

A. Punitive Model

The punitive model best describes the current system. This is the established criminal approach for both juveniles and adults, and its

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^{1.} Exodus 20:5; Deuteronomy 5:9.

main goals are punishment and deterrence. It essentially divides juveniles into two groups: good kids and bad kids. Good kids do not get into trouble. Bad kids, on the other hand, simply need to be punished.

1. Spare the Rod, Spoil the Child²

Originally influenced by strong Calvinist doctrine that saw God's grace as immutable,³ the punitive approach seeks to punish sinful behavior: "To beat the devil out of the boy."⁴ Scientifically, the punitive model appears most influenced by social Darwinism and eugenics. Bad boys and girls cannot be helped or changed; they need to be punished severely to deter them from following their evil instincts.

The early influence of both Calvinism and social Darwinism, including their emphasis on inherent defects, leaves the punitive approach susceptible to conscious and unconscious bias. This bias often targets certain groups in the population, which are defined by phenotypic traits such as race, gender, and ethnicity. Furthermore, initial perceptions of who is a "bad kid" are reinforced by a system that emphasizes the continuing nature of deviancy.⁵ Once a child gets into trouble for the first time and is labeled a "delinquent," he is much more likely to be viewed as incorrigible, particularly if he belongs to an already marginalized group. Finally, those who live in "tough" neighborhoods are far more likely to have contact with the police, and a stepped set of legal rules increases the severity of the outcome with each contact. Consequently, African-American and Latino youths are disproportionately arrested, charged, detained, and incarcerated when compared to white adolescents with similar records accused of similar crimes.6

^{2.} See Proverbs 23:13.

^{3.} See, e.g., David P. Leonard, In Defense of the Character Evidence Prohibition: Foundations of the Rule Against Trial by Character, 73 IND. L.J. 1161, 1197–98 (1998).

^{4.} See, e.g., Mary Berkheiser, Capitalizing Adolescence: Juvenile Offenders on Death Row, 59 U. MIAMI L. REV. 135, 159 (2005) (noting that in colonial times "the preferred method of dealing with children's crimes was for their parents to 'beat the devil' out of them").

^{5.} See Barry C. Feld, Race, Politics, and Juvenile Justice: The Warren Court and the Conservative "Backlash," 87 MINN. L. REV. 1447, 1571 (2003) (noting the cumulative decisions made at intake, petition, detention, adjudication, and disposition).

^{6.} See Howard N. Snyder, Juvenile Arrests 2000, JUV. JUST. BULL. (Office of Juvenile Justice & Delinquency Prevention, U.S. Dep't of Justice, Wash., D.C.), Nov. 2002, at 10, available at http:// www.ncjrs.gov/pdffiles1/ojjdp/191729.pdf (noting that in 2000 the arrest rate for black juveniles was nearly four times the rate for white juveniles); see also BARRY C. FELD, BAD KIDS: RACE AND THE TRANSFORMATION OF THE JUVENILE COURT 180, 217, 231, 256, 264 (1999); Barbara Bennett Woodhouse, Youthful Indiscretions: Culture, Class Status and the Passage to Adulthood, 51 DEPAUL L. REV. 743, 757 (2002) ("A number of studies report that minority or lower-class youths receive more severe dispositions than [W]hite youths even after controlling for relevant

The numbers are even more dramatic for those transferred to adult court. Thus, although black juveniles account for only 26% of youths arrested, they are 46% of those waived to adult criminal court.⁷ These disparities cannot be explained by the nature of the offenses committed. For instance, African-American juveniles are forty-eight times more likely to be incarcerated for drug offenses than white juveniles.⁸ For violent crimes, white youths serve the shortest sentences (193 days), blacks serve almost 24% longer (254 days), and undifferentiated Hispanics serve the longest (305 days, or 37% longer than whites).⁹

Behavioral genetics may be misinterpreted to aggravate these racial disparities, especially if the science is read as reinforcing biological determinism. The risk is that those applying the law may either consciously or unconsciously misapply genetic evidence to reinforce a long tradition that seeks to punish those viewed as suspect outsiders.

The punitive model views the children in the justice system as criminals, and accordingly, a punitive government should enforce the law and root out such criminals. Any attempt to explain or mitigate a juvenile's behavior based on the child's developmental limitations or experiences is often belittled with derogatory labels like "abuse excuse"¹⁰ or "coddling."¹¹

The only real issue before a punitive court is culpability. Did the accused child commit the crime and was he morally culpable for it? Once culpability is determined, the punitive model uses legal tools like imprisonment, zero tolerance policies, and waivers to adult court

7. Fox Butterfield, *Racial Disparities Seen as Pervasive in Juvenile Justice*, N.Y. TIMES, Apr. 26, 2000, at A1.

9. Id.

legal variables." (alteration in original) (internal quotation marks omitted) (quoting Barry C. Feld, *The Juvenile Court Meets the Principle of Offense: Punishment, Treatment, and the Difference It Makes*, 68 B.U. L. REV. 821, 884 (1988))); Marcy Rasmussen Podkopacz & Barry C. Feld, *The End of the Line: An Empirical Study of Judicial Waiver*, 86 J. CRIM. L. & CRIMINOLOGY 449, 464 (1996) ("Although about one-third (34%) of the arrests for violent crimes involved white juveniles, less than one-fifth (19%) of the violent offenders against whom prosecutors filed reference motions were white.").

^{8.} Id.

^{10.} See, e.g., ALAN M. DERSHOWITZ, THE ABUSE EXCUSE: AND OTHER COP-OUTS, SOB STORIES, AND EVASIONS OF RESPONSIBILITY 45–47 (1994); JAMES Q. WILSON, MORAL JUDGMENT: DOES THE ABUSE EXCUSE THREATEN OUR LEGAL SYSTEM? (1997); Kenneth B. Noble, *Menendez Brothers Convicted*, N.Y. TIMES, Mar. 24, 1996, § 4, at 2 ("A California jury . . . convicted Lyle and Erik Menendez of murdering their parents, rejecting their claim that years of sexual and emotional abuse, not greed, had compelled them to commit the crime.").

^{11.} See, e.g., Elsa Brenner, The New Debate on Penalties for Juvenile Offenders, N.Y. TIMES, Feb. 18, 1996, § 13 (Westchester Wkly.), at 1 (quoting Westchester County District Attorney Jeanine Pirro, "For too long, we have been coddling young offenders.... We have been reluctant to treat them as adults.").

to deter crime. For example, a court recently followed the punitive model when it sentenced a twelve-year-old boy to thirty years in prison for killing his grandparents, despite well-documented evidence of preexisting mental illness.¹² The child was held accountable for his behavior regardless of its cause.

2. Culpability and Brain Development

The punitive approach, particularly its focus on culpability, is coming under attack as a result of new neuroscientific findings that demonstrate that adolescent brains are significantly undeveloped in comparison to adult brains.¹³ Specifically, these findings indicate that the prefrontal lobe does not fully develop until at least the mid-twenties, which is significant because the prefrontal lobe is responsible for controlling impulses, regulating emotions generated by the amygdala deep in the brain, and processing consequences.¹⁴ In essence, this part of the brain acts like the brakes on a car, slowing down emotional processes in order to assess the wisdom of a particular action. Because the prefrontal lobe develops gradually, it does not simply turn on or off at a particular age.

To the extent that the prefrontal lobe operates like the brakes on a car, most adolescents drive cars with very thin brake shoes. The effectiveness of such weak brakes depends on how fast the car is going and how suddenly the car needs to stop. Because of the decreased ability to slow emotional processes, a teen's ability to resist impulses is highly dependent on the circumstances. When teens feel threatened or are among their peers, the car goes fast: their emotions soar, and they are less capable of resisting their impulses.

Such impulsiveness may be aggravated by a child's previous history. In order to be adaptable to changed circumstances, the brain is plastic, changing both its biochemistry and even its anatomy in response to the environment.¹⁵ The more often an individual is exposed to stressful environments, including "bad neighborhoods, bad homes, and bad

15. Debra Niehoff, The Biology of Violence: How Understanding the Brain, Behavior, and Environment Can Break the Vicious Circle of Aggression 182–87 (1999).

^{12.} See Bruce Smith, Jurors Reject Zoloft Defense in Teen's Murder Case, CINCINNATI POST, Feb. 16, 2005, at A2. The defense was claiming Zoloft caused the aggression, but it was uncontested that the child was seriously depressed. There is strong evidence of a correlation between depression and aggression in youth. See Stephen C. Messer & Alan M. Gross, Childhood Depression and Aggression: A Covariance Structure Analysis, 32 BEHAV. RES. & THERAPY 663, 663 (1994).

^{13.} See, e.g., B.J. Casey et al., *Imaging the Developing Brain: What Have We Learned About Cognitive Development*?, 9 TRENDS COGNITIVE SCI. 104 (2005) (reviewing literature on changes in the brain from childhood to late adolescence).

^{14.} See infra note 59.

relationships," the more quickly the brain responds to such situations.¹⁶ This information helps explain the inconsistencies in teen behavior. The immature prefrontal lobe does not adequately modulate the strong emotions stirred up by adolescent hormones, so most teens are subject to wide mood swings. Since the brakes on the car do not work well, it is always going either too quickly or too slowly, and the adolescent is unable to adequately control his moods and impulses. If teens have had relatively little experience with violence, they are less likely to read social cues as threatening. As a result, they put less stress on their prefrontal lobe and are more likely to be able to resist inappropriate impulses. But teens exposed to violence or subject to strong peer pressure experience more stress. This stress places additional strain on the immature prefrontal lobe, making violent impulses difficult, if not impossible, to resist.

These scientific findings about the anatomical and biochemical differences in adolescent brains have had a large impact on the law and its focus on culpability. Recently, the Supreme Court cited research in this area when it invalidated the juvenile death penalty in Roper v. Simmons.¹⁷ The Court noted that teens' diminished impulse control and limited ability to process the consequences of their actions render them less culpable.¹⁸ The Court held that teens are less culpable for three basic reasons: (1) they are immature and, consequently, less in control of their impulses; (2) they are more powerfully influenced by others, especially peers;¹⁹ and (3) they have not fully developed their character yet, so they are likely to change considerably.²⁰ The Court also cited this research as evidence that there was greater hope for treatment and growth that would transform juvenile offenders into lawful citizens in adulthood.²¹ Consequently, the Court held that the death penalty amounts to cruel and unusual punishment for acts committed while a juvenile.22

The Court's opinion in *Roper* was foreshadowed by *Atkins v. Virginia*, which invalidated the death penalty for mentally retarded adults.²³ In *Atkins*, as in *Roper*, the Court found that it was cruel and

- 22. Id. at 568.
- 23. 536 U.S. 304, 321 (2002).

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^{16.} Id. at 185-86.

^{17. 543} U.S. 551, 568 (2005).

^{18.} *Id.* at 570 ("The susceptibility of juveniles to immature and irresponsible behavior means 'their irresponsible conduct is not as morally reprehensible as that of an adult.'" (quoting Thompson v. Oklahoma, 487 U.S. 815, 835 (1988))).

^{19.} Id. at 569.

^{20.} Id. at 570.

^{21.} Id.

unusual to punish an individual for behavior he could not understand or control.²⁴ Read together, *Atkins* and *Roper* may undermine a punitive approach to juveniles and genetically disadvantaged individuals.

The Court in *Roper* reinforced this notion when it referred to the chance for juveniles to reform.²⁵ One of the questions that emerges from *Roper* is whether juveniles now have a constitutional right to treatment if they are detained, since it might be cruel and unusual to deny them the opportunity to escape future punishment. Even if there is no specific right for a minor to receive treatment, a broad reading of *Roper* might constitutionally require states to adopt a rehabilitative model of juvenile justice.

B. Rehabilitative Model

In contrast to the punitive approach, the rehabilitative model focuses on treatment rather than punishment.²⁶ An outgrowth of the Progressive Movement at the turn of the twentieth century, the rehabilitative model finds the source of juvenile crime in the environment rather than within the individual child. This model focuses on bad parenting and toxic culture as the causes of deviance.

1. "There's No Such Thing as a Bad Boy"²⁷

Strongly influenced by psychoanalysis, behavioral psychology, and child development theories, the rehabilitative model seeks to improve disadvantaged children by creating a better environment for them. The basic premise of this approach is that given the "right" upbringing, education, and treatment, any child can become a productive citizen. Implicit in this theory, however, is the notion that certain culturally defined groups have failed their children. Generally, re-

^{24.} See id. at 317–20 (discussing why mental retardation renders defendants less culpable for their behavior, and how that undermines the retribution justification for the death penalty).

^{25.} See Roper, 543 U.S. at 570 (noting that "a greater possibility exists that a minor's character deficiencies will be reformed").

^{26.} For further accounts of the rehabilitative model, see FELD, supra note 6, at 60-63 and Amy M. Thorson, Note, From Parens Patriae to Crime Control: A Comparison of the History and Effectiveness of the Juvenile Justice Systems in the United States and Canada, 16 ARIZ. J. INT'L & COMP. L. 845, 845 & n.1, 846-47 (1999).

^{27.} Boys Town (Metro-Goldwyn-Mayer (MGM) 1938) (spoken by Father Flanagan).

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formers have focused on outsiders—including immigrants,²⁸ people of color,²⁹ and the poor³⁰—as bad parents.

Under the rehabilitative theory, the government should exercise its *parens patriae* powers to act as a beneficent parent. In essence, the role of the rehabilitative juvenile court is to oversee the therapy necessary to repair the bad parenting that led the child to err. The legal tools available to accomplish this goal include various treatment therapies, foster placement, and the use of juvenile as opposed to adult courts. At one time, nearly all the states embraced the rehabilitative model and reflected it in their juvenile court acts.³¹ Many continue to include rehabilitative goals in their current statutes.³² For example, a Florida newspaper recently reported that a juvenile court would probably send a fourteen-year-old boy to a residential treatment facility for killing his friend during an argument following a game they had been playing.³³ If the court had applied the adult punitive standard rather than focused on rehabilitative goals, the boy would have been incarcerated for thirty years to life.³⁴

29. See, e.g., Barry C. Feld, The Transformation of the Juvenile Court—Part II: Race and the "Crack Down" on Youth Crime, 84 MINN. L. REV. 327, 340–50 (1999) (describing the changes that took place in the 1960s in response to African-American migration into the cities and white migration out to the suburbs).

30. See, e.g., BARRY C. FELD, CASES AND MATERIALS ON JUVENILE JUSTICE ADMINISTRA-TION 2 (2000) (noting that juvenile courts were described as rehabilitative although there is some question "[w]hether their movement was in fact a humanitarian one to save poor and immigrant children or intended to extend social control over them").

31. See, e.g., FRANCIS BARRY MCCARTHY ET AL., JUVENILE LAW AND ITS PROCESSES: CASES AND MATERIALS 59–61 (3d ed. 2003) ("The Illinois Act served as a model for legislation in other states. By 1928, all but two states, Maine and Wyoming, had adopted juvenile court systems.").

