

Juvenile Justice at a Crossroads: Science, Evidence, and Twenty-First Century Reform

Author(s): Laura S. Abrams

Source: *Social Service Review*, Vol. 87, No. 4 (December 2013), pp. 725-752

Published by: The University of Chicago Press

Stable URL: <https://www.jstor.org/stable/10.1086/674074>

---

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



The University of Chicago Press is collaborating with JSTOR to digitize, preserve and extend access to *Social Service Review*

JSTOR

# Juvenile Justice at a Crossroads: Science, Evidence, and Twenty-First Century Reform

LAURA S. ABRAMS

*University of California, Los Angeles*

**ABSTRACT** Over a century after its founding, the juvenile justice system sits at an important historical juncture. Mounting concern that the juvenile justice system has strayed from its mission of rehabilitation has catalyzed a vocal campaign for large-scale policy reforms. The current reform movement invokes an abundance of scientific discourses, including neuroscience and evidence-based practice, to situate their arguments for a more humane, cost-effective, and youth-specific system. This article situates the contemporary discussion concerning juvenile justice reform in relation to the historical uses of science in debates concerning the optimal way to contend with youth crime. The author suggests that social workers ought to play a more visible role in decisions concerning juvenile justice law, policy, and practice, given the ethical dilemmas involved in these new scientific discourses and the important changes likely to emerge from the current systems change movement.

Over a century after the matriarchs of professional social work established the first official US juvenile court in Cook County, Illinois, the juvenile justice system sits at an important historical crossroads. Major federal and state legislative reforms during the 1980s and 1990s dramatically increased the overall prison population and eased the process of classifying juveniles as adults, leading to a sharp increase in the number of young people sentenced to juvenile correctional facilities and adult prisons (Shook and Sarri 2008). These changes gradually chipped away at the underlying premise of the juvenile justice system, that young people are fundamentally different from adults and developmentally amenable to rehabilitation. Moreover, mounting concern that juvenile detention and incarceration are overused and ineffective (Mendel 2011); reports of abuse, violence, and substandard care in correctional facilities housing minors (Ziedenberg and Schiraldi

*Social Service Review* (December 2013). © 2013 by The University of Chicago. All rights reserved. 0037-7961/2013/8704-0003\$10.00

1997; Vera Institute of Justice 2009); the disproportionate involvement of children of color and poor children at all stages of juvenile justice processing (Armour and Hammond 2009); high rates of recidivism (Mendel 2011); and the high costs of confinement have all contributed to a heightened perception that the juvenile justice system is in dire need of far-reaching reforms.

From a historical purview, this is not the first major crossroads in juvenile justice reform, nor will it likely be the last. As policy makers and scholars are continuing to grapple with fundamental questions surrounding the causes and remedies for juvenile delinquency, medical and social scientific discourses are influencing the larger conversations surrounding juvenile justice reform. In particular, advocacy groups and professional organizations draw upon burgeoning neuroscience research concerning the structure and function of the younger person's brain and on a body of social science research on evidence-based practices to support the argument for restoration of the original mission of the juvenile justice system: one that uniquely offers youth, who are structurally and functionally different from adults, the opportunity for rehabilitation. These discourses exert a major influence on policy, as evidenced by three recent US Supreme Court decisions regarding the constitutionality of adult sentences for juveniles convicted of capital crimes, as well as policy changes occurring in states and municipalities that reverse or scale back statutes to transfer or waive minors to the adult system.

In the 1980s and 1990s, the public was persuaded to support an increase in the rate of incarceration and "adult time for adult crime" (Deitch et al. 2009, 12) as a panacea for rising rates of violent crime. Now, as this relatively new science is used to influence policy, it is important to consider whether or not the current trends in juvenile justice reform represent a meaningful opportunity for reform or perhaps another wave of potentially reactionary policy. In this article, I draw upon the system's history as well as recent legal and scientific developments to examine critically current developments in juvenile justice reform and to draw some particular implications for the profession of social work. Over the past century, social work has strayed from the system that it designed, abandoning juvenile justice largely to the domain of law enforcement (Peters 2011). Yet, given the current call for broad-based changes that emphasize children's rights, ethics, racial justice, and empirically valid treatment strategies, this article suggests that it is time for social workers to take a more influential role in conversations about the future of this important social welfare system.

## HISTORICAL DEBATES IN JUVENILE JUSTICE

When the juvenile justice system was fashioned in the earlier part of the US Progressive Era (1890–1920), its founders considered it to be a landmark child-saving victory, one that would address the unique needs of young people who were straying from a moral path. As part of the larger child-saving reforms of the era, social reformers and social workers were involved in developing a system—from specialized courts to designated reform institutions—to handle the often complicated cases of child delinquency and dependency (Platt 1969; Mason 1994; Tanenhaus 2004). In the social reformers' view, a separate system of juvenile justice represented great progress compared to the traditional treatment of delinquent youth in the adult criminal justice system or by arbitrary community standards (Platt 1969). By 1928, all US states followed the trend established in Illinois to devise their own systems of juvenile justice, which were often governed by widely variant and experimental rules and regulations (Lou 1927).