32. See, e.g., 705 ILL. COMP. STAT. ANN. 405/5-101(1)(c) (West 2004) ("To provide an individualized assessment of each alleged and adjudicated delinquent juvenile, in order to rehabilitate and to prevent further delinquent behavior through the development of competency in the juvenile offender.").

33. See Missy Stoddard, 14-Year-Old Guilty in Shooting Death: Boy's Plea Deal Likely Will Result in Sentence to Treatment Center, SUN-SENTINEL (Fort Lauderdale, Fla.), July 24, 2004, at B3 ("Since he was adjudicated as a juvenile, the teen likely will be sentenced to a residential treatment facility.").

34. Id.

^{28.} See, e.g., FELD, supra note 6, at 63-64 ("[T]he juvenile court reformers were . . . sending numerous missionaries from the dominant culture to the lower classes to acculturate immigrants, to teach mothers household management, and to supervise the recipients of charity." (internal quotation marks omitted) (quoting ELLEN RYERSON, THE BEST-LAID PLANS: AMERICA'S JUVE-NILE COURT EXPERIMENT 47 (1978))); Katherine R. Kruse, Lawyers Should Be Lawyers, but What Does That Mean?: A Response to Aiken & Wizner and Smith, 14 WASH. U. J.L. & POL'Y 49, 89 (2004) (noting that "the history of the juvenile court provides support for the argument that underlying the benevolence of the juvenile court reform was a desire for social control of the 'deviant' immigrant classes by members of the social elite").

2. Amenability to Treatment

Recall that the crucial issue for the punitive model is whether minors with immature brains are fully culpable for their crimes. In contrast, the crucial issue for courts applying the rehabilitative model is whether juvenile offenders are amenable to treatment.³⁵

The Court in *Roper* noted that juveniles are more likely than adults to be rehabilitated.³⁶ In fact, most juveniles grow out of their delinquent ways without any intervention at all.³⁷ As Professor Franklin Zimring expresses it, "[T]he cure for youth crime is growing up."³⁸ Although most adolescent males have committed one or more crimes,³⁹ most of them will mature into responsible, law-abiding adults. This pattern is not surprising given the plasticity of the brain and the normal development of the prefrontal lobe that occurs in the early- to mid-twenties.

Nevertheless, about 5% of juvenile offenders will continue on their path of crime and become life-long criminals.⁴⁰ Some of these juveniles have more serious problems than a simple immaturity of the prefrontal lobe. They may suffer from depression or anxiety, or they may have conduct disorders. They may have been victims of physical or sexual abuse, or they may have been traumatized by other violence

36. Roper v. Simmons, 543 U.S. 551, 570 (2005) ("[A] greater probability exists that a minor's character deficiencies will be reformed.").

37. See, e.g., Mark A. Small, Juvenile Law and Genetics, in GENETICS AND CRIMINALITY: THE POTENTIAL MISUSE OF SCIENTIFIC INFORMATION IN COURT 199, 205 (Jeffrey R. Botkin et al. eds., 1999) ("One of the most well-known findings in criminal justice is the age-crime curve; the consistent finding that the age of offense typically peaks in the late teenage years and significantly declines as age advances."); Franklin E. Zimring, *Penal Proportionality for the Young Offender: Notes on Immaturity, Capacity, and Diminished Responsibility, in YOUTH ON TRIAL:* A DEVELOPMENTAL PERSPECTIVE ON JUVENILE JUSTICE 271, 283 (Thomas Grisso & Robert G. Schwartz eds., 2000) ("The theory is that the high prevalence of offense behavior in the teen years and the rather high rates of incidence for those who offend are transitory phenomena associated with a transitional status and life period." (citing Delbert S. Elliott, Serious Violent Offenders: Onset, Developmental Course, and Termination—The American Society of Criminology 1993 Presidential Address, 32 CRIMINOLOGY 1 (1994))).

38. Zimring, supra note 37, at 284.

39. See Terrie E. Moffitt, Adolescence-Limited and Life-Course-Persistent Antisocial Behavior: A Developmental Taxonomy, 100 PSYCHOL. REV. 674, 687 (1993) ("[N]ear adolescence, a few boys join the [lifelong criminals], then a few more, until a critical mass is reached when almost all adolescents are involved in some delinquency with age peers."); *id.* at 689 ("Data from epidemiological studies using the self-report method suggest that almost all adolescents do commit some illegal acts.").

40. William Halikias, Forensic Evaluations of Adolescents: Psychosocial and Clinical Considerations, 35 Adolescence 467, 471–72 (2000).

^{35.} See generally Christopher Slobogin, Treating Kids Right: Deconstructing and Reconstructing the Amenability to Treatment Concept, 10 J. CONTEMP. LEGAL ISSUES 299 (1999) (arguing that a juvenile should be transferred to adult court only when it is impossible to treat him in the juvenile system).

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in their lives. Some may have genetic variants that result in low levels of the brain enzyme monoamine oxase A (MAOA), a deficiency that may incline juveniles toward violent behavior.⁴¹ Individuals subject to these conditions may need treatment to counteract them and help stave off a life of crime.

Therefore, for courts that follow the rehabilitative model, a key legal issue in determining whether juvenile court is the appropriate venue for a minor is whether that minor is amenable to treatment. Scholars such as Christopher Slobogin argue that this should be the only consideration in deciding whether the juvenile court should retain jurisdiction or transfer the juvenile to adult court.⁴² As a result, they are very critical of statutes that automatically transfer juveniles to adult court based on age and the severity of the offense.⁴³ These scholars believe that the nature of the crime committed has nothing to do with whether treatment may be successful.

Amenability to treatment, however, is vague and difficult to establish for at least two reasons. First, the complex interaction of genetics, environment, and character makes it very difficult to predict whether treatment will work. Just as two individuals with similar cancers may respond differently to the same chemotherapy, two juveniles diagnosed with conduct disorder may respond differently to identical treatments.

Second, the success of a particular treatment will almost always depend on its quality; as with most things, the government gets what it pays for. Budgets for therapy and rehabilitation are often quite limited. Some juveniles could be treated effectively, but the necessary treatment is not adequately funded. Several courts have interpreted "amenability to treatment" to mean amenability to treatment *with existing resources.*⁴⁴ Consequently, juveniles from affluent families are more likely to be found amenable to treatment. There are two reasons for this. First, affluent families are more likely to be able to pay for testing and experts to establish that their child is treatable.⁴⁵ Sec-

45. Sacha M. Coupet, Comment, What to Do with the Sheep in Wolf's Clothing: The Role of Rhetoric and Reality About Youth Offenders in the Constructive Dismantling of the Juvenile Justice System, 148 U. PA. L. REV. 1303, 1319 n.85 (2000) ("[C]lients who do not have resources to

^{41.} See infra note 102 and accompanying text.

^{42.} See generally Slobogin, supra note 35.

^{43.} See, e.g., id.; Lisa M. Flesch, Note, Juvenile Crime and Why Waiver Is Not the Answer, 42 FAM. CT. REV. 583 (2004).

^{44.} See, e.g., State ex rel. Juvenile Dep't v. Reed, 863 P.2d 1291, 1294 (Or. Ct. App. 1993) (evaluating a request for transfer to adult court in the context of \$419.533(1)(d)(A) of the Oregon Revised Statutes, which was repealed in 1993, and included the factor of amenability of the child to treatment and rehabilitation); Slobogin, *supra* note 35, at 310–11 (noting that most states require that treatment be available to the juvenile court).

ond, these families are also more likely to be able to pay for the treatment themselves if there is no public program available.⁴⁶

Even if resources for evaluation and treatment are made available, diagnosing misbehaving adolescents can be tricky. Because normal teens are quite volatile and subject to large mood swings, there is always a risk of mislabeling normal adolescent behavior as a symptom of a mental disorder. Moreover, the standards for the various categories are somewhat broad, so separate therapists may diagnose different conditions in the same teen. Furthermore, there is a significant risk of either conscious or unconscious bias. For example, some scholars have argued that minorities are more likely to be placed incorrectly into special education classes.⁴⁷ Similarly, delinquent girls are often treated much more harshly than boys because they confound cultural gender expectations.⁴⁸ For example, runaway girls are more frequently arrested than runaway boys.⁴⁹

Girls are also more likely to be fleeing physical or sexual abuse.⁵⁰ Overall, 61% of the girls in the juvenile justice system are victims of physical abuse, and 54% of them are victims of sexual abuse.⁵¹ These girls understandably suffer from a variety of psychological problems, including anorexia, depression, anxiety, posttraumatic stress disorder (PTSD), aggression, disassociative behaviors, self-mutilation, suicide

47. See, e.g., Perry A Zirkel, Does Brown v. Board of Education Play a Prominent Role in Special Education Law?, 34 J.L. & EDUC. 255, 258–59 (2005) (referring to "the long-standing problem of the disproportionate representation of minority children in special education").

48. See, e.g., AM. BAR ASS'N & NAT'L BAR ASS'N, JUSTICE BY GENDER: THE LACK OF AP-PROPRIATE PREVENTION, DIVERSION AND TREATMENT ALTERNATIVES FOR GIRLS IN THE JUSTICE SYSTEM 15, 17, 19 (2001), available at http://www.abanet.org/crimjust/juvjus/justiceby genderweb.pdf (documenting that girls are disproportionately charged and detained for status offenses and more likely to be returned to detention for technical probation violations); Alecia Humphrey, The Criminalization of Survival Attempts: Locking Up Female Runaways and Other Status Offenders, 15 HASTINGS WOMEN'S L.J. 165, 173–74 (2004) (referring to courts' "sexism and paternalistic biases... around girls' sexuality and perceived unfeminine behavior" and citing studies that show girls receive harsher sanctions than boys).

49. See Humphrey, supra note 48, at 175 ("[W]hile girls and boys actually run away in equal numbers, girls are arrested more often.").

50. Id. at 177.

51. Id. at 176.

pay for outside evaluators may have difficulty proving amenability to treatment to a judge during a transfer hearing.").

^{46.} See, e.g., Woodhouse, supra note 6, at 757 ("At the 'soft end,' kids with drug, truancy, and authority problems are diverted out of the juvenile justice system into the 'private sector system of mental health and chemical dependency treatment and confinement.' . . . Middle-class kids whose families have the resources to retain lawyers and kids with roots in affluent communities are more likely to land at the 'soft end' than their lower-class counterparts." (quoting Barry C. Feld, *The Honest Politician's Guide to Juvenile Justice in the Twenty-First Century*, 564 ANNALS AM. ACAD. POL. & Soc. Sci. 10, 15 (1999))).

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attempts, and substance abuse.⁵² Their history of repeatedly running away is likely to be viewed as evidence that they are not amenable to treatment with diversion, so they are incarcerated in disproportionate numbers for status offenses.⁵³

3. The Case for Treatment

Despite the difficulties of evaluating amenability to treatment, a strong case can be made for the rehabilitative model's emphasis on the treatment of juvenile offenders. Treating minors is likely to be effective because their behavior is easier to change for two primary reasons. First, young people have immature brains that continue to develop as they grow up. Consequently, appropriate therapy can literally help shape the brain as it matures to produce better behavior. Second, because the juvenile brain is plastic and constantly changes in response to the environment, a well-structured environment coupled with other necessary therapies can dramatically improve current behavioral tendencies.⁵⁴

A good example of how biological events and the environment interact to shape behavior and the brain is a baby with colic. The event starts with an infant experiencing stomach pain that leads to a predictable behavior—crying. Crying, in turn, causes certain brain changes. Specifically, there is a drop in serotonin that affects impact receptors in the brain. These receptors then turn genes on and off. The crying behavior also elicits a response from parents, perhaps frustration or spanking. The parental response triggers the child's perception of the environment. If this perception includes pain, then the pain provokes an emotional response like fear or anger, which in turn triggers a new biological event: the increase in cortisol and norepinephrine, the stress hormones associated with the fight or flight response.

A different parental response—say, cuddling—might spark an entirely different chain of biochemical and emotional responses, perhaps resulting in the release of more serotonin and dopamine, a biological event that might mitigate the pain. From either response, the infant learns what to expect from the environment and creates strategies for dealing with the world.

^{52.} Id. at 177.

^{53.} Cf. id. at 169–75 (describing judges' desire to detain female status offenders, partly in response to concerns that they will run away from unlocked facilities, and noting the legal techniques used for ordering the detention).

^{54.} See NIEHOFF, supra note 15, at 262 ("Strategies to reduce violence have this miraculous plasticity at their disposal.").

Although biology, genetics, and environment all interact to affect behavior, it is possible that biological interventions can mitigate aggression. For example, some researchers suggest that certain medical treatments might help juveniles who produce excess levels of the stress hormone norepinephrine.⁵⁵ Biological interventions can mitigate aggression by targeting three different mechanisms: biochemistry, genes, and brain anatomy.

Medications that alter brain biochemistry have shown some promise, but there are difficulties in medicating adolescents. Because teen brains are not fully mature, they do not respond like adult brains, and some medications may be more dangerous for minors than for adults. For example, some antidepressants have been found to make teens more prone to suicide.⁵⁶ Because few drugs are tested on children, it is often difficult to find safe medications. Furthermore, if courts were to force juveniles to take such medications, serious issues of medical ethics would arise. Generally, patients (or their parents) have the right to weigh the risks and benefits of particular medications. Vesting the government with this choice transforms medicine, which is normally a service provided to an individual, into a possible tool for government control.

Mandated medical treatment also poses the risk that politics will dominate medicine. Medical decisions may be made inappropriately for political purposes, like "get-tough-on-crime" policies.⁵⁷ For example, the California legislature passed a bill in 1996 authorizing child molesters to be chemically castrated even though such medication was not shown to prevent molestation and caused serious side effects.⁵⁸

57. Lori B. Andrews, Predicting and Punishing Antisocial Acts: How the Criminal Justice System Might Use Behavioral Genetics, in BEHAVIORAL GENETICS: THE CLASH OF CULTURE AND BIOLOGY 116, 133 (Ronald A. Carson & Mark A. Rothstein eds., 1999).

58. See CAL. PENAL CODE § 645 (West 1999 & Supp. 2006); Andrews, supra note 56, at 133 (listing effects "such as causing the user to grow breasts, gain weight, and suffer from osteo-

^{55.} See id. at 127 (noting that propranolol, an antihypertension drug, can diminish aggression).

^{56.} See, e.g., U.S. Food & Drug Admin., FDA Public Health Advisory: Suicidality in Children and Adolescents Being Treated with Antidepressant Medications (Oct. 15, 2004), http://www. fda.gov/cder/drug/antidepressants/SSRIPHA200410.htm (explaining that manufacturers had been required to add a warning about an increased risk of suicide in teens using certain antidepressants); U.S. Food & Drug Admin., Medication Guide About Using Antidepressants in Children and Teenagers, http://www.fda.gov/medwatch/SAFETY/2005/Feb_PI/Antidepressant MedGuide.pdf (last visited Apr. 17, 2007); see also Andrea Cipriani et al., Suicide, Depression, and Antidepressants, 330 BRIT. MED. J. 373, 373-74 (2005) ("[I]n children and adolescents the balance between benefits and harms seems to be negative, with little evidence of efficacy and increasing evidence of an association between exposure to [serotonin reuptake inhibitors] and other antidepressant drugs and emergence of suicidal thought and behaviours."); Marianne Szegedy-Maszak, Medication and Melancholy, U.S. News & WORLD REP., May 16, 2005, at 50 (noting that the FDA issued a black box warning that antidepressants could increase the risk of suicide in children and teens).

This incident helps demonstrate how public fear of violence can be politically exploited to the grave detriment of individuals.

Methods of attacking genetic problems are even more controversial. Eugenic approaches such as abortion and sterilization raise serious constitutional issues about reproductive privacy, as well as grave moral issues like those that arose during the Holocaust. Genetic interventions designed to reach present generations also raise ominous ethical and medical issues. For example, gene splicing, a technique that has been used with animals, may have unknown side effects because many genes affect more than one trait and traits often arise from combinations of genes.

Anatomical approaches are also dangerous. Surgery on various brain regions has not been very successful. For example, excising the amygdala will moderate or even eliminate aggression. Unfortunately, it also causes "psychic blindness."⁵⁹ Those who suffer from this condition are unable to feel much emotion or recognize it in others.⁶⁰ It is impossible for them to establish and maintain any relationships, and therefore it is difficult for them to interact with others or hold a job.

Unlike biological interventions and other similar medical treatments, various forms of psychological therapy pose relatively low risks and have been demonstrated to be effective.⁶¹ Behavioral therapy works particularly well with youth.⁶² Unfortunately, therapies often produce better behavior in structured environments like schools but

porosis"). But see NIEHOFF, supra note 15, at 165 (citing Fred Berlin's study, which suggested that Depo-Provera successfully treated 90% of paraphilia-motivated sex offenders).

^{59.} See, e.g., RHAWN JOSEPH, NEUROPSYCHIATRY, NEUROPSYCHOLOGY, AND CLINICAL NEUROSCIENCE: EMOTION, EVOLUTION, COGNITION, LANGUAGE, MEMORY, BRAIN DAMAGE, AND ABNORMAL BEHAVIOR 184 (2d ed. 1996) ("Terzian and Ore (1955) describe a young man who, following bilateral removal of the amygdala, subsequently demonstrated an inability to recognize anyone, including close friends, relatives and his mother. He ceased to respond in an emotional manner to his environment and seemed unable to recognize feelings expressed by others. He also demonstrated many features of the Klüver-Bucy syndrome (perserverative oral 'exploratory' behavior and psychic blindness), as well as an insatiable appetite."); *id.* at 193 ("When [the amygdala] is damaged or functionally compromised, social-emotional intellectual functioning becomes grossly disturbed."); NIEHOFF, *supra* note 15, at 96–98 (describing experiments with rhesus monkeys, and noting a similar result in a human patient). Currently the amygdala, or parts of it, is excised in order to control extreme cases of epilepsy. *See* University of Michigan Health System, Department of Neurosurgery Homepage, Epilepsy Program, http:// www2.med.umich.edu/departments/epilepsy// (last visited Apr. 17, 2007).

^{60.} JOSEPH, supra note 59, at 184.

^{61.} See VERNON L. QUINSEY ET AL., VIOLENT OFFENDERS: APPRAISING AND MANAGING RISK 69 (1998) (noting that behavioral therapy "show[s] at least modest positive effect[s]"); Slobogin, *supra* note 35, at 328–30.

^{62.} QUINSEY ET AL., supra note 61, at 70.

fail to change aggressive behavior at home or on the streets.⁶³ Other times, particular therapies are actually counterproductive.⁶⁴ Never-theless, meta-analyses demonstrate that psychological interventions generally do help.⁶⁵

In order for psychological treatment to be successful, real behavioral therapy must be available. Unfortunately, many juvenile facilities are not equipped to provide such services. For example, the Juvenile Detention Center in Chicago, which houses approximately four hundred minors, has only two full-time psychologists. No matter how hard they work, two psychologists cannot possibly test all these children, let alone provide them with meaningful behavioral therapy.

In short, the administration of a juvenile justice system based on a rehabilitative model presents a viable alternative to a strict punitive model. There are significant difficulties, however, and in many ways the rehabilitative model might appear to have failed altogether. Unfortunately, state and federal governments have never invested enough resources to give rehabilitation a fair chance. Without sufficient resources, overcrowded and understaffed detention facilities often become little more than warehouses for delinquents, so the possible advantages of a rehabilitative model are never allowed to come to fruition.

C. Restorative Justice Model: Forgive and Forget

The models of justice discussed so far have focused attention on the individual delinquent. Some new theories, however, have shifted that attention. A few years ago, a new theory emerged: restorative justice.⁶⁶ Unlike either the punitive or rehabilitative model, restorative justice focuses not on correcting the deviant child, but on making the community whole. Restitution to the community is at the core of the restorative justice concept. Supported by the U.S. Department of Jus-

65. Id. at 69.

^{63.} Craig F. Ferris, *Summary: Cultivating Violence*, 794 ANNALS N.Y. ACAD. SCI. 318, 321 (1996) (citing a program for kindergarteners that significantly reduced "hyperactive, impulsive, and aggressive behavior" at school, but not at home).

^{64.} QUINSEY ET AL., *supra* note 61, at 70–71 (citing a study by J. McCord in which boys who received "a combination of vocational counseling; medical or psychiatric attention; a sojourn in summer camps; and referrals to the Boy Scouts, YMCA, and other community programs" were more likely than a control group to report problem drinking and stress-related diseases, and to die younger, possibly due to "a development of harmful dependency on counselors").

^{66.} This approach is also sometimes known as "balanced and restorative justice." For more discussion of restorative justice, see Gordon Bazemore, *The Fork in the Road to Juvenile Court Reform*, 564 ANNALS AM. ACAD. POL. & SOC. SCI. 81 (1999) and Lode Walgrave, *Restoration in Youth Justice, in 31* YOUTH CRIME AND YOUTH JUSTICE: COMPARATIVE AND CROSS-NATIONAL PERSPECTIVES 543 (Michael Tonry & Anthony N. Doob eds., 2004).

tice, a number of states modified their juvenile court acts to reflect this approach.⁶⁷

Under a restorative justice approach, the goal is to make amends so the child can rejoin the community. To accomplish this goal, it is sometimes necessary to help the child become more competent and capable of peacefully coexisting in a society. Restorative justice, however, specifically rejects rehabilitation. In this model, rehabilitation is seen as stigmatizing; it separates the child from his community.⁶⁸

Because the approach is not child-centered, it does not specifically suggest a likely cause for juvenile crime. Its emphasis on socialization, however, seems to imply that the problem merely reflects the immaturity and impulsiveness of juveniles. Theoretically, once juveniles are made to understand how their behavior affects others, they will learn to control themselves in order to fit into the community. The classic example of the restorative justice approach is the child who steals a candy bar from the grocery store and is forced to return it, apologize, and work at the store sweeping up until he has paid for it.

A notion of redemption is inherent in this approach; confession heals sinners and forgiveness heals victims. Hence, the approach embraces juveniles who readily admit guilt and seem willing to "repay their debt" to the victim in one form or another. No attempt is made to understand what motivated the behavior, or to identify any scien-

^{67.} See, e.g., COLO. REV. STAT. ANN. § 19-2-309.5(1) (2005) (citing "adhering to the principals [sic] of restorative justice" as a goal of Colorado's "community accountability program"); FLA. STAT. ANN. § 985.303(2)(a) (West 2001) (authorizing the creation of Neighborhood Restorative Justice Centers to impose sanctions on juvenile offenders, including restitution or work to be done for the victim or the community as a whole); 705 ILL. COMP. STAT. ANN. 405/5-101(2)(j) (West 1999) (declaring that "juvenile justice policies . . . shall be designed to . . . (j) Hold minors accountable for their unlawful behavior and not allow minors to think that their delinquent acts have no consequences for themselves and others"); IND. CONST. art. 1, § 18 ("The penal code shall be founded on the principles of reformation, and not of vindictive justice."); KAN. STAT. ANN. § 75-7038 (1997) (authorizing grants by the commissioner of juvenile justice for purposes including "restitution programs" and "balanced and restorative justice programs"); LA. REV. STAT. ANN. §§ 46:2600(3), 46:2610(C)(9) (West Supp. 2007) (including "balanced and restorative justice programs" in the list of "exemplary sanctions" to be imposed, and citing "[e]ncouragement of the principles and practices of balanced and restorative justice" as a goal of programs for delinquent and at-risk juveniles); ME. REV. STAT. ANN. tit. 34-A § 1214(3)(F) (Supp. 2006) (creating an Office of Victim Services to "[a]ssist victims with obtaining victim compensation, restitution and other benefits of restorative justice"); MINN. STAT. ANN. § 388.24 subd. 2 (West 1997) (requiring county attorneys to establish "pretrial diversion programs" for juveniles "to provide eligible offenders with an alternative to adjudication that emphasizes restorative justice").

^{68.} OFFICE OF JUVENILE JUSTICE & DELINQUENCY PREVENTION, BALANCED AND RESTORA-TIVE JUSTICE FOR JUVENILES: A FRAMEWORK FOR JUVENILE JUSTICE IN THE 21ST CENTURY 27-28 (1997), available at http://www.ncjrs.gov/pdffiles/framwork.pdf (explaining that unlike restorative justice, rehabilitation justice seeks to address dysfunction rather than assume current competency).

tific basis for correcting the problem. Redemption and reassimilation are initially offered to all; if these fail, exile in the form of incarceration may be appropriate.

With the model's strong focus on assimilation into the community, there is a significant risk of marginalizing "outsiders." Indeed, the focus of the model is on the younger, more trivial offenders who can be successfully reintegrated into society, since it is far harder to mediate between the perpetrators and the victims of violent crimes. As a result, in a restorative justice system, violent offenders tend to be seen as outsiders who should be cast out and incarcerated.

Thus, the key issue for courts applying the restorative approach is cooperativeness. They must determine if the appropriately apologetic youngster can be successfully reintegrated into the group. The state merely mediates the reconciliation between the offending child and the community, using legal tools such as mediation, healing circles, community service, and restitution.

It is too early to tell how well this system works in practice. From my limited observation of this approach in the Chicago juvenile courts, balanced and restorative justice has been used as a diversion mechanism for less serious offenses. Although broad claims for success have been made, there is no hard data available to evaluate the success of this approach.⁶⁹ For more serious offenses, the references to balanced and restorative justice in the Juvenile Court Act⁷⁰ seem to be window dressing, and the Chicago juvenile courts largely proceed with business as usual by continuing to apply the normal blend of punitive and rehabilitative approaches.

D. Assimilative Model: Shape Up or Ship Out

The assimilative model is similar to the restorative justice approach in its emphasis on the assimilation of juvenile offenders back into the community. It differs, however, in that it recognizes that both nature and nurture may play a part in the creation of juvenile crime. Children who commit crimes are seen as more than merely immature and impulsive; they are the product of bad parenting, bad choices, and a toxic culture.

Unlike restorative justice with its emphasis on redemption, the assimilative model focuses on a more purely utilitarian set of premises.

^{69.} In a speech at the DePaul University College of Law on October 25, 2006, James Mc-Carter, the Chief State's Attorney for the Juvenile Division, claimed that the Cook County Balanced and Restorative Justice Program had reduced juvenile incarcerations by 50%. But no data has been released that verifies this claim.

^{70. 705} Ill. Comp. Stat. Ann. 405/1-1 to 7-1.

It seeks the greatest good for the greatest number and assumes that whatever works is good. The question is simple: What will work to change the child's behavior and protect society?

Scientifically, the assimilative model is influenced by neuroscience, behavioral genetics, and eugenics. The model recognizes that there are multiple influences on—and contributing causes to—delinquency. For example, environment can aggravate or trigger latent genetic predispositions, or it may cause biochemical or anatomical changes in the brain. All of these may, in turn, lead to aggression or crime.

Whatever the cause of the undesirable behavior, the goal is to change it and reassimilate the child. Thus, the groups marginalized by this model are behaviorally defined: criminals, the mentally ill, the mentally impaired, and the culturally resistant. Those who cannot or will not change their behavior must be isolated to protect society.

Thus, the crucial question for the assimilative model is whether the child is incorrigible, as the state should do whatever it can to control the child's behavior. Possible measures include psychotropic drugs, behavioral therapy, foster placements, curfews, and ultimately incarceration. The assimilative model takes no stands on procedural issues, such as whether a juvenile court or an adult court handles a matter. What counts is that the system works.

E. Preventive Model: An Ounce of Prevention Is Worth a Pound of Cure

Like the assimilative model, the preventive model is basically utilitarian. It seeks to prevent harm to society, and whatever method protects the greatest number of people is the correct approach to take. The preventive model also sees a combination of nature and nurture as the source of juvenile delinquency. Bad genes, bad environments, and bad choices lead to antisocial behavior. Relying heavily on behavioral genetics, neuroscience, and sociology, the preventive model seeks to identify the causes of aggression and crime and eliminate them *before* harm occurs. The critical issue for courts following this model is the dangerousness of the juvenile.

It is this emphasis on prevention that sets the preventive model apart. It is proactive rather than reactive and could easily be summed up with a familiar motto: "An ounce of prevention is worth a pound of cure." Some measures reflective of this model, like preventive detention⁷¹ and curfews,⁷² are quite controversial. Others, like limiting

^{71.} See, e.g., Stephen J. Morse, Preventive Confinement of Dangerous Offenders, 32 J.L. MED. & ETHICS 56, 69 & nn.55-56 (2004) (suggesting that preventive detention is justified when the

the driving privileges of teens⁷³ or limiting the sale of alcohol to minors,⁷⁴ are less so.

Some of these preventive measures assume that children have diminished constitutional rights. For instance, in *Ferguson v. City of Charleston*, the Supreme Court held that it was unconstitutional to test pregnant women's urine for drugs without their consent.⁷⁵ However, one year later in *Board of Education of Independent School District No. 92 v. Earls*, the Supreme Court permitted similar urine tests to be performed on all high school students engaged in extracurricular activities.⁷⁶ In both cases, the government acted without any individualized suspicion to search for drugs without consent. The Court, however, noted that the Fourth Amendment rights of high school students are different in a school setting.⁷⁷

As *Earls* illustrates, government actions to prevent delinquency need not be aimed at any particular child. Indeed, many preventive measures are aimed at the entire juvenile population, not just delinquents. For example, rules that limit teens' ability to obtain drivers' licenses apply to all teens—good drivers and bad. Similarly, curfews limit the hours that all adolescents can be on the streets, not just those with a history of delinquency or a proclivity for crime. Different rationales are used to justify such over-inclusive measures. Sometimes, as in *Earls*, adolescents' liberty interests are minimized.⁷⁸ Other times,

prediction of dangerousness is accurate; the detention is reserved for "different" individuals; the potential harm is grave; due process is provided; and the consequences are humane); Christopher Slobogin, *The Civilization of the Criminal Law*, 58 VAND. L. REV. 121 (2005) (advocating preventive detention); *see also* Kansas v. Hendricks, 521 U.S. 346, 369–71 (1997) (holding that detaining an individual past his prison sentence as a "sexually violent predator" was a civil commitment, not a criminal proceeding, so such a detention did not violate double jeopardy and the ex post facto prohibition).