As several historical texts detail (Coffey 1975; Krisberg and Austin 1993; Tanenhaus 2004; Elrod and Ryder 2011), the juvenile justice system underwent a series of major changes that shaped the course of its policies and practices over its century of operation. Rather than reiterating this chronological history, this discussion will focus on three major tensions: etiology, diversion, and rehabilitation. These three central themes form a foundation for understanding the current crossroads in juvenile justice and the role of medical and social science in the current movement toward broad-based policy and practice reforms.

## ETIOLOGY

In the Progressive Era, the prevailing belief among the founders of the juvenile justice system was that a newly identified group of young people, coined “adolescents” (Hall 1904), had less well-developed reasoning, maturity, and impulse control compared to adults. According to this logic, young people could not be considered fully responsible for their actions because their aberrant or delinquent behaviors stemmed from larger systems of influence, such as family problems, community conditions, and material deprivation. This view is congruent with other child-saving reforms of the era, such as restrictions on child labor and compulsory schooling, all of which aimed to demarcate childhood and adolescence through new institutions

and legal mandates (Platt 1969). An ecological view of juvenile delinquency undergirded the formation of the juvenile justice system and its multiple legal and institutional components, as social reformers believed that young people who were subject to these destructive outside influences should be afforded the opportunity for rehabilitation in a system designed to meet their unique developmental needs.

Evidence for this ecological view is evident in Sophonisba Breckenridge's and Grace Abbot's book *The Delinquent Child and the Home* (1912), a landmark study of over 14,000 cases that came before the Cook County juvenile court in its first 10 years of operation (1899–1909). In this text, the authors systematically examine home conditions and additional ecological correlates of delinquency. They repeatedly point to evidence of environmental influences on deviant behavior, with particular attention to home life, parental supervision, troubled family members and siblings, and home overcrowding, as well as neighborhood factors such as the absence of playgrounds, poor-quality schools, and overall neighborhood blight. With its focus on these family and community factors, the authors provide an ecological perspective on the root causes of delinquency.

Posing a challenge to the ecological perspective, the medical model composes another main historical thread for understanding the etiology of juvenile delinquency. The medical model assumes that deviant thinking and antisocial activity stem from an inherited defect of character. In the early years of the juvenile justice system and in the wake of the popular European and American eugenics movements, prominent medical professionals sought to locate a biological basis for delinquency, conducting studies of intelligence, personality, and other traits that they believed to account for antisocial activity in young people. Most notorious among these physicians was William Healy of Chicago, who founded the Juvenile Psychopathic Institute of Chicago. Paralleling European researchers, Healy examined physical factors, such as body size measurements, birth weight, and other components of youths' medical histories in order to locate a genetic basis of delinquency. Not finding these endeavors to be fruitful, Healy later turned to other aspects of individuals, conducting tests on intelligence and personality (Richardson 1989).

The fledging medical model eventually departed from its quest to locate a genetic basis of delinquency and became more aligned with advances in psychiatry and, later, psychology. A resulting treatment model for individuals, paralleling a view of adult criminals, considered juvenile delinquency

to be symptomatic of deeper individual problems and internal conflicts that would become progressively worse if left untreated (Shoemaker 2009). Accordingly, insight-oriented therapies emerged as the dominant strategy to treat youth who were placed on probation or in the care of the juvenile corrections system. In practice, this meant that work with juvenile probationers became focused on presumably malleable defects of individual psychological composition rather than inherited, or potentially unalterable, biological traits (Krisberg and Austin 1993).

While the ecological perspective has dominated the social science paradigm on juvenile delinquency, the medical model arguably has played a more influential role in shaping practices within the juvenile justice system, and in particular, approaches to the rehabilitation of the youth within its care (Krisberg and Austin 1993). In the science of curing delinquency, an array of interventions—from those that are psychodynamic to those that are strictly behavioral—have been tested and tried, but most have remained at the individual level rather than focusing on the family, the neighborhood, or the surrounding environment (Abrams and Snyder 2010). As this article will later discuss, the twenty-first-century language of juvenile justice reform fits neatly into this historical thread of medical discourse.

#### DIVERSION

Another major historical dispute within the juvenile justice system involves diversion programs, practices that attempt to steer youth away from the juvenile justice system altogether. Diversion programs are based on the assumption that involvement in the juvenile justice system may do more harm than good because treating and hence labeling young people as criminals will likely make them behave as such. Although diversion was not an entirely novel idea within the philosophy or practices of the juvenile justice system, the idea gained traction in the 1960s and early 1970s, a time period that witnessed rising delinquency rates, a movement toward deinstitutionalization of mental health patients and other institutionalized populations, and national attention to civil rights issues, including those of children (Zimring 2000). A refashioned examination of children's rights contributed to key Supreme Court decisions that invoked minors' due process rights in juvenile delinquency proceedings (e.g., *In re Gault*, 387 U.S. 1 [1967]; *In re Winship*, 397 U.S. 358 [1970]). Removing the risk of arbitrary judicial discretion, these decisions granted accused minors entitlement to legal

protections, such as the rights to receive notice of the charges, to obtain counsel, to confrontation and cross-examination, and to exercise the privilege against self-incrimination.