^{72.} See, e.g., Hodgkins ex rel. Hodgkins v. Peterson, 355 F.3d 1048, 1051 (7th Cir. 2004) (invalidating a curfew on First Amendment grounds); Ramos v. Town of Vernon, 353 F.3d 171, 172 (2d Cir. 2003) (invalidating a curfew on equal protection grounds). But see Hutchins v. District of Columbia, 188 F.3d 531, 534 (D.C. Cir. 1999) (upholding a curfew against constitutional challenges).

^{73.} See, e.g., ALA. CODE § 16-28-40 (LexisNexis 2001) (restricting driver's licenses to minors who are enrolled in school); 625 ILL. COMP. STAT. ANN. 5/6-107 (West 2002) (providing for graduated licenses for minors).

^{74.} See, e.g., ALA. CODE § 6-5-70 (LexisNexis 2001) (allowing parents and guardians to sue people who give or sell their children alcohol); ARIZ. REV. STAT. ANN. § 4-241 (2002).

^{75. 532} U.S. 67, 82-86 (2001).

^{76. 536} U.S. 822, 838 (2002).

^{77.} *Id.* at 829-30 ("Fourth Amendment rights . . . are different in public schools than elsewhere; the 'reasonableness' inquiry cannot disregard the schools' custodial and tutelary responsibility for children." (alteration in original) (internal quotation marks omitted) (quoting Vernonia Sch. Dist. 47J v. Acton, 515 U.S. 646, 656 (1995))).

^{78.} Id. at 832 ("We therefore conclude that the students affected by this Policy have a limited expectation of privacy.").

the extent of the danger posed is said to outweigh even strong liberty interests.

Not all preventive measures focus on minors as a group. Some scholars suggest that dangerous individuals should be identified and segregated during childhood to prevent them from harming others.⁷⁹ Such preventive detention rests largely on claims of science. A number of studies have tried to determine whether antisocial toddlers become mean school-aged children, and whether mean school-aged children become violent adolescents.⁸⁰ These tracking studies are buttressed by studies that try to determine whether aggression is influenced more by the environment or by genetic inheritance.⁸¹ Similarly, many biological and genetic factors have been posited as the source of aggressive behavior in children and teens, including Fragile X Syndrome,⁸² XXY syndrome,⁸³ high levels of testosterone,⁸⁴ and low rest-

80. See, e.g., Miriam K. Ehrensaft et al., Intergenerational Transmission of Partner Violence: A 20-Year Prospective Study, 71 J. CONSULTING & CLINICAL PSYCHOL. 741, 748, 751 (2003) (noting that "childhood behavior problems are among the most robust predictors of [partner] violence" and that their study confirmed other longitudinal studies of behavior problems over the life course); Helene Raskin White & Marsha E. Bates, Persistence of Aggressive and Nonaggressive Delinquency in Relation to Neuropsychological Functioning, 794 ANNALS N.Y. ACAD. Sci. 413 (1996) (studying the persistence of aggressive behavior in children from age twelve to young adulthood).

81. See, e.g., John Archer et al., The Association Between Testosterone and Aggression Among Young Men: Empirical Findings and a Meta-analysis, 24 AGGRESSIVE BEHAV. 411 (1998); D.M. Falkenbach et al., Do Changes in Testosterone (T) Levels Affect Human Aggression?, 27 AG-GRESSIVE BEHAV. 260 (2001); D.B. O'Connor et al., Effects of Exogenous Testosterone (T) on Self-Reported and Partner-Reported Aggression in Men, 27 AGGRESSIVE BEHAV. 220 (2001).

82. Jennifer Jewell, Fragile X Syndrome, http://www.emedicine.com/ped/topic800.htm (last updated Sept. 13, 2006) ("Universal behavioral features of males with fragile X syndrome are similar to those observed in patients with attention deficit hyperactivity disorder (ADHD)--- aggressive tendencies and attention deficits."); see also Patricia A. Jacobs et al., Aggressive Behaviour, Mental Sub-normality and the XYY Male, 208 NATURE 1351 (1965).

83. Cf. Johannes Nielsen et al., Follow-up 10 Years Later of 34 Klinefelter Males with Karyotype 47, XXY and 16 Hypogonadal Males with Karyotype 46, XY, 10 PSYCHOL. MED. 345 (1980).

84. See, e.g., Dan Olweus et al., Testosterone, Aggression, Physical, and Personality Dimensions in Normal Adolescent Males, 42 PSYCHOSOMATIC MED. 253 (1980) (reporting that aggressive behavior is associated with higher levels of testosterone in male adolescents); Corinna N. Ross et al., Intensity of Aggressive Interactions Modulates Testosterone in Male Marmosets, 83 PHYSIOLOGY & BEHAV. 437 (2004); Elizabeth J. Susman et al., Gonadal and Adrenal Hormones: Developmental Transitions and Aggressive Behavior, 794 ANNALS N.Y. ACAD. SCI. 18 (1996) (discussing the complex role of testosterone and other hormones in aggression).

^{79.} See Christopher Slobogin et al., A Prevention Model of Juvenile Justice: The Promise of Kansas v. Hendricks for Children, 1999 WIS. L. REV. 185, 195–96 ("Hendricks thus creates a new category of people who may be preventively detained for long periods of time: non-insane people who cannot 'adequately' control their behavior. . . A good argument can be made that dangerous youthful offenders should constitute one of the subcategories of people who are eligible for the regime authorized by Hendricks." (referring to Kansas v. Hendricks, 521 U.S. 346 (1997))).

ing heart rates.⁸⁵ Although many of these theories have been discredited,⁸⁶ there can be little doubt that the search is on to identify a genetic contribution to aggression and, if possible, find a way to control it.

Before proceeding, it should be noted that the five models of juvenile justice discussed above yield five corresponding critical issues: (1) culpability, (2) treatability, (3) incorrigibility, (4) cooperativeness, and (5) dangerousness. It remains to be seen what insights behavioral genetics can contribute toward addressing these issues.

III. BEHAVIORAL GENETICS

Scientists have used at least four different techniques to search for genetic sources of aggression: (1) heritability studies, (2) brain biochemical studies, (3) animal studies, and (4) genetic mapping of targeted populations. Given the scope of this Article, the first three methods are of particular importance and will be treated in turn.

A. Heritability: To What Extent Is Aggression Explained by Genetics Rather than the Environment?

Medical science has come to accept that multiple factors contribute to various conditions or behaviors. For example, heart disease is commonly thought to be the product of several factors, including heredity, diet, exercise, and smoking habits. Geneticists call the genetic contribution (as opposed to the environmental factors) "heritability."

In order to measure heritability, scientists often study families with twins. Specifically, they compare statistics for identical (monozygotic) twins to those of fraternal (dizygotic) twins.⁸⁷ Since identical twins come from both the same egg and the same sperm, they are genetically identical.⁸⁸ In contrast, fraternal twins are no more genetically similar than any other sibling pair who share the same parents. They

^{85.} See Jame Ortiz & Adrian Raine, Heart Rate Level and Antisocial Behavior in Children and Adolescents: A Meta-analysis, 43 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 154 (2004) (examining forty studies that collectively supported the connection between low resting heart rate and aggressive behavior).

^{86.} See Daryl B. O'Connor et al., Exogenous Testosterone, Aggression, and Mood in Eugonadal and Hypogonadal Men, 75 PHYSIOLOGY & BEHAV. 557, 565 (2002) (reporting that exposure to additional testosterone does not seem correlated to aggression, whereas impulsivity does).

^{87.} NIEHOFF, supra note 15, at 237-38 (describing studies of adopted children as well).

^{88.} *Id.* at 237. Although identical twins usually continue to have identical genes throughout life, over time their epigenetic marks that control the intensity of the activity of the genes gradually diverge. Such changes may be either random events or the result of differing life experiences, or both. Thus, the genes of even identical twins may act differently over the course of a lifetime. Nicholas Wade, *Explaining Differences in Twins*, N.Y. TIMES, July 5, 2005, at F5.

developed from separate sperm and ova and therefore have only half of their genes in common.

If a given trait has no genetic component, then it should be equally common among twins and the general population. If, however, a particular trait is entirely genetically controlled, identical twins should be twice as likely to share the trait as fraternal twins, because identical twins have twice as much genetic information in common. For example, a few decades ago scientists thought autism was caused entirely by environmental factors, primarily emotionally cold mothers.⁸⁹ If that were so, identical twins raised apart would be no more likely to be autistic than any two random children in the population. In fact, however, if one identical twin has autism, it is far more likely that the other twin will have it as well.⁹⁰ Similarly, fraternal twins who share more genetic information than members of the public would be more likely to share the trait than the general population.

A similar analysis can be used to look for environmental factors. All twins (both identical twins and fraternal twins) who share a home have similar environments. If a trait is caused solely by environmental factors, then the greater genetic similarity between identical twins is irrelevant to the likelihood that they will both manifest that trait. Hence, any trait that is caused exclusively by environment will be shared no more frequently by identical twins than by fraternal twins.

Of course, few traits are explained solely by either the environment or genetics. It is the two operating in conjunction that accounts for most characteristics. Scientists use twin studies to measure the relative contributions of genetics and environment. If genes are a factor that influences a trait, then the extent to which the trait is overrepresented in the identical twin pool may be a rough measure of how heritable the trait is. Thus, by comparing concordances (the proportion of identical twins who share the trait and the proportion of fraternal twins who share the trait), scientists can estimate heritability.

It is important to note, however, that these twin studies are merely statistical measures over large populations: they do not prove a genetic cause for any particular trait. Similarly, they do not predict how a particular individual is likely to behave. Just because a trait seems to be heritable does not establish an inevitable genetic connection; it merely illustrates a higher-than-random statistical correlation.

^{89.} James R. Laidler, The "Refrigerator Mother" Hypothesis of Autism, http://autism-watch. org/causes/rm.shtml (last visited Apr. 17, 2007).

^{90.} See, e.g., A. Bailey et al., Autism as a Strongly Genetic Disorder: Evidence from a British Twin Study, 25 PSYCHOL. MED. 63 (1995) (noting a high concordance among identical twins for autism, and a much lower concordance among fraternal twins).

Studies vary as to the heritability of aggression, although most show some heritable component.⁹¹ The varied results are hardly surprising since there are several different types of aggression—defensive, premeditated, and impulsive.⁹² Defensive aggression is a survival strategy common to most animals, including humans, and is not considered abnormal when practiced within limits.⁹³ Premeditated aggression consists of planned force used to achieve a specific goal. It may be based on largely logical motives like wealth maximization, or it may reflect a more disordered mental state like sociopathy. Typically, impulsive aggression is more reactive; it is often described as an overreaction to a perceived threat. What complicates the inquiry further is that each form of aggression can have several different causes, which are likely to overlap with genetic and environmental factors that comprise the overall psychosocial situation of the individual.

B. Brain Biochemical Studies: What Happens in the Brain of a Violent Individual?

Heritability studies suggest the degree to which traits are inherited, but they do not directly isolate the mechanisms by which those traits are inherited and expressed. Therefore, scientists must also look closely at brain biochemistry to gain insight into the biological mechanisms of behavior.

At least two different biological patterns of aggression have been identified.⁹⁴ In one, aggressive individuals have higher levels of the neurotransmitter norepinephrine.⁹⁵ These individuals are highly. aroused with fast heart rates.⁹⁶ Such unusually elevated levels of norepinephrine may be induced by long-term exposure to stress or

94. Nicolle M.H. van de Wiel et al., *Cortisol and Treatment Effect in Children with Disruptive Behavior Disorders: A Preliminary Study*, 43 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 1011 (2004); *see also* NIEHOFF, *supra* note 15, at 128 (referring to "a differential responsiveness that distinguishes two important types of violent behavior—one characteristic of people who feel unnecessarily threatened and the other of people who don't seem to feel anything at all").

95. NIEHOFF, supra note 15, at 128 (referring to several human studies). Increases in norepinephrine in the brain increase aggression. *Id.* at 127.

96. *Id.* at 126 ("Anger... is a reaction to threat, a physiological call to arms that revs up the heart, coils muscles, and sends blood pressure soaring."). It also notes that this is the result of monoamine transmitters, such as norepinephrine.

^{91.} See Emil F. Coccaro, Neurotransmitter Correlates of Impulsive Aggression in Humans, 794 ANNALS N.Y. ACAD. SCI. 82 (1996) (citing conflicting studies on the effect of various neurotransmitter levels).

^{92.} Id.

^{93.} Id.; see also Darlene Francis et al., The Role of Early Environmental Events in Regulating Neuroendocrine Development: Moms, Pups, Stress, and Glucocorticoid Receptors, 794 ANNALS N.Y. ACAD. SCI. 136 (1996) (describing the hormones and neurotransmitters that are secreted when an organism experiences stress).

pain.⁹⁷ Inversely, hostile confrontations also cause the brain to create more norepinephrine and a faster heart rate.⁹⁸ Hence, threatening or stressful situations seem to elicit this reactive form of aggression, which is an exaggerated version of the fight or flight response.⁹⁹ There is some evidence that beta-blocker drugs designed to treat hypertension reduce both aggressive tendencies and the nature of the aggression manifested, thus making it less destructive.¹⁰⁰ Similarly, both animal and human studies suggest that antidepressant drugs decrease impulsive aggression.¹⁰¹

In contrast, another group of aggressors appears to be just the opposite. These individuals seem to have inherited a tendency to have lower levels of MAOA, which affects neurotransmitters.¹⁰² This condition is associated with low arousal, lowered heart rates, lower levels of circulating cortisol, and lowered skin conductivity.¹⁰³ Many studies have found that a low resting heart rate during childhood or adolescence predicts either aggression or criminality in later years.¹⁰⁴ Low MAOA alone, however, may not be the sole cause of aggression. In

99. See id. at 126 (noting that "the 'aggressive monoamines' have long been implicated on the fight, as well as the flight, side of the response equation").

100. See NIEHOFF, supra note 15, at 127 ("[S]tudies have demonstrated that the administration of propranolol, an antihypertensive drug that blocks norepinephrine's action at beta receptors, specifically reduces attack behavior, leaving defensive and escape behaviors untouched."); Coccaro, supra note 91, at 84 (citing clinical data that beta-blockers have "anti-aggressive effects").

101. See A. Cologer-Clifford et al., Effects of Serotonergic_{1A} and _{1B} Agonists in Androgenic Versus Estrogenic Systems for Aggression, 794 ANNALS N.Y. ACAD. SCI. 339 (1996) (studying the effect of certain drugs on aggression in rodents); Ray W. Fuller, Fluoxetine Effects on Serotonin Function and Aggressive Behavior, 794 ANNALS N.Y. ACAD. SCI. 90, 92–94 (1996) (citing studies on the impact of the neurotransmitter serotonin on aggressive behavior in humans and animals; studies of the effect of fluoxetine (a selective serotonin uptake inhibitor antidepressant) on rodent aggression; a few small clinical studies of fluoxetine's effect on human aggressive behavior; and a study in which fluoxetine reduced anger in human patients).

102. See generally Avshalom Caspi et al., Role of Genotype in the Cycle of Violence in Maltreated Children, 297 SCIENCE 851 (2002); Robert M. Sade, Introduction: Evolution, Prevention, and Responses to Aggressive Behavior and Violence, 32 J.L. MED. & ETHICS 8, 11 (2004).

103. NIEHOFF, *supra* note 15, at 129 (noting lower skin conductance and lowered heart rates in individuals with antisocial personality disorders); *see also id.* at 185 tbl.6.1 (depicting a chart that notes decreased cortisol levels in those with antisocial personality disorders).

104. See, e.g., Ortiz & Raine, supra note 85; Adrian Raine et al., Low Resting Heart Rate at Age 3 Years Predisposes to Aggression at Age 11 Years: Evidence from the Mauritius Child Health Project, 36 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 1457, 1462 (1997). But see Richard E. Tremblay et al., Physical Aggression During Early Childhood: Trajectories and Predictors, 114 PEDIATRICS 43 (2004) (finding that a low resting heart rate was not associated with measures of aggression, but that other factors, such as mothers with a history of antisocial behavior during their school years, mothers who start childbearing early and smoke during pregnancy, and parents who have low income and serious problems living together, were predictive).

^{97.} See id. (citing studies of rats that were physically restrained regularly and later put on an electrified grid to fight with other rats).

^{98.} Id. at 127.

the studies, low MAOA levels generally led to aggression when the individuals had also experienced childhood abuse.¹⁰⁵

It is tempting to assume that individuals who exhibit low heart rates and correspondingly low MAOA levels are genetically predetermined to be overly aggressive or even sociopathic. But the physical traits associated with low MAOA levels are not determinative predictors of violence for four reasons.

First, the biological studies described above merely measure a statistical correlation between these traits and aggression rates in general. They do not predict aggressiveness in any particular individual. Similarly, a study might show biological or genetic characteristics associated with individuals who are likely to develop Type II diabetes, but it would be unable to predict which members of a family would become diabetic. One obvious reason biological studies alone cannot predict which individuals will develop diabetes in middle age is that nongenetic factors like diet, exercise, weight, and age affect the result. Similarly, a complex behavior like aggression has multiple roots.

Second, most of the biochemical studies discussed above looked at individuals who had already demonstrated aggressive behavior. There is no data showing how many other individuals in the population have low levels of serotonin, low arousal, slow heart rates, low skin conductance, and low MAOA, yet do not act violently.¹⁰⁶ Consider a hypothetical study in which researchers select a group of nurses, find that most of them share the XX chromosome pattern (characteristic of females), and then conclude that the XX chromosome pattern predisposes individuals to select nursing as a career. Just as environmental factors can affect a woman's decision to become a nurse, environmental factors can affect which predisposed juveniles become criminals. Without a wide-scale study of the entire population, the results are generally skewed.

Third, isolating individuals with low MAOA would not adequately address criminal violence. Even if this factor could adequately identify sociopaths (a questionable assumption), the number of sociopaths in the general population is very small. So even if measuring MAOA levels made it possible to predict which juveniles would develop into

^{105.} Caspi et al., supra note 102; Sade, supra note 102, at 11.

^{106.} Gary W. Kraemer & A. Susan Clarke, Social Attachment, Brain Function, and Aggression, 794 ANNALS N.Y. ACAD. SCI. 121, 121 (1996) ("There is no indication of what proportion of humans could be counted as having low 5-HT function [low serotonin levels associated with low heart rate and low arousal] and yet never engage in violent behavior or come to the attention of the medical or justice systems.").

sociopaths, the technique would not find the majority of violent criminals among whom sociopaths are still a minority.

Fourth, screening would result in a number of false positives, risking severe consequences for individuals who would never actually become aggressive. Consider a hypothetical test based on the 2002 juvenile crime rate. That year, 14 juveniles were arrested for violent crimes for every 5000 juveniles in the U.S. population.¹⁰⁷ If the test classified juveniles correctly 90% of the time (an extremely unlikely phenomenon), then in a representative sample of 5000 juveniles, 13 violent juveniles would be correctly identified and only one would be missed. Unfortunately, of the remaining 4986 innocent juveniles in the sample, 499 would be misidentified as violent. This amounts to 38 innocent juveniles misidentified for every one violent juvenile detected. Hence, even with a highly accurate test, a large number of innocent juveniles would be misidentified in order to find the few who are violent.¹⁰⁸

Studies of brain biochemistry can provide insight into the biological component of aggression. It is inappropriate, however, to use the information learned from these studies to take preemptive actions that are likely to harm innocent individuals.

C. Can Animals Be Genetically Altered to Be Aggressive?

Animal studies allow for more controlled and individualized experiments than human studies. Typically, researchers use rats or mice to test their hypotheses about which genes or combinations of genes influence a particular behavior. They splice genes into or out of the animals and then compare how they react to various stimuli. Because scientists can manipulate the genetic makeup of the animals, they can isolate particular genes or portions of chromosomes that may contribute to a particular behavior. Of course, genetic variables are not the sole cause of behavior in mice. Scientists need to provide an environment with appropriate stimuli to elicit the targeted behavior. But these studies allow researchers to compare normal mice with genetically altered mice presented with the same stimuli. Although these studies have helped identify some of the biochemistry of aggression,

^{107.} Howard N. Snyder, *Juvenile Arrests 2002*, JUV. JUST. BULL. (Office of Juvenile Justice & Delinquency Prevention, U.S. Dep't of Justice, Wash., D.C.), Sept. 2004, at 4, *available at* http:// www.ncjrs.gov/pdffiles1/ojjdp/204608.pdf ("In 2002, there were 276 arrests for Violent Crime Index offenses for every 100,000 youth between 10 and 17 years of age"). Note that many of the arrests likely involved juveniles who were arrested more than once, so this statistic merely provides an upper bound on the number of juveniles who had at least one arrest. *See id*.

^{108.} Cf. Small, supra note 37, at 204-05 (using a similar analysis with different figures).

there has been no single gene or set of genes that have been identified as the cause of aggression.

D. Types of Teen Aggression: What Behavior Is Researched?

Teens engage in several different types of aggressive activities, so researchers studying aggressive behavior must be careful to define what they mean when they measure a subject's "aggressive" behaviors. Furthermore, since different motivations lie behind the various types of aggression, studies that do not differentiate between these different types of aggression may produce misleading findings.

Teen behavior mirrors the findings from certain animal behavior studies that show social threat to be a frequent precursor to aggression.¹⁰⁹ For instance, dominant rats maintain their dominance by attacking subordinate rats or those who have invaded their territory.¹¹⁰ Subordinate animals retreat and appease the alpha animal for a period of time; if pushed sufficiently, however, they will lash out disproportionately, often willing to fight to the death.¹¹¹ Adolescents often behave in much the same way; some dominant teens maintain their social position by bullying others,¹¹² while those teens who are bullied often pacify and retreat but can also overreact with lethal aggression.¹¹³

Frequently, responsible adults only recognize bullying in hindsight. Abused partners and bullied peers are often too ashamed to complain. Therefore, this form of aggression may be less likely to be measured in studies. Moreover, as long as the perpetrators avoid excessive force, adults are less likely to respond to these forms of aggression. Therefore, the victims of bullying are often left to cope with the aggression on their own.

There is also a form of group violence that often occurs in adolescence.¹¹⁴ This includes instances in which individual teens behave violently in a group even though they are not necessarily violent

^{109.} See, e.g., NIEHOFF, supra note 15, at 65–67, 70 (describing aggression by alpha rats against subordinates and intruders).

^{110.} Id. at 70.

^{111.} Id.

^{112.} See, e.g., Dan Olweus, Bullying at School: Knowledge Base and an Effective Intervention Program, 794 ANNALS N.Y. ACAD. SCI. 265, 269 (1996) ("[B]ullies have unusually strong needs for power and dominance; they seem to enjoy being 'in control' and subduing others.").

^{113.} See, e.g., Bullies—Schools, Parents Must Safeguard Children, WICHITA EAGLE (Kan.), Sept. 14, 2005, at A8.

^{114.} See, e.g., Howard N. Snyder, Juvenile Arrests 2003, JUV. JUST. BULL. (Office of Juvenile Justice & Delinquency Prevention, U.S. Dep't of Justice, Wash., D.C.), Aug. 2005, at 2, available at http://www.ncjrs.gov/pdffiles1/ojjdp/209735.pdf ("[J]uveniles are more likely to commit crimes in groups and are more likely to be arrested than are adults.").

individually. Sometimes this group violence is part of an initiation rite. Typically, there is strong peer pressure to participate, which ranges from razzing the reluctant participant to threats of violence or death. The extent of the violence varies. Sometimes only property damage, as in the trashing of a vacant house, is involved. Other times, the violence is much more personal and ravaging, as in gang rapes or murders. Such group violence cuts across socioeconomic lines and can be found in sporting groups,¹¹⁵ fraternities,¹¹⁶ and gangs.¹¹⁷ Property crimes may not be counted as violence, but the other activities are likely to be viewed as premeditated aggression. Consequently, a study that defines violence in which teens engage.

Finally, there is an instrumental form of aggression, in which juveniles use aggression to get what they want. As with the other types of aggression, the severity of the violence in this category varies dramatically. Typical instrumental violence may occur in conjunction with other criminal activity, as when juveníles use guns to rob stores or protect their drug trade. Whether this form of aggression shows up in statistics used for sociological studies depends on how the incidents are reported. Thefts and drug offenses are not necessarily included in

116. See, e.g., Delta Tau Delta, Beta Alpha Chapter v. Johnson, 712 N.E.2d 968, 973–74 (Ind. 1999) (documenting the scope of criminal activities including sexual assault in fraternities). Violence that occurs within a fraternity is often described by the term "hazing," which can have a variety of different connotations. See, e.g., Michael W. Gosk, Comment, From Animal House to No House: Legal Rights of the Banned Fraternity, 28 CONN. L. REV. 167, 167–69 (1995) (describing the violence associated with fraternities which led some to be banned); Sussberg, supra note 115, at 1423 n.21 (citing an alarming number of hazing incidents in fraternities, especially in concert with alcohol consumption); Maria Newman, High School Group's Hazing Was Open Secret, Some Say, N.Y. TIMES, Aug. 8, 2002, at B5 (describing a "paddling" rite that took place among a fraternity of high school students).

117. See RANDALL G. SHELDEN ET AL., YOUTH GANGS IN AMERICAN SOCIETY 72–73, 134 (2d ed. 2001) (noting the initiation rites common to many gangs); see also Katharine K. Baker, Sex, Rape, and Shame, 79 B.U. L. REV. 663, 670 (1999) (describing the Spur Posse, a gang of white high school students who developed a system of scoring points by having sexual conquests with girls); Michelle Oberman, Turning Girls into Women: Re-evaluating Modern Statutory Rape Law, 85 J. CRIM. L. & CRIMINOLOGY 15, 15–16 (1994) (also describing the Spur Posse). This violence is not just confined to male gangs. Female gang members also act violently toward each other. See, e.g., Cheryl Hanna, Ganging Up on Girls: Young Women and Their Emerging Violence, 41 ARIZ. L. REV. 93, 124 (1999) (describing female gang initiation rites, including group sex and "catfights").

^{115.} See, e.g., R. Brian Crow & Scott R. Rosner, Institutional and Organizational Liability for Hazing in Intercollegiate and Professional Team Sports, 76 ST. JOHN'S L. REV. 87, 90–91, 102–04 (2002) (describing various forms of physical hazing involving college and professional athletes); Joshua A. Sussberg, Note, Shattered Dreams: Hazing in College Athletics, 24 CARDOZO L. REV. 1421, 1424 n.22 (2003) (listing incidents of hazing, including violent acts, against members of sporting teams); Patricia Wencelblat, Note, Boys Will Be Boys? An Analysis of Male-on-Male Heterosexual Sexual Violence, 38 COLUM. J.L. & SOC. PROBS. 37, 38 (2004) (describing sexual assaults of high school football players by other players).

aggression studies. If, however, the crimes are recorded as weapons violations or aggravated assaults, then they are more likely to be included.

All of this evidence shows that studies of aggression, including heritability studies, brain chemical studies, and animal studies, require that the researcher carefully identify the behavior to be measured. If the behavior is defined too broadly, genetic or other biological contributions to specific types of aggression may be overlooked. On the other hand, if the behavior is defined too narrowly, genetic or other biological contributions to an aggregate level of aggressiveness may be missed.

IV. DOMESTIC ABUSE AS A FACTOR IN AGGRESSION

Abuse and violence are crucial factors in generating aggressive behavior. Scientists have demonstrated that "domestic violence has an environmental effect on children's behavior problems independent of genetic effects."¹¹⁸ Minors between the ages of nine and twelve who have been reported as abused or neglected are sixty-seven times more likely to be arrested than other minors.¹¹⁹ Abuse provides negative social role modeling.¹²⁰ It also alters brain chemistry and, if prolonged, alters the very anatomy of the brain.¹²¹ Indeed, stress hormones associated with abuse trigger genetic responses. As neuroscientist Debra Niehoff explains, "[S]ocial stress has the power to turn genes off and on. Within an hour of losing a fight, the experience has switched on the immediate early gene c-fos, presumably in preparation for activating additional genes."122 The biochemical responses to these changes can "actually reconstruct[] the brain, with long-lasting consequences for neural function and behavior."123 Sev-

120. Sociologists have documented this modeling effect, describing it using a "social learning theory." See, e.g., David L. Burton, Male Adolescents: Sexual Victimization and Subsequent Sexual Abuse, 20 CHILD & ADOLESCENT SOC. WORK J. 277, 279, 282 (2003) (finding that typically adolescent sexual abusers not only had been abused themselves, but also copied the methods of abuse when they victimized others).

122. Id. at 133.

123. Id. at 186.

^{118.} Sara R. Jaffee et al., Influence of Adult Domestic Violence on Children's Internalizing and Externalizing Problems: An Environmentally Informative Twin Study, 41 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 1095, 1100 (2002).

^{119.} CHILD WELFARE LEAGUE OF AM., CHILDREN 2001 CREATING CONNECTED COMMUNI-TIES: POLICY, ACTION, COMMITMENT 3 (2001), available at http://www.cwla.org/advocacy/ nationalfactsheet01.pdf (citing a 1996 study in Sacramento County).