The implementation of diversion programs was one component of this renewed emphasis on children's rights. Finding that the juvenile justice system largely failed to rehabilitate the youth in its care, the President's Commission on Law Enforcement and the Administration of Justice (1967) called for the implementation of youth services bureaus in local communities. These bureaus launched a host of programs geared toward diverting youth, particularly lower-level and first-time offenders, away from the juvenile court and into community-based programs (Krisberg and Austin 1993). Moreover, the landmark Juvenile Justice and Delinquency Prevention Act of 1974 promoted both deinstitutionalization and diversion, particularly for lower-level offenders. Among other provisions, this act mandated that status offenders be excluded from sentences leading to institutionalization and made even more funds available for community-based programs (Raley 1995).

Although diversion programs appealed to the common political sentiments of the era, controversy soon arose about their value. Using social scientific evidence and meta-analysis techniques, critics charged these well-funded programs with a great deal of ambiguity, both in the very definition of diversion as well as in the target population. For example, criminologist Malcolm Klein's (1979) review of 200 articles and reports finds the major diversion programs to lack comprehensive evaluation, to have unclear and inconsistent rationale for client selection, and to be uncertain of what diversion from the system truly means. His review suggests that most diversion programs reached many who were not headed for the deeper ends of the justice system to begin with (e.g., status offenders or voluntary clients), thus becoming prevention rather than actual diversion programs (Klein 1979). He also argues that diversion programs did not avert labeling youth as delinquent or criminal but, on the contrary, widened the net of those who came into contact with the justice system. Scholars attributed this problem to the facts that diversion programs often took voluntary clients and that youth who may not have received any court sanctions at all were monitored more closely for compliance with the diversion requirements than they would have otherwise been (Blomberg 1983).

Klein's viewpoint raised a degree of controversy about diversion programs, particularly surrounding the programs that Klein reviewed, which

his critics claimed had not yet been well evaluated or had time to evolve fully (Klein 1979). However, his opinion was at least partially validated when, a decade later, John Whitehead and Steven Lab's (1989) meta-analysis of 50 experimentally researched diversion programs showed minimal evidence of effectiveness and that in some programs, system-diverted youth had higher recidivism rates than those who did not participate in the diversion program. Moreover, another meta-analysis of 44 juvenile diversion studies at the time found that a majority of the reportedly diverted youth were actually involved in the court system, contrary to the main goal of avoiding labeling (Gensheimer et al. 1986). In these debates, social science, in the form of experimental methods, systematic review, and meta-analysis, played a prominent role. Without evidence of effectiveness, diversion programs gradually lost favor in and funding from the government, and gradual dissatisfaction with diversion as an effective model of juvenile justice practice paved the way for various punitive and institutional approaches to take root.

#### REHABILITATION

Throughout the past century of paradigm shifts in juvenile justice, attention to rehabilitation has existed uneasily alongside the goal of punishment. This balancing act has vacillated widely according to prevailing theory, science, and political climate, as has the interpretation and implementation of rehabilitation, which has ranged from allowing judges to remove youth from their homes for long periods of time to offering juvenile probationers the opportunity to give back to the community through activities such as community service. For youth sentenced to out-of-home placement, interventions have ranged from family-style dormitories with a focus on moral guidance, such as those initiated even prior to the Progressive Era (Platt 1969; Brenzel 1975), to institutions resembling army or wilderness boot camps (Greenwood 2005).

The most dramatic swing toward the punitive end of this spectrum occurred in the 1980s in tandem with America's declared war on drugs, during which time there was heightened public panic over violence, crime, drugs, and gangs. Part of this fear was fueled by an actual increase in juvenile and adult violent crime rates, as well as the burgeoning epidemic of street drugs, such as crack cocaine (Krisberg and Austin 1993). In the 1980s, President Ronald Regan ramped up America's war on drugs through both



international and domestic law enforcement efforts. Most relevant to this discussion was the initiation of stringent federal and state sentencing reforms for the possession and sale of illicit drugs. These sentencing reforms were largely responsible for the tripling of the national prison population between 1987 and 2007, which disproportionately affected African American men (Pew Center on the States 2008).

Although both adult and juvenile violent crime rates also increased in the 1980s, statisticians and the media paid disproportionate attention to violent crime among youth. Political scientist John Delilio (1995) helped fuel the public fear of the younger generation by coining the term “superpredators” to describe urban young men who were morally vacant and lacking “impulse control or empathy” (23). The public sentiment against urban young men was reinforced by extremely negative media portrayals of youth gang culture. With the growing pressure to crack down on the “superpredators” and a declared war on those who sold drugs and join gangs, federal and state governments enacted a number of policy measures designed to provide harsh sentences for youth offenders that would take them off the streets and deter them from committing crimes.

These efforts focused on easing the process of transferring minors to the adult criminal justice system, a tactic otherwise known as “adult time for adult crime” (Deitch et al. 2009, 12). Although the option of transferring juveniles to the adult system has always existed by law, before the 1980s the actual transfer of juveniles to the criminal court was fairly limited (Tanenhaus 2004). During the 1980s and 1990s, every US state modified its juvenile statutes to make it easier to transfer juveniles to criminal court. These policy reforms lowered the minimum age at which a juvenile could be treated as an adult, expanded the offenses for which a juvenile could be treated as an adult, required that more attention be paid to the offense rather than the other characteristics of the juvenile, and shifted power from judges to prosecutors to make the decision regarding whether a juvenile should be tried as an adult (Scott and Steinberg 2008b). Whereas judges had traditionally decided whether to transfer a juvenile to adult court, a major component of these legislative changes either excluded categories of youth, often based on age and offense, from the juvenile court (statutory exclusion) or provided concurrent jurisdiction to both the juvenile justice and criminal justice systems and allowed the prosecutor to decide where to file the case (prosecutorial discretion). These provisions were enacted under the rationale that judges often blocked the transfer of

juveniles to adult court. Although only a small number of states had used these provisions prior to the 1980s, by the year 2000, 28 states passed statutory exclusion provisions and 15 had prosecutorial discretion provisions. Moreover, 34 US states passed laws dictating that once a youth had been waived to an adult court, any subsequent cases for that individual would automatically be transferred to the adult system (Sickmund 2003).