^{121.} NIEHOFF, supra note 15, at 112.

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eral heritability studies also confirm that the environment significantly contributes to aggression and delinquency.¹²⁴

Both experiencing the abuse directly as a victim and indirectly as a witness have been associated with subsequent aggression.¹²⁵ Because it is common for a family to scapegoat a single child, abuse may be either a shared or a non-shared trait with siblings.¹²⁶ When scapegoating occurs, only one child may be targeted, and the experience of abuse will vary among the children. In either case, a history of family violence continues to be an important factor in predicting subsequent aggression.

Although the precise mechanisms for the intergenerational transmission of violence are still being discovered, we have learned a great deal about why exposure to violence begets violence. Individuals who are exposed to violence adapt to that environment in a variety of ways, including the release of stress hormones in the body and brain that increases the likelihood of a fight or flight response.¹²⁷ The cyclical exposure to these chemicals over time changes both the biochemistry and the anatomy of the brain.¹²⁸ Specifically, functional MRIs of individuals who have experienced long-term exposure to stress show increased activity in the amygdala, the part of the brain that governs strong emotions.¹²⁹ This activity is experienced as a powerful internal-

^{124.} See, e.g., Douglas A. Kramer, Commentary: Gene-Environment Interplay in the Context of Genetics, Epigenetics, and Gene Expression, 44 J. AM. ACAD. CHILD & ADOLESCENT PSYCHI-ATRY 19 (2005); Alison Pike & Robert Plomin, Importance of Nonshared Environmental Factors for Childhood and Adolescent Psychopathology, 35 J. AM. ACAD. CHILD & ADOLESCENT PSY-CHIATRY 560, 563 (1996) (noting that environmental experiences have a significant impact on delinquency).

^{125.} See, e.g., Cathy Spatz Widom & Michael G. Maxfield, A Prospective Examination of Risk for Violence Among Abused and Neglected Children, 794 ANNALS N.Y. ACAD. SCI. 224, 229 (1996) ("Abused and neglected children have a higher likelihood of arrests for delinquency, adult criminality, and violent criminal behavior than matched controls. . . . [C]ompared to controls, abused and neglected children are arrested earlier, commit more offenses, and more often become chronic or repeat offenders").

^{126.} Lynne Namka, Scapegoating—An Insidious Family Pattern of Blame and Shame on One Family Member, http://www.angriesout.com/grown19.htm (last visited Apr. 17, 2007); see also RICHARD RHODES, WHY THEY KILL: THE DISCOVERIES OF A MAVERICK CRIMINOLOGIST 136 (1999) (noting that violence within families is selective).

^{127.} See generally Francis et al., supra note 93.

^{128.} See NIEHOFF, supra note 15, at 186-87.

^{129.} See, e.g., Scott L. Rauch et al., Exaggerated Amygdala Response to Masked Facial Stimuli in Posttraumatic Stress Disorder: A Functional MRI Study, 47 BIOLOGICAL PSYCHIATRY 769, 772 (2000) ("[P]atients with PTSD exhibited significantly greater amygdala responses [to maskedfearful versus masked-happy faces]."); Paul J. Whalen et al., Human Amygdala Responsivity to Masked Fearful Eye Whites, 306 SCIENCE 2061 (2004) (noting that subjects who had PTSD had increased amygdala activity when shown fearful eyes). But see Ruth A. Lanius et al., Neuroimaging of Hyperaroused and Dissociative States in Posttraumatic Stress Disorder, CPA BULL, Aug. 2002, at 22 (noting that among sexual abuse survivors and other patients with

ized fear that generates anger. Simultaneously, there is decreased activity in the prefrontal lobe, which normally operates to smooth out emotional impulses.¹³⁰ So at the very time that stress hormones are causing the amygdala to generate powerful sensations of fear and anger, the frontal lobe that helps an individual control himself shuts down, significantly increasing the likelihood that fear and anger will be manifested in aggressive behavior. When the individuals involved are teens with immature prefrontal lobes, the lack of impulse control is even stronger. Hence, the combined effect of exposure to violence and the normal immaturity of the prefrontal lobe make it extremely difficult for victimized adolescents to control their aggressive impulses.

If one is to survive in a chaotic environment with intermittent violence, one must be constantly on the lookout for danger. Hence, violence also programs individuals to be hypervigilant:

When the entire experience [of physical trauma] is transferred to memory, the labels stay put, branding details of the traumatic event into the memories. Like loose threads on an old sweater, these amygdala-enhanced details catch on every outstanding resemblance to the original trauma, pulling fragments of the painful memory up to conscious awareness over and over again.¹³¹

Therefore, teens who have been exposed to violence are far more likely to interpret words, gestures, and other social cues as threatening.¹³² Once a threat is perceived, these teens are quick to anger and lash out because of the structural changes in their amygdalas and prefrontal lobes. Even teens who have not been exposed to violence have immature prefrontal lobes that make it difficult for them to control their behavior. For adolescents who have undergone changes due to environmental violence, it is sometimes impossible for them to control their impulses.

Of course, not all adolescents exposed to violence respond in precisely the same way. Some become passive, hypervigilant, and fearful. These children often become the targets for bullies and others who sense their fear.¹³³ Studies indicate that many girls who grow up in abusive households find themselves victims of domestic violence later

PTSD, two distinct patterns emerge: 70% show heightened arousal, but 30% actually showed decreased amygdala activity usually related to a dissociative state).

^{130.} See NIEHOFF, supra note 15, at 111.

^{131.} Id. at 125.

^{132.} See Sandra Graham & Colleen Halliday, The Social Cognitive (Attributional) Perspective on Culpability in Adolescent Offenders, in YOUTH ON TRIAL, supra note 37, at 345, 352 (explaining that hypervigilant youth are especially likely to interpret others' intentions as hostile).

^{133.} Olweus, supra note 112, at 268.

in life.¹³⁴ It is unclear why one teen responds to violence with more violence, while another responds passively. Some have suggested that an inherited characteristic, like the level of MAOA in the brain, determines the result.¹³⁵ Others have suggested gender correlations.¹³⁶

Some scholars have posited that violence develops gradually in predictable stages.¹³⁷ Although the early stages enable later progression to violence, the later stages are not inevitable.¹³⁸ In essence, this theory posits that violence is a learned behavior and that the learning can be interrupted.¹³⁹ According to criminologist Lonnie Athens, violence progresses in stages, from "brutalization" to "belligerency" to "violent performances" and, finally, to "virulency."¹⁴⁰

Brutalization, the first stage of the process, occurs when individuals are treated cruelly by key members of intimate social groups, such as families, gangs, or cliques,¹⁴¹ and can occur in three ways: "violent subjugation, personal horrification and violent coaching."¹⁴² Subjugation occurs when an intimate authority figure, like a parent or a gang leader, uses violence to enforce obedience.¹⁴³ At some point the child becomes fearful and submits, but then becomes humiliated and angry.¹⁴⁴ Horrification occurs when children witness violence against another intimate like a sibling or a parent: "Violent subjugation of someone cherished [is] . . . 'exceedingly traumatic for the subject.'"¹⁴⁵ The child feels obligated to try to protect his loved one but is powerless to do so. Feeling both impotent and afraid fuels both rage and shame.¹⁴⁶ Violent coaching occurs when an authority figure encour-

138. RHODES, supra note 126, at 111

141. Id.

143. Id. at 112-13.

- 145. Id. at 117.
- 146. Id. at 118.

^{134.} Deborah Epstein et al., Effective Intervention in Domestic Violence Cases: Rethinking the Roles of Prosecutors, Judges, and the Court System, 11 YALE J.L. & FEMINISM 3, 8–9 (1999). But see Ehrensaft et al., supra note 80, at 749 (finding that exposure to child abuse did not predict being abused by a partner, but exposure to violence between parents did predict such later victimization).

^{135.} See supra note 104 and accompanying text.

^{136.} Widom & Maxfield, supra note 125, at 229–30. But see Myrna S. Raeder, A Primer on Gender-Related Issues That Affect Female Offenders, 20 CRIM. JUST. 4, 11 (2005) (documenting that girls and women also become more aggressive as a result of prior exposure to violence).

^{137.} RHODES, *supra* note 126, at 111 (summarizing ideas presented by Lonnie Athens); *see also* NIEHOFF, *supra* note 15, at 52 ("This inclusive biology views violence as a developmental process rather than a genetic or cultural mandate.").

^{139.} Id. at 316-17.

^{140.} Id. at 112.

^{142.} Id. (emphasis omitted).

^{144.} RHODES, supra note 126, at 113.

ages the minor to act violently.¹⁴⁷ The authority figure belittles any attempts minors make to smooth over conflicts or flee. Children are taught that it is their duty to stand up for themselves and to be prepared to physically attack others when necessary. The authority figure often tells stories glorifying those who triumph in physical fights.¹⁴⁸ Sometimes, especially within gangs, the coaching is coercive. If the minor does not act aggressively toward an outsider, he will be a victim of the gang.¹⁴⁹

As stated above, brutalization often occurs in the context of intimate violence either in the home or on the street: "Although brutalization and child abuse are not synonymous, serious child abuse is always potentially brutalizing."¹⁵⁰ Indeed, some scientists have posited that early child abuse may contribute to the low arousal observed in some violent individuals.¹⁵¹ Not all brutalized children become violent, but almost all violent juveniles have been brutalized.¹⁵²

Unfortunately, when children are incarcerated they are typically further brutalized, horrified, and coached.¹⁵³ Gang presence, as well as exposure to a larger, concentrated population of aggressively violent youth, makes these facilities breeding grounds for aggression and violence. Because experiencing abuse causes children to develop violent tendencies and incarceration often serves to further the cycle of violence, strategies formulated to reduce juvenile crime and deal with

150. RHODES, supra note 126, at 314.

151. See, e.g., Adrian Raine, Autonomic Nervous System Factors Underlying Disinhibited, Antisocial, and Violent Behavior: Biosocial Perspectives and Treatment Implications, 794 ANNALS N.Y. ACAD. Sci. 46, 56 (1996) ("It is . . . possible that the environmental influence of experiencing environmental stress in early childhood results in reduced autonomic arousal.").

152. See, e.g., Ehrensaft et al., supra note 80, at 748–51 (noting that although a history of abuse is strongly associated with becoming an abuser, a variety of factors can either exacerbate or mitigate that course); Adam M. Tomison, Intergenerational Transmission of Maltreatment, http://www.aifs.gov.au/nch/issues6.html (last visited Apr. 17, 2007) (distinguishing the statistics generated by retrospective and prospective studies that demonstrate that although most abusers were abused as children, most abused children do not grow up to be abusers); see also Raeder, supra note 136, at 6 (noting that adult female inmates in Cook County Jail had suffered "child abuse, sexual assault, and domestic violence at rates two and three times the national average"); Janet Currie & Erdal Tekin, Does Child Abuse Cause Crime? 7 (Nat'l Bureau of Econ. Research, Working Paper 12171 (2006)), available at http://www.Nber.org/papers/w12171 (citing Cathy Spatz Widom, Does Violence Beget Violence? A Critical Examination of the Literature, 106 PsYCH. BULL. 3 (1989) (noting that child abuse victims are 53% more likely to be arrested as a juvenile and 38% more likely to be arrested for a violent crime)).

153. RHODES, supra note 126, at 314 ("Detention centers in particular are notorious for advancing violentization.").

^{147.} Id. at 119-20.

^{148.} Id. at 121.

^{149.} See, e.g., Nat'l Drug & Safety League, Leading the Fight Against Gangs in the United States, http://www.hopefs.org/Behavior/thefightagainstgangs.html (visited Apr. 17, 2007) (noting that gangs use violence to intimidate recruits into committing violent acts).

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juvenile offenders will be much more effective if they consider this essential information.

V. COMMUNITY ACCOUNTABILITY

A. The Current Absence of Community Accountability

Holding juveniles individually accountable for their aggression is like treating heart disease with medications, but locking the patient in a smoke-filled room, chaining him to a recliner, and providing him only fats and sweets as nourishment. A purely biological remedy is unlikely to succeed unless environmental factors are corrected.

Unfortunately, the juvenile justice system completely ignores the social context of violence. The problem of adolescent aggression is viewed as an individual character flaw, and the consequences are imposed solely upon the delinquent minors. Thus, a common problem with all five theories of juvenile justice is that they place all the burden of change on the children, calling upon them to be accountable. But their behavior does not occur in a vacuum. The scientific studies discussed above demonstrate that genetic and neurological factors operate in conjunction with an exposure to child abuse and other violent environments to make violent impulses very difficult to resist.

Niehoff explains that "[v]iolent behavior is open to change, but . . . the brain must develop a different attitude toward the outside world, and the world itself must be different."¹⁵⁴ Incarcerating children, or even treating them and returning them to the same environment that contributed to their problems in the first place, is an exercise in futility. If society is serious about attacking the problem of youth aggression, it must attack the most significant environmental causes of that aggression: child abuse and domestic violence.

Unfortunately, the law has undermined many attempts to protect children from violence in their homes. The Supreme Court has consistently ruled that states have no duty to protect children from abuse, even when a child is being supervised by child protective services or a state court protective order is in place.¹⁵⁵ Indeed, the Court has made state child welfare agencies entirely unaccountable for the quality of their services, holding that parents lack standing to sue these agencies

^{154.} NIEHOFF, supra note 15, at 263.

^{155.} Town of Castle Rock v. Gonzales, 545 U.S. 748, 768 (2005); DeShaney v. Winnebago County Dep't of Soc. Servs., 489 U.S. 189, 202 (1989).

even when their children are lost in the foster care system¹⁵⁶ and that state agents are not liable for their conduct.¹⁵⁷

States have also enacted legislation that excludes a number of children from protective services.¹⁵⁸ In Illinois, for example, those over age thirteen who are adjudicated delinquent may not be placed by the Department of Children and Family Services (DCFS).¹⁵⁹ As a result, if a thirteen-year-old girl who is sexually abused at home runs away and becomes homeless, she will not be provided any shelter or services if she has turned to prostitution or theft to support herself. In essence, these abused children are simply abandoned by the state.

Similarly, Illinois DCFS has an unofficial policy of not responding to reports of sexual abuse when the abuser does not live with the child.¹⁶⁰ Accordingly, if a child reports to a teacher that his uncle is molesting him, DCFS will not respond unless the uncle lives with him. Hence, if the parents disbelieve the child, the child is left in the abusive situation.

Private resources are also insufficient. Most domestic violence shelters are overcrowded and have limited beds available.¹⁶¹ Even worse, most shelters will not permit males over the age of twelve to stay there.¹⁶² So if an abused woman has a teenage son, she may face an impossible dilemma. If she goes to the shelter, she must leave her son with the abuser. If she does not go, she must remain in the abusive environment.

Finally, although there are many professionals who are required to report suspected abuse to the appropriate state agency, many adults

159. Id.

160. Personal Conversation with a DCFS attorney, who wished to remain anonymous (Jan. 2006).

161. For example, in 2002 in New York City 2649 people were turned away from shelter beds due to lack of space. N.Y. STATE OFFICE OF CHILDREN & FAMILY SERVS., THE DOMESTIC VIOLENCE PREVENTION ACT: 2002 ANNUAL REPORT TO THE GOVERNOR AND LEGISLATURE 6 tbl.3 (2002), available at http://www.ocfs.state.ny.us/main/reports/2002_domestic_violence_ report.pdf.

162. See, e.g., LUPITA PATTERSON, WASH. STATE COALITION AGAINST DOMESTIC VIOLENCE, MODEL PROTOCOL: ON WORKING WITH BATTERED WOMEN AND THEIR TEENAGE BOYS IN SHELTER 1 (2003), available at http://www.wscadv.org/Resources/protocol_teenage_boys.pdf ("[I]n many domestic violence shelters [there] is an age limitation on male children in shelter."); Sheila Y. Moore, Adolescent Boys Are the Underserved Victims of Domestic Violence (Dec. 26, 1999), http://www.casamyrna.org/new/op-ed.html (noting that not a single domestic violence shelter in Massachusetts accepted teenaged boys until 1999).

^{156.} Suter v. Artist M., 503 U.S. 347, 363 (1992).

^{157.} See DeShaney, 489 U.S. at 203.

^{158.} See, e.g., 20 ILL. COMP. STAT. ANN. 505/5(1) (West 1999) ("A minor charged with a criminal offense under the Criminal Code of 1961 or adjudicated delinquent shall not be placed in the custody of or committed to the Department by any court, except a minor less than 13 years of age").

who see abusive behavior in public ignore it. Consequently, children learn that such abuse is acceptable and normal. All too often cultural norms of family privacy prevent individuals from acting to help abused children. In essence, the entire community has abandoned abused children.

Obviously, children are too vulnerable to be able to protect themselves from violence in the home. They must rely on others to protect them. State law usually requires that state child protective agencies and the police have exclusive power to intervene in such situations. Nevertheless, according to the Supreme Court, a state has no duty either to intervene to protect children or to act without gross negligence when it chooses to intervene.¹⁶³

Consider the case of three-year-old Joshua DeShaney.¹⁶⁴ Numerous individuals reported that Joshua's father was beating him.¹⁶⁵ Joshua's father agreed to place him in preschool, which would have allowed teachers to monitor Joshua's condition.¹⁶⁶ Unfortunately, Joshua's father failed to live up to his agreement. Every time the state social worker came to visit, "Joshua was too ill to see her."¹⁶⁷ She never demanded to see Joshua to check for further abuse. More reports came in. The social worker admitted that she was dreading the day that she would get the phone call telling her that little Joshua was dead.¹⁶⁸ Still, she "took no action."¹⁶⁹ Eventually, Joshua's father beat Joshua until he was so brain-damaged that he would have to be institutionalized for life.¹⁷⁰

Joshua's mother sued Winnebago County, the Department of Social Services (DSS), and individual DSS employees for their failure to protect Joshua.¹⁷¹ She argued that Joshua, like prisoners, had a substantive due process right to be protected by the state. The Supreme Court rejected this argument, stating that prisoners only have a right to be protected because the state has limited their liberty to protect themselves.¹⁷² Thus, the Court ignored the fact that state law limited the abilities of others to intervene and protect Joshua, including his

- 169. DeShaney, 489 U.S. at 193 (majority opinion).
- 170. Id.
- 171. Id.
- 172. Id. at 198-99.

^{163.} DeShaney, 489 U.S. at 202; see also Castle Rock, 545 U.S. at 768 (holding that the plaintiff had no "property interest in police enforcement of the restraining order against her husband," so the police's refusal to protect her and her children did not violate her due process).

^{164.} DeShaney, 489 U.S. 189.

^{165.} Id. at 192-93; id. at 209 (Brennan, J., dissenting).

^{166.} Id. at 192 (majority opinion).

^{167.} Id. at 193.

^{168.} Id. at 209 (Brennan, J., dissenting).

stepmother, doctors, nurses, and neighbors.¹⁷³ In rejecting this argument, the Court seemed to engage in the fiction that toddlers can adequately protect themselves against abuse.

The Court further limited the rights of extended families to intervene when it denied grandparents the right to visit their grandchildren without parental consent.¹⁷⁴ Although Justice O'Connor's opinion for the plurality suggested that the rule might be different if the grandparents could prove harm to the child,¹⁷⁵ the Court has consistently affirmed a constitutional right of parents to isolate their children.¹⁷⁶ Thus, children remain at risk for abuse. Private individuals are denied the right to intervene on their behalf but the state has no duty to protect them. In essence, *DeShaney* held that in spite of the state's power to intervene under *parens patriae*, the Due Process Clause does not create a substantive due process right for children to be protected from known parental abuse.¹⁷⁷ It could easily be argued that in many ways these legal rules enable and protect abusers.

The next Supreme Court case to raise these issues, *Town of Castle Rock v. Gonzales*,¹⁷⁸ provided a similar disturbing outcome. Mr. Gonzales apparently had a history of beating both his wife and his children.¹⁷⁹ Mrs. Gonzales filed for divorce and obtained a protective order that specifically limited Mr. Gonzales' access to his children and ordered the police department to enforce the terms of the protective order.¹⁸⁰ At about 5:00 p.m., Mr. Gonzales took the children from their front yard without permission. Mrs. Gonzales called the police

176. See, e.g., id. (holding that grandparents could not be awarded visitation rights over the objection of the mother); Michael H. v. Gerald D., 491 U.S. 110 (1989) (holding that the biological mother and her husband could prevent visitations with the child's biological father); In re Baby Girl Clausen, 502 N.W.2d 649 (Mich. 1993) (holding that a biological father could gain custody of his daughter who had been placed with adoptive parents for over two years).

177. DeShaney, 489 U.S. at 203.

178. 545 U.S. 748 (2005).

^{173.} Cf. id. at 210 (Brennan, J., dissenting) ("Through its child-welfare program, in other words, the State of Wisconsin has relieved ordinary citizens and governmental bodies other than the Department [of Social Services] of any sense of obligation to do anything more than report their suspicions of child abuse to DSS.").

^{174.} Troxel v. Granville, 530 U.S. 57, 73 (2000).

^{175.} Id. at 68 ("[T]he [child's grandparents] did not allege, and no court has found, that [the child's mother] was an unfit parent. That aspect of the case is important, for there is a presumption that fit parents act in the best interests of their children.").

^{179.} Mrs. Gonzales had "applied for and [been] granted a restraining order from a Colorado trial judge, who found a risk of irreparable injury and found that physical or emotional harm would result if [her] husband were not excluded from the family home." *Id.* at 787 (Stevens, J., dissenting) (internal quotation marks omitted). Since the restraining order covered both Mrs. Gonzales and the children, see *id.*, it is extremely likely that Mr. Gonzales had abused all of them.

^{180.} Id. at 751-53 (majority opinion).

at 7:30 p.m. to have the protective order enforced.¹⁸¹ The police told Mrs. Gonzales to call back at 10:00 p.m. At about 8:30 p.m., Mrs. Gonzales discovered that her estranged husband had taken the children to an amusement park.¹⁸² She asked the police to recover the children. They refused and told her to call back at 10:00 p.m.¹⁸³ At 10:10 p.m., Mrs. Gonzales again asked for enforcement of the order. The police told her to call again at midnight. Mrs. Gonzales called the police again at midnight and again at 12:10 a.m. They told her they would send an officer out. They did not do so. At 12:50 a.m., she went to the police station and again asked for the protective order to be enforced. The police officer refused to pick up her husband and instead went to dinner.¹⁸⁴ Around 3:20 a.m., her estranged husband came to the police station and opened fire. He had killed the three children, who were found in the back seat of his car.¹⁸⁵

Mrs. Gonzales claimed that she had a property interest in the protective order, which triggered a procedural due process right to have the order enforced.¹⁸⁶ The Supreme Court rejected that argument and reasserted the reasoning of *DeShaney*.¹⁸⁷ Once again, the Court rejected a state duty to protect children from domestic violence. This time, however, its ruling was even more dangerous because it took the teeth out of state protective orders and authorized police officers to ignore them at will.

B. Changes in the Law Are Needed to Assure Community Accountability

Cases like *DeShaney* and *Castle Rock* demonstrate the three-prong failure of government to respond to child abuse: (1) government prohibits private actors from intervening, (2) but assumes no duty to intervene itself, and (3) refuses to be held accountable for its gross negligence when it does intervene. Legal changes should be made at the judicial, congressional, and state levels to actively combat abuse.

- 183. Castle Rock, 545 U.S. at 753.
- 184. Id. at 753-54.
- 185. Id. at 754.
- 186. Id.
- 187. Id. at 768.

^{181.} Id. at 753, 182. Id.

1. Courts Must Impose a Duty on the State to Exercise Reasonable Care to Protect Children from Suspected Abuse

First, courts must impose a duty on the state to exercise reasonable care to protect children from suspected abuse. The standard of care should be analogous to gross negligence. The state should not be held responsible for mere mistakes of judgment when a reasonable actor could not know the outcome. When the state has actual knowledge of ongoing abuse, however, it has a moral duty—and should have a legal duty—to take some protective action. Police and social workers should not be allowed to stand by passively while children are beaten into vegetative states or killed. Therefore, the state should be liable when state actors willfully or recklessly fail to act. Refusing to enforce a protective order should be considered a per se act of gross negligence unless the violation is so trivial that no possible harm could occur.

2. Congress Should Create a Federal Remedy for Violation of the Duty to Protect Children from Abuse

Second, federal law should be amended to create a remedy under 42 U.S.C. § 1983¹⁸⁸ for violation of the duty to protect children from abuse. A federal remedy is crucial for two reasons. First, states may be reluctant to enforce damage actions against themselves, so state remedies are likely to be ineffective. Children should not have to rely upon the states to police themselves. A private remedy that could be enforced in federal court would create an incentive for state compliance. Second, § 1983 remedies permit the recovery of attorney's fees, so that poor plaintiffs are not barred from recovery by the costs of a lawsuit.

There are three routes to creating a § 1983 remedy: (1) by reversing *DeShaney* and *Castle Rock* and acknowledging that children have an existing constitutional right to be protected from abuse; (2) by enacting legislation to give children a federal statutory right to protection; or (3) by amending the Constitution to provide children with an independent constitutional right to protection. The Supreme Court has shown little interest in the first option, and the Constitution is difficult to amend.

Although creating a federal statutory right seems the most feasible, such legislation needs to be carefully drafted. The first obstacle is sep-

^{188. 42} U.S.C. § 1983 (2000) (allowing injured parties to sue anyone, other than a judge acting in his judicial capacity, who violates their constitutional or federal statutory rights under color of state law).

aration of powers.¹⁸⁹ If the legislation appears to be a congressional attempt to overturn *DeShaney* and *Castle Rock*, then the Court is likely to invalidate it. Congress and the Supreme Court occasionally engage in a dialogue about the meaning of the Constitution, and frequently these differences can be overcome.¹⁹⁰

The second possible stumbling block is that § 1983 actions must rest on either a federal law or a constitutional violation. Currently, no federal statute applies. If a constitutional violation can be found, then no legislative action would be needed and remedies would not depend on fickle politics. The Court has already rejected both a substantive due process claim¹⁹¹ and a procedural due process claim.¹⁹²

VI. EQUALITY THEORIES

The most likely source for a constitutional violation may be an equal protection claim. Such a claim would have to rest on an innovative theory of equal protection. There are at least three different ways to define "equal" for purposes of the Equal Protection Clause: (1) formally equal, (2) substantively equal, and (3) hedonically equal.

A. Formally Equal: Identical

Formal equality demands equal treatment and defines "equal" to mean "identical." The goal is to treat identical individuals the same and different individuals differently. Formal equality can be contrasted to substantive equality, which defines "equal" to mean "having equivalent access to power." The goal of substantive equality is to remedy the subordination of those who are different. To illustrate the distinction, consider a sighted student and a blind student arriving to take an exam. According to principles of formal equality, it is sufficient if both students are given the same examination, bluebooks for answers, and pencils. Because they are treated identically, they have been treated equally, even though one is able to complete the exam and the other is not. If the blind student fails, it is not because he has

^{189.} U.S. CONST. art. VI; see also City of Boerne v. Flores, 521 U.S. 507, 536 (1997) (holding that the Supreme Court has the power to determine what constituted a constitutional violation and that congressional power to enforce civil rights laws under § 1983 did not include the right to change the effect of a prior Supreme Court ruling).

^{190.} See, e.g., Civil Rights Act of 1991, Pub. L. No. 102-166, 105 Stat. 1071 (codified at 42 U.S.C. § 1981 (2000) (strengthening employment discrimination protection after Wards Cove Packing Co. v. Atonio, 490 U.S. 642 (1989)); Jane Rutherford, The Myth of Due Process, 72 B.U. L. REv. 1, 22-23 (1992) (describing the interplay between Supreme Court decisions and congressional legislation on issues such as discrimination against women, abortion, and habeas corpus).

^{191.} DeShaney v. Winnebago County Dep't of Soc. Servs., 489 U.S. 189, 202 (1989).

^{192.} Castle Rock, 545 U.S. at 768.

been treated unequally, but because of "natural" differences between the students. To give the blind student an exam in Braille and a laptop is to extend "special" treatment.

Embedded in formal equality are two unarticulated sub-issues: (1) Identical to whom? and (2) Identical in what way? As Professor Martha Minow explains, one can only be different if one is different from some standard trait.¹⁹³ Thus, one is only short in comparison to the norm of a tall person, and a child is only different in comparison to an adult. Consequently, formal equality not only imposes an unstated norm, it also creates hierarchy. The unstated norm is the preferred state, and those who are "different" are implicitly less valuable. Hence, Professor Kenneth Karst argues that the label "different" necessarily carries a stigma.¹⁹⁴

Formal equality can never fully protect groups that are perceived as different. Individuals are only entitled to be treated the same if they share identical characteristics with those who embody the powerful norm. To the extent that individuals are different, they are unprotected. For example, the Supreme Court permitted pregnancy discrimination because women are different in that they can get pregnant.¹⁹⁵ In other words, the standard is presumed to be people who cannot become pregnant-generally, although not exclusively, men. Those who fit the norm acquire a kind of power, and the rules are designed to meet their needs. In fact, the more similar the plaintiff is to the norm, the less she needs protection at all. For example, single, childless women may be more similar to men and therefore may face less discrimination in the job market than mothers. If, however, the plaintiff varies from the norm, she is relatively powerless. The very factors that diminish her power-such as pregnancy-are likely to render her "different" and therefore unprotected. Formal equality cannot help those who are differently situated; it necessarily prefers those who are most similar to the presumed norm.