Other policy changes during this time period allowed the juvenile justice system to more closely resemble the adult criminal justice system. For example, some states permitted opening juvenile proceedings and records to the public (Scott and Steinberg 2008a). While historically the juvenile court had sought to keep proceedings closed and records sealed in order to protect the privacy of juveniles, the opening of proceedings and records represented a shift in the public view toward the precedence of public safety considerations over the protection of young people (Krisberg and Austin 1993). Juvenile detention and correctional facilities also gradually began to resemble the more punitive, rank-and-file orientation of adult jails and prisons (Krisberg 2006). Although the harsh conditions and punitive aspect of juvenile facilities were not novel, the more overwhelming emphasis on punishment in juvenile facilities represented a dramatic shift from the historical tenor of morally-focused reformatories.

Currently, the uneasy coupling of punitive and rehabilitative aspects of the juvenile justice system is seen most acutely in youth correctional institutions, which often try to blend aspects of residential group homes with the rank and file mentality, physical structure, and punitive orientation of adult penal facilities. Many scholars find that the tensions arising between these goals compromise the opportunity for youth to authentically engage in treatment programs (Abrams and Anderson-Nathe 2012; Cox 2012), as well as complicate the ability of probation officers to carry out their own functions as both law enforcement officers and supportive counselors (Inderbitzen 2007). Nevertheless, the institutions that confine youth offenders are still bound by these conflicting goals, leading some to question whether youth can truly be rehabilitated under the current structure (Abrams and Anderson-Nathe 2012).

### **THE CURRENT CROSSROADS IN JUVENILE JUSTICE**

After more than a century of juvenile justice policy and practice, there are no clear-cut answers to the age-old questions surrounding the causes and

remedies for juvenile delinquency. However, mounting evidence of systems failures has renewed the call for a model of juvenile justice that hearkens back to the one that the system's matriarchs originally envisioned. Since the turn of the twenty-first century, children's advocacy groups, professional organizations, and liberal activists have made great strides toward reinstituting a system of justice that is separate from that of adults. They endeavor to keep the majority of young offenders diverted from the deeper ends of the system, to challenge racial injustices and other forms of discrimination within the system, and to provide comprehensive and high-quality care for young people whose crimes warrant more intensive intervention.

Much of the call for reform is fueled not only by a basic humanitarian concern for children's rights but also by the recent fiscal crisis. The war on drugs and the ensuing growth of the prison population in the 1980s and 1990s resulted in an unsustainable economic drain on public funds. Fiscal conservatives and bipartisan coalitions have joined the call for a reduction in the use of incarceration. A number of advocacy groups and policy organizations have argued that lower-level offenders, and juveniles in particular, should be served by community-based alternatives to detention or incarceration that make better financial sense (DeFoor 2009; Levin 2010). Recent closures of large state juvenile correctional facilities in states such as Illinois, California, Texas, and New York reflect the growing sentiment among policy makers and the general public that the need to reduce spending necessitates major criminal justice reforms (Justice Policy Institute 2009; Public Opinion Strategies and Mellman Group 2012).

Currently the number of youth in the correctional system is at a 35-year low, likely due to a blend of policy shifts, facility closures, and historically low juvenile crime rates (Annie E. Casey Foundation 2013). Among all minors who have contact with the juvenile justice system, the vast majority of cases are ordered to probation sentence or are diverted from the system altogether. For example, in 2009, the US juvenile court processed 1,504,144 cases. For those convicted, 8.9 percent were given out-of-home placement (correctional facilities or group homes), and the remainder were either placed on probation (36 percent), released (32.3 percent), waived (.5 percent), or other (22.3 percent)—meaning orders to community restitution, services, or other diversion alternatives (Sickmund, Sladky, and Kang 2013).

Diversion programs are still subject to criticism with respect to program effectiveness and consistency. For example, programs can range widely with regard to when the diversion phase begins and whether or not the

case even arrives at a formal processing stage. Moreover, the effectiveness of a given diversion program rests on its ability to assess the problems that a given youth may be experiencing and then to provide or coordinate the appropriate services for these needs outside of the formal processing of the juvenile justice system. Yet the absence of a standard implementation format, target population, or intervention strategy makes diversion programs very difficult to measure and assess (Hamilton et al. 2007). Some scholars argue that high-quality diversion programs applied to the right population of youth can indeed prevent future delinquency (Greenwood 2008). However, the most recent meta-analysis finds that the type of diversion program makes little difference in relation to known individual risk factors for reoffending, such as race and gender (Sullivan and LaTessa 2011). Moreover, Mark Lipsey (2009) also finds that, after controlling for other risk factors, the level of supervision assigned to juvenile offenders (i.e., diversion or probation services) makes no difference in recidivism risk. Hence, the efficacy of diversion programs and standard probation services in reducing future criminal justice involvement still rests in a gray area.

For the relatively small population of young people who are incarcerated, the failures of the juvenile justice system are very clearly documented. Juvenile incarceration costs on average nearly six times the amount for adult incarceration (Pew Center on the States 2008), yet research consistently finds that the majority of young people who spend time in correctional facilities will experience new arrests, convictions, or stints of incarceration in the juvenile system or enter the adult penal system within a few years of their release. While few states track long-term recidivism rates, the available evidence is troubling. For example, a longitudinal study of nearly 2,500 juvenile offenders who served time in a juvenile correctional facility in the state of Texas finds rearrest rates as high as 85 percent over a 5-year period (Trulson et al. 2005). Similarly the California Department of Corrections and Rehabilitation (2010) finds that 82 percent of youth paroled from its state institutions in 2006 were rearrested within 3 years of release. Examining rates of new convictions is a more conservative recidivism measure, since many arrests do not result in substantiated convictions. Using reconviction data, eight states (Arkansas, Florida, Georgia, Kentucky, Maryland, North Dakota, Oklahoma, and Virginia) report an average 12-month recidivism rate of 33 percent among formerly incarcerated youth, accounting for both juvenile and adult system dispositions (Snyder and Sickmund 2006). These available figures, however, are not

current and do not include the four states with the largest juvenile justice systems: California, Texas, Florida, and New York.

Even though available recidivism rates are outdated and inconsistent, advocates, in response to what is perceived to be high costs and poor outcomes associated with this system, argue that juvenile justice policies and practices have strayed so far from their original mission of rehabilitation that these institutions end up doing more harm than good. Several public cases involving gross abuse and misuse of the system have rallied increasing public support for this perspective. For example, in response to evidence of excessive force by staff, New York State Governor David Patterson appointed a task force of experts to conduct a thorough review of state-run juvenile correctional facilities. The report documents an absence of adequate mental health, health, or appropriate educational services, and it concludes that youth are unjustly subject to violence, substandard living conditions, and harsh practices such as shackling and restraints (Vera Institute of Justice 2009). The case of New York State is not isolated, as scores of investigations of state- and county-run juvenile detention and correctional facilities report similar findings. The list of lawsuits resulting from these investigations is quite extensive, and settlements are costly. In response, advocates are pushing to close these large facilities and to invest in less expensive, community-based alternatives such as counseling, work, and restorative justice programs that aim to keep more youth in their communities (Mendel 2011).

Lending further weight to the argument for major reform, research suggests that trying and sentencing youth as adults produces a plethora of negative outcomes (Scott and Steinberg 2008a). In regard to public safety, empirical studies find that youth who are transferred to the adult system are more likely to commit further and more serious crimes than equivalent groups of offenders who remain under juvenile court jurisdiction (Bishop et al. 1996; Fagan 1996; Redding 2003). Moreover, research has suggested that young people are needlessly harmed by their experiences in adult jails and prisons as they are highly susceptible to abuse, rape, and violent victimization by older inmates and correctional staff (Forst, Fagan, and Vivona 1989; Ziedenberg and Schiraldi 1997; Deitch et al. 2009).

In sum, there is robust evidence of multiple problems permeating the contemporary juvenile justice system. From inadequacies involved in determining who will most benefit from diversion and community-based programs to abuses occurring in costly and ineffective correctional facilities,

the juvenile justice system has become a focal point of concern among critics from all sides of the political spectrum, particularly from a children's advocacy perspective. In the call for a return to a sensible and effective system of juvenile justice, science is once again invoked in arguments for system reform.

#### **CONTEMPORARY DISCOURSES: NEUROSCIENCE AND EVIDENCE-BASED PRACTICES**

Children's advocates increasingly rely on emerging research on cognitive reasoning and brain development to validate their call for a return to a system of justice that meets the unique physiological, emotional, and developmental needs of young people. In the latter part of the 1990s, the John D. and Catherine T. MacArthur Foundation sponsored a series of studies concerning the age of cognitive maturity. Countering the prevailing belief that brain development is effectively completed by age 16, these studies suggest that higher-order cognitive functions, such as reasoning, impulse control, and the ability to resist peer pressure, continue to develop well past the age of 16 and into adulthood (Grisso et al. 2003; MacArthur Foundation Research Network on Adolescent Development and Juvenile Justice 2006). Advocates have used this research to provide a more concrete scientific basis (as opposed to a purely humanitarian one) and to argue that young people are deserving of a separate system of justice.

In tandem with this research on cognitive development, a series of brain-imaging studies find that components of younger brains are both structurally and functionally different than those of older brains (Giedd et al. 1999; Sowell et al. 2001; Gogtay et al. 2004). According to this research, the brain continues to develop throughout adolescence and into early adulthood, particularly in the prefrontal cortex, which is located in the frontal lobe and is associated with control of executive functions. These executive functions refer to higher-order cognitive processes that include motivation, inhibition, logical decision making, problem-solving, planning, emotional regulation, working memory, sexual urges, prioritization, and anticipation of consequences (Sowell et al. 2001). Advocacy groups use these findings to argue that younger people are biologically predisposed to impulsivity, unreasoned judgments, and susceptibility to peer influence (MacArthur Foundation Research Network on Adolescent Development and Juvenile Justice 2006; Back 2008). Prominent professional associations,

such as the American Medical Association, the American Association of Child and Adolescent Psychiatry, the American Psychological Association, and the American Psychiatric Society, have endorsed this nascent science, leading these arguments to gain traction in the legislative and public policy arenas, including cases involving the constitutionality of life without parole and death sentences for minors and in revisions to state transfer and waiver laws.

On the federal level, the discourse surrounding the structure and function of the adolescent brain has served as a strong basis for three recent Supreme Court decisions regarding the extent of constitutionally acceptable punishments for minors. While these cases deal with the very small numbers of youth who are at the extreme end of the criminal justice system, they serve as rationale for state-level reforms affecting many more young people. The first decision, *Roper v. Simmons* (543 U.S. 551 [2005]) addresses the question of whether sentencing someone who committed an offense under the age of 18 to death was a violation of the Eighth Amendment's prohibition on cruel and unusual punishment. After noting an evolving societal consensus against the sentence, the majority decision, written by Justice Anthony Kennedy, turned to other evidence to help guide the Court's decision. For the most part, this evidence consisted of research on adolescent development and maturity, and this served as the basis for the Court's conclusion that juveniles are categorically less culpable than adults and therefore not deserving of the death penalty. Furthermore, the Court used this evidence to argue that the character of juveniles is not fixed in adolescence and that they have substantial potential for change (*Roper v. Simmons*).

The *Roper v. Simmons* decision is important because it provided an unequivocal statement by the Court that juveniles are categorically different than adults. Yet the direct effect of the decision was limited because death sentences for juveniles were rare, and only 73 juveniles were on death row at the time of the decision (Streib 2005). In fact, language in the majority opinion indicated some support for a life sentence without the opportunity for parole for juvenile offenders; appeals filed by juveniles with regard to life without parole and other sentences were still generally dismissed because courts determined that *Roper* did not apply. Consequently, it was unclear whether the *Roper* decision, outside of the Court's statement of differences between juveniles and adults, would have much effect outside of the context of the death penalty. The Supreme Court, however, addressed



this issue in 2009, when it decided to hear two cases challenging life without parole sentences for juvenile offenders. These cases, *Graham v. Florida* (130 U.S. 357 [2009]) and *Sullivan v. Florida* (130 U.S. 2059 [2010]) dealt with the question of whether it was a violation of the Eighth Amendment to sentence a juvenile to a life without the opportunity for a parole decision for a nonhomicide offense.

Declining to rule on the *Sullivan v. Florida* case because of procedural issues, the Court held in *Graham v. Florida* that it was indeed cruel and unusual punishment to sentence a juvenile to life without the opportunity for parole for a nonhomicide offense. Like in *Roper v. Simmons*, the evolving standards of decency test applied by the Court exhibited, in the view of the majority, a societal consensus against this sentencing practice. The majority decision also considered other evidence in making its determination, largely adolescent and brain development research. Written by Justice Kennedy, the majority decision concluded that the evidence regarding differences between juveniles and adults, especially the evidence pertaining to brain development, had become even stronger since the *Roper* decision.

In 2012, the Supreme Court decided on two additional cases on life without parole sentences for juvenile offenders. The justices' ruling in *Miller v. Alabama* (132 U.S. 2455 [2012]) extends beyond *Graham v. Florida*; in a 5–4 vote, they decided that mandatory life sentences for juveniles convicted of murder are unconstitutional based on the Eighth Amendment restriction on cruel and unusual punishment. The basis of these cases, as evidenced by oral arguments and briefs, also strongly featured neuroscience, particularly the notion that youth are not fully formed in their reasoning or judgment. In the majority opinion, Justice Kagan wrote: "Mandatory life without parole for a juvenile precludes consideration of his chronological age and its hallmark features—among them, immaturity, impetuosity, and failure to appreciate risks and consequences" (*Miller v. Alabama*; Kagan, majority opinion). Although the Court also based its conclusions on other arguments, including international law and considerations of human rights, the tremendous influence of the fields of neuroscience and developmental psychology in developing this standard is clear.

#### THE ROLE OF SCIENCE IN LAW, POLICY, AND ADVOCACY

This series of Supreme Court decisions directly affects a very small number of young people who were tried and sentenced to life without the



possibility of parole in the adult system. However, the Court's endorsement of the arguments pertaining to the juvenile brain also provided much needed leverage for advocates. In particular, the rulings in *Graham v. Florida* and *Miller v. Alabama* offer a persuasive discourse to make the case for broader system reforms that provide all youth, including those tried in criminal court, the right to rehabilitation (Arya 2010). From 2005 to 2010, advocates successfully modified transfer or waiver statutes in 15 US states, and these efforts are continuing in reforms that increase the age of automatic transfer to criminal court and remove prosecutorial discretion (Arya 2011). Juvenile justice advocates are also drawing on the power of these rulings to provide practical training for reform advocates (National Juvenile Justice Network 2012) and arguments for criminal defense attorneys in cases dealing with juveniles who are tried as adults (Jennings 2010).

Despite the seemingly widespread public and professional endorsement of the adolescent brain argument, sound critiques of this perspective are also present. Some researchers and legal analysts suggest that this imaging research, using small and likely unrepresentative samples, is far too new to use as a basis for any legal or public policy decisions, particularly as the amicus briefs that cite this science are not peer reviewed or subject to high scientific standards (Bower 2004; Aronson 2007). Others question the potentially unanticipated or paradoxical social consequences of brain research for juvenile justice policy. For example, the argument that young people are biologically less developed than adults introduces major questions about the nature of juvenile justice itself (Rosen 2007; Cox 2009). In other words, could this research be used to argue that youth are inherently less capable than adults of making good decisions because of these developmental deficits and cognitive immaturities? If so, might the public be even more concerned that youth present ominous public safety risks (National Juvenile Justice Network 2012)?

An additional set of concerns among critics and scholars regarding the discourse surrounding the adolescent brain is an underlying uneasiness with biodeterminism. While noting that brain research can and has been used to launch a credible advocacy position on behalf of youth involved in the juvenile justice system, some caution against the essentialist argument that these differences in structure constitute universal biological deficiencies (Paus 2005; Males 2009, 2010; Sercombe 2010). In casting adolescents as universally underdeveloped in executive function because of age, this

discourse does not account for the majority of youth who make smart and rational decisions even under peer influence or other pressures. The notion that young people's immature and impulsive behavior can be ascribed to biological deficiencies indeed bears resemblance to the medical model's historical focus on the link between crime and faulty genetics—an attribution of innate deficiency that has been used against young people, and young people of color in particular, in the criminal justice system (Males 2009, 2010). Legal scholar Jay Aronson (2009) speaks to the uneasy relationship between biological science and criminal law, stating: "We must not submit to a new kind of biological determinism which posits that behavior is merely the 'calculable [consequence] of an immense assembly of neurons firing'" (924). Hence, while neuroscience has exerted great influence on recent law and policy, the use of this nascent research should continue to be examined with ethical caution.

#### EVIDENCE-BASED PRACTICES

The movement to adopt evidenced-based practices in probation and correctional settings is another major trend in current juvenile justice reforms. Paralleling developments in the health sciences, the past 2 decades have ushered in a wealth of knowledge and information about a particular set of practices that strive to lower the recidivism rate and improve treatment outcomes with juvenile-justice-involved youth. These evidence-based practices (EBP) rest on the assumption that empirically definable and testable interventions, when applied with fidelity, can reduce thinking patterns and behaviors associated with criminal offending and ultimately reduce the risk of repeat offending. Given the bleak results of juvenile diversion and intervention strategies and the high costs associated with these programs, there is plenty of pressure among policy makers to figure out the types of programs and strategies that will produce measurable and tangible results. Indeed, current criminal justice policy is often based on the premise of advances in social science. For example, a brief from the Center for Evidence-Based Corrections states: "The current research on offender rehabilitation and behavioral change is now sufficient to enable corrections to make meaningful inferences regarding what works in our field to reduce recidivism and improve public safety" (Guevara and Solomon 2009, 2).

Evidence-based correctional practices in juvenile justice settings have several major goals, including (1) to tailor interventions to the risks of the

individual (with lower-risk individuals receiving minimal intervention); (2) to enhance intrinsic motivation to change on the part of the offender; (3) to intervene with a cognitive-behavioral technique that addresses criminogenic needs, such as criminal personality; antisocial attitudes, values, and beliefs; low self control; criminal peers; substance abuse; and dysfunctional family; (4) to strengthen ties for continued results in the community; and (5) to operationalize and measure results (adapted from Guevara and Solomon 2009). Certain strategies have emerged among practitioners for enacting these interventions, such as Motivational Interviewing (Miller and Rollnick 2002), Multi-systemic Therapy (Hennegger 1997), and other manualized treatment programs. Researchers have established many of these methods as evidence-based through repeated randomized clinical trials. Yet, compared to the time spent evaluating these interventions, relatively little work has been done to assess how well these strategies are implemented in law enforcement operations and actual practices (LaTessa 2004).

The language of evidence-based practice exerts a major influence over current policies, funding streams, and practices in juvenile probation systems and corrections. This emphasis is explicit in expert recommendations on systems reform (Guevara and Solomon 2009) and, following suit, states and counties are under increased scrutiny to show that their programs conform to evidence-based standards. Although substitute words are often used, such as “best practices,” “proven practices,” and “evidence-informed practices,” funders and policy makers hail these interventions as the highest standard of innovation and most effective use of shrinking funding for juvenile justice programs. Subsequently, science is moving the field away from standard probation services or more untested interventions (e.g., art therapy or vocational rehabilitation programs) and toward branded therapies. This is particularly the case for youth who have moved further into the juvenile justice system, where programs are under increased pressure to reduce costs and recidivism rates. The official position from the Youth Transition Funder’s Group, a group of foundations interested in juvenile justice explicitly, states: “Three evidence-based programs are scientifically proven to prevent crime, even among youth with the highest risk of re-offending. Functional Family Therapy, Multidimensional Treatment Foster Care (MTFC) and Multi-systemic Therapy (MST) all focus on the family. None involve incarceration. All deliver results. These models are spreading

and now serve more than 400,000 youth a year. The studies provide a strong scientific base to show what works” (Peterson 2012, 8–9).

With an explicit emphasis on outcomes, evidence, and measurable standards, evidence-based practices can be viewed as the modern scientific paradigm for juvenile justice: a quest to identify the most efficacious ways to cure youth who fall into the system’s purview. However, not all experts are sold on the evidence-based model. Jeffrey Butts (2008) cautions against the assumption that most youth charged with crimes are in need of highly specialized therapeutic intervention. Rather Butts reasons that the majority of delinquent youth are likely to benefit from the same types of programs that help all youth thrive, which are related to education, healthy adult relationships, and opportunities for prosocial leisure and development, such as sports and recreation. This Positive Youth Development framework (PYD) recognizes that even with additional needs for mental health or substance abuse programs, the majority of youth within the juvenile justice system can be assisted by programs that build on their strengths. These ideas are not entirely inconsistent with EBPs, and in fact some of the PYD programs are noted as evidence-based (Butts, Bazemore, and Meroe 2010). The main difference between them is that PYD emphasizes programs that provide opportunities for youth development, versus those seeking to apply therapeutic principles to remedy a deficiency.

Others question the true science of evidence-based practices in juvenile justice settings; there is an array of unpublished research that tends to include more null or negative results. In a systematic review of the literature on MST, a highly favored intervention in juvenile justice, Julia Littell (2005) finds the effect size of this intervention to be much smaller than authors typically purport, and she even questions whether the financial drive to sell and package correctional interventions may outweigh the science of fairly reporting all available findings. This controversy was published as a conversation in a series of articles between Littell (2005, 2006) and the major MST researchers (Henggeler, Schoenwald, and Swenson 2006). The researchers raised some important questions about blanket acceptance of evidence-based correctional practices, including the problem of unpublished results, the applicability of most evidence-based interventions to culturally diverse populations, and the importance of the organizational and interpersonal context in which these interventions are delivered. Hence there is ample room to question how well the science of evidence-based

corrections translates into real-world practices and whether funding streams are truly aligned with more rigorous reviews of available evidence (Furman 2009).

### **THE SOCIAL WORK ROLE IN JUVENILE JUSTICE REFORM**

Social workers and social reformers were intimately involved in founding the juvenile justice system and, for many years, they had a major stake in shaping the major policies and practices associated with juvenile courts and reformatories (Platt 1969). Over time, the profession retreated from its investment and involvement in juvenile justice and criminal justice more broadly, representing just 2 percent of career choices among social workers (Gibelman 2004). According to Clark Peters (2011), the most prominent explanation for this downward trend is that social workers have retreated from working in the coercive and involuntary environment of the prison system, in which a therapeutic relationship is difficult to sustain. Peters (2011) also proposes alternative explanations for the gradual erosion of social work influence, including the predominance of male probation officers and male clients of the juvenile justice system compared to a primarily female social work workforce, along with the deprofessionalization of the probation officer role.

For any number of these reasons, social work no longer holds a seat at the decision-making table in juvenile justice. Yet, based on the current cross-roads in juvenile justice reform, for several reasons, this author argues that the time is ripe for social work to reenter this conversation. First, as neuroscience plays an increasing and powerful role in arguments for juvenile justice reform, it is important that an ecological discourse remain present. Social workers launched the juvenile justice system with an ecological viewpoint that gradually gave way to a medical model, of which the emphasis on neuroscience is the most recent facet. Granting that this strand of research on the brain may be important, interesting, and even helpful for young people, research still consistently finds evidence of ecological correlates of delinquency such as family, school, and neighborhood factors (Heilbrun et al. 2000; Harris et al. 2011). The ecological model lends itself to key prevention alternatives, such as strengthening families, schools, and neighborhoods, and it recognizes that engaging multiple systems is needed to address complex problems (Peters 2011). Reducing arguments for juvenile justice reform to a biological basis eclipses what social workers have

espoused and practiced for generations about the importance of modifying environments so that healthy behavior among young people can be encouraged.

Moreover, arguments regarding the immaturity of the juvenile brain tend to universalize the condition of delinquency by attributing it to impulse control, faulty judgment, and susceptibility to peer influence. Yet not all young people are systemically subject to punishment, as major disparities based on race and class continue to permeate the juvenile justice system. Overwhelmingly, the juvenile justice system deals with young people who are poor, from single-parent families, and disproportionately from ethnic minority groups, particularly African Americans (Mendel 2011; Sickmund et al. 2013). These racial disparities are apparent at all stages of the juvenile and criminal justice system, from arrests through parole decisions. There is a risk that an appeal to the public to have empathy for youth based on the structure and function of the teenage brain may eclipse a much-needed critical argument for systems reform based on these persistent racial disparities and other injustices, such as the aforementioned abuses and substandard conditions found within the system itself.

Finally, as evidence-based practices gain traction in the rationale for and implementation of juvenile justice reform, some critical issues remain. Social workers should continue to challenge the profit motive behind EBPs and to consider whether or not they have actually been tested on the populations most represented within the juvenile justice system, particularly young African American men. As the contexts and the case mix of youth will continue to change due to policy change and fiscal crisis, our responsibility as social workers will be to understand better what elements of interventions are effective in which settings and to monitor these interventions over time.

Moreover, social workers should question whether law enforcement officers are better equipped than other professional groups to deliver mental health and therapeutic interventions to the juvenile