The Court has held that children are different from adults: they are more immature and vulnerable.¹⁹⁶ Because children are different, they have different rights. Ironically, this has been interpreted to

^{193.} MARTHA MINOW, MAKING ALL THE DIFFERENCE: INCLUSION, EXCLUSION, AND AMERI-CAN LAW 22 (1990) ("Difference, after all, is a comparative term. It implies a reference: different from whom?").

^{194.} Kenneth L. Karst, Why Equality Matters, 17 GA. L. REV. 245, 248-49 (1983).

^{195.} Geduldig v. Aiello, 417 U.S. 484, 496–97 (1974) (upholding a California law excluding pregnancy-related disabilities from the state's disability insurance plan).

^{196.} Roper v. Simmons, 543 U.S. 551, 569-70 (2005) (holding that minors are not subject to the death penalty because they are more susceptible to peer pressure than adults and have less control of their surroundings); Bellotti v. Baird, 443 U.S. 622, 634 (1979) (holding that children's

mean that the more vulnerable have fewer rights to protect them.¹⁹⁷ For example, juveniles do not have a right to a jury trial when they are accused of a crime.¹⁹⁸ Because the vulnerable are different from the strong, formal equality is unlikely to advance their interests. Children can never fully benefit from formal equality because they will always be different from adults.

B. Substantively Equal: Equal Power

The chief alternative to formal equality is substantive equality.¹⁹⁹ Substantive equality requires individualized treatment to ensure equal opportunity. While formal equality calls for identical treatment and does not allow for differences, substantive equality seeks to accommodate differences. In order to do so, it must take steps to equalize power. Recall the example of the blind student. In contrast to formal equality, substantive equality would not only permit the blind student to have a Braille exam and laptop; it would require such accommodations to assure the blind student had equal power to succeed. Thus, while formal equality concentrates on identical treatment, substantive equality concentrates on individualized treatment in order to equalize power. Power is at the core. Substantive equality is a remedy for subordination, not differential treatment.

rights are different from adults' rights because children are immature, vulnerable, and subject to parental control).

^{197.} Although some constitutional rights have been extended to juveniles, for example, *In re Gault*, 387 U.S. 1, 33–34, 41, 55, 57 (1967), children generally have diminished rights. *See, e.g.*, H.L. v. Matheson, 450 U.S. 398, 413 (1981) (upholding a parental notification requirement before adolescents can have an abortion); Parham v. J.R., 442 U.S. 584, 620 (1979) (permitting children to be committed to mental institutions without the same procedural protections as adults); McKeiver v. Pennsylvania, 403 U.S. 528, 545 (1971) (denying children accused of crimes the right to trial by jury); Prince v. Massachusetts, 321 U.S. 158, 168 (1944) (holding that "[1]he state's authority over children's activities is broader than over like actions of adults"); Moe v. Dinkins, 669 F.2d 67, 68 (2d Cir. 1982) (per curiam) (denying adolescents the right to marry). 198. *McKeiver*, 403 U.S. at 545.

^{199.} See, e.g., MINOW, supra note 193, at 19–48 (discussing the difficulty of deciding when it is necessary to legally acknowledge differences to overcome real discrimination and unique issues faced by certain groups, and when it is better to treat everyone "equally" in order to avoid perpetuating the perception of difference); Christine A. Littleton, *Reconstructing Sexual Equality*, 75 CAL. L. REV. 1279 (1987) (describing the greater value still placed on traditionally male activities and norms, leading to more favorable treatment of those who conform to that model); Catharine A. MacKinnon, *Reflections on Sex Equality Under Law*, 100 YALE L.J. 1281 (1991) (explaining the difference between formal and substantive equality in the context of issues such as reproduction and sexual assault); Rutherford, *supra* note 190, at 65–78 (explaining how societal hierarchy affects how equality and the Interpretive Turn, 66 CHI.-KENT L. REV. 451, 469 (1990) ("The substantive meaning of equality, or of equal protection, is that legislators must use law to insure that no social group, such as whites or men, wrongfully subordinates another social group, such as blacks or women.").

Empowerment is the primary way to achieve substantive equality. On rare occasions, the Court has applied this approach. For example, the Court held that Southern communities could not evade the demands for equal integrated schools for African-Americans simply by closing the public schools.²⁰⁰ In theory, closing schools treated all racial groups identically. But it left African-American students where they were before—excluded from quality education and integrated classrooms. In that case, the Court recognized that only by empowering blacks to attend integrated schools could equality be achieved.²⁰¹

While formal equality focuses on equal treatment, substantive equality focuses on empowerment. Empowerment, however, is not a realistic goal for children. There was really no way to make Joshua DeShaney, a mere toddler, powerful enough to protect himself. Hence, substantive equality is also insufficient.

C. Hedonically Equal: Equal Pain and Pleasure

Rather than focusing on identical treatment or empowerment, hedonic equality focuses on a legal accounting of each individual's experience of pain or pleasure. The hedonic approach has been used by groups as diverse as personal injury lawyers seeking damages for pain and suffering and feminists who attack structural preferences for male pleasure or female pain. Hedonic theorists criticize legal rules that fail to account for the costs of suffering and the rewards of pleasure.

Pain and pleasure must be measured in context, because some individuals or groups feel pain or pleasure more than others. For example, infants have not developed calloused skin, so they are much more sensitive to heat, cold, and pain than adults. Thus, if a baby and an adult both have scalding water spilled on them, the infant will feel much more pain. Arguably, an infant should get more compensation for the greater pain it suffers if it is burned. Implicit in such arguments is a notion of equality. If the infant suffers more, but is treated the same as one who suffers less, the infant has been treated unequally. Hedonic theory requires that the personal experiences of pain and pleasure be valued proportionally.

Legal rules tend to misallocate the remedies for pain. The law undervalues the pain and pleasure experienced in everyday relationships. Accordingly, cases often characterize these settings as "private" and not subject to demands for equal treatment. Slavery, for example, occurred in private settings: the homes, workplaces, and churches of

^{200.} Griffin v. County Sch. Bd., 377 U.S. 218, 232 (1964).

^{201.} Id.

individual citizens. Slaves were not owned by the state but by individual people. They were beaten, bought, sold, separated from loved ones, and regularly subjected to rape in private settings. Society went to great lengths to make their suffering invisible. This entire scheme is dependent on defining many spheres of human activity as private, separate from the polity, and hence not subject to equality demands. As Jacobus tenBroek explains, "The equal protection of the laws is violated fully as much, perhaps even more, by private invasions made possible through failure of government to act as by discriminatory laws and officials."²⁰²

This is precisely what the Court did in *DeShaney* when it claimed that the state had no duty to protect Joshua from the actions of a private actor. This view arises from a crabbed reading of the state action requirement of the Fourteenth Amendment. Specifically, the Court draws an artificial distinction between acts of commission and acts of omission. So a police officer cannot beat a child, but he can stand by and watch while someone else does. This distinction between negative rights (which protect us from government action) and positive rights (which entitle us to government protection) has been soundly criticized in the scholarly literature.²⁰³

Indeed, the history of the Fourteenth Amendment reveals that the framers were quite concerned that private action could undermine emancipation. They worried that new employment practices and con-

^{202.} JACOBUS TENBROEK, EQUAL UNDER LAW 119 (rev. ed. 1965). For a similar argument that constitutional values should be protected from private incursions, see generally Erwin Chemerinsky, Rethinking State Action, 80 Nw. U. L. REV. 503 (1985) and Robin West, Toward an Abolitionist Interpretation of the Fourteenth Amendment, 94 W. VA. L. REV. 111, 129 (1991). Others have argued for dispensing with the requirement of state action. See, e.g., Charles L. Black, Jr., Foreword: "State Action," Equal Protection, and California's Proposition 14, 81 HARV. L. REV. 69 (1967) (arguing that discarding the state action doctrine is necessary to eliminate racial discrimination); Harold W. Horowitz, The Misleading Search for "State Action" Under the Fourteenth Amendment, 30 S. CAL. L. REV. 208 (1957) (arguing that there is state action in enforcing any legal relationship between people, and therefore there is no real distinction between "state action" and the actions of private persons whose power to discriminate is enforced by the state); Harold W. Horowitz & Kenneth L. Karst, The Proposition Fourteen Cases: Justice in Search of a Justification, 14 UCLA L. REV. 37 (1966) (arguing for a broader and more coherent understanding of state action); Kenneth L. Karst & Harold W. Horowitz, Reitman v. Mulkey: A Telophase of Substantive Equal Protection, 1967 SUP. CT. REV. 39 (approving of the Supreme Court's decision in Reitman v. Mulkey, 387 U.S. 369 (1967), because it was a step in the direction of recognizing substantive equal protection).

^{203.} See, e.g., Susan Bandes, The Negative Constitution: A Critique, 88 MICH. L. REV. 2271 (1990) (explaining the traditional distinction between positive and negative rights, and refuting arguments that have been used to support such a distinction); Steven J. Heyman, The First Duty of Government: Protection, Liberty, and the Fourteenth Amendment, 41 DUKE L.J. 507 (1991) (arguing that the Fourteenth Amendment encompasses the affirmative right to protection of fundamental rights).

tracts would simply mimic slavery under another name. Had the framers merely wanted to prohibit state bias, the amendment could simply have read that "No State shall discriminate" The very choice of the word "protection" implies a state duty to protect individuals from private actors. As Robin West explains, "[A]s noble or central as the ideal of formal justice may be, the Fourteenth Amendment does not speak of equal justice; it speaks of equal protection."²⁰⁴

VII. APPLYING PRINCIPLES OF HEDONIC EQUALITY

The history of the Equal Protection Clause demonstrates that its purpose is to protect vulnerable populations (like former slaves) from state actions that place them at risk. The state acts to place abused children at risk by both interfering with private rescue and refusing public assistance. Applying hedonic equality would require the state to take affirmative steps to protect vulnerable individuals from private endangerment.

A. Creating a § 1983 Action to Permit Federal Claims Against State Agencies

Just as a § 1983 action would lie against a sheriff who refuses to interfere in a lynching, it should lie against police officers, social agencies, and other actors who willfully refuse to take steps to protect abused children.

Federal statutes creating a § 1983 action must be very specific to grant individuals standing to sue. Other federal statutes designed to benefit abused and neglected children have been thwarted by the reluctance of courts to imply private causes of action. Consider, for example, *Suter v. Artist M.*²⁰⁵ There, Congress had funded state programs that provided services to abused and neglected children. The legislation sought to control the quality of the programs funded with a series of regulations that Illinois allegedly ignored.²⁰⁶ Children were abandoned in the system without caseworkers for months at a time.²⁰⁷ Furthermore, children entered the system and were never assigned a social worker. The Supreme Court ruled that the families who sued had no right to enforce the federal quality regulations. Therefore, the families had no remedy, and the only available enforcement tool was for the federal government to deny the state funds for

^{204.} West, supra note 202, at 126.

^{205. 503} U.S. 347 (1992).

^{206.} Id. at 351-52.

^{207.} Brief of Respondents, Suter, 503 U.S. 347 (No. 90-1488), 1991 WL 521632.

its programs. Since the federal government was not actually going to carry out that threat, the result was to leave states completely unaccountable for the inefficiency of their child service systems. Federal legislation is thus necessary to repair this deficit in state responsibility left by these Supreme Court decisions.

B. States Must Create Additional Remedies Against State Actors Who Fail to Protect Children, and They Must Authorize Certain Private Actors to Intervene on Behalf of Abused Children

Additional state legislation is also necessary. States should authorize tort claims against state actors who are grossly negligent in protecting children from abuse. Moreover, state agencies should discipline employees who fail to take their duty to protect children seriously, and legislators should create remedies enforceable against officers and others who fail to enforce protective orders. It may be necessary for states to create a private right for some limited class of individuals to remove and treat children who are victims of abuse. State legislatures can debate the scope of such a right. Perhaps medical personnel or extended family members should be given the right to petition for temporary or permanent custody. Perhaps even strangers should be authorized to intervene when a situation threatens grave bodily injury or death.

C. Changes in Government Policies and Budgetary Priorities Are Needed to Ensure Community Accountability

In addition to legislative solutions, several policy changes are essential. States and communities should mount extensive campaigns to educate the public to intervene, albeit politely, when they see abuse.²⁰⁸ Most individuals have witnessed a child being abused in a store or on public transportation, yet few intervene. Well-meaning members of the public are often reluctant to say anything out of fear of later retaliation against the child. Others may be afraid for their own safety. Yet a show of concern from a stranger can have a powerful effect on a child. A former student of mine, who was abused as a child, said that she always blamed herself for the abuse and assumed it was normal until the day a stranger in a grocery store confronted her abusive fa-

^{208.} One way to intervene is to simply defuse the situation without condemning the actions of the parent. One child development expert suggests that strangers should try to empathize with the frazzled parents who are using too much force by saying something sympathetic like, "Shopping at this time of night is always trying." The comment deflects attention from the child, while trying to soothe the parent. Conversation with Sarah Patton, Prof. Early Childhood Development, Coll. of DuPage.

ther. The student claimed that the confrontation changed her life. It let her know that it was wrong for her father to beat her, that others cared, and that she should not blame herself.

Communities should also work to educate parents about the horrendous effects violence has on children. Many parents were raised in angry, abusive homes and have simply mimicked their own parents' behaviors. Specific and thoughtfully presented education about alternative forms of discipline and the consequences of abuse can help spread better parenting methods.

Most importantly, government at all levels must invest more effort and money in treating abused children. Simply placing such children in foster homes or giving their parents anger management classes is not sufficient. These children's immature brains can be saved from another generation of abuse if effective mental health systems have the resources to devote appropriate attention to their needs.

VI. CONCLUSION

Biology and the environment engage in a complicated dance that shapes the way children grow. As they develop, adolescents are caught up in the steps of the dance. To change their behavior, society must do more than merely remove them from the dance floor from time to time.

As a community, Americans must take the responsibility to change both the law and the culture that permits children to be brutalized. Specifically, the following changes should be made:

- 1. Recognize that children have a constitutional right to be safe.
- 2. Acknowledge that the government has a duty to protect children.
- 3. Create a § 1983 action to permit federal claims against state agencies that are grossly negligent in protecting children.
- 4. Provide private parties with standing to enforce legislation designed to protect children.
- 5. Create tort claims against state actors who are grossly negligent in protecting children.
- 6. Create a right for limited classes of private individuals to intervene in cases of abuse and domestic violence.
- 7. Require all states to provide welfare services to all children regardless of age or prior history of delinquency.

New government policies must also help change the culture of abuse:

- 1. Invest more resources in child protection, intervention, rehabilitation, and parent education.
- 2. Mount a campaign to educate the public on the consequences of abuse and violence.

3. Mount a campaign to educate the public on how to intervene effectively when they see abuse.

Neuroscience and behavioral genetics can reveal a great deal about how individuals develop, but they cannot provide magic solutions for social ills. Only a genuine communal commitment to improving the lives and environments of children can save the community from the consequences of early exposure to violence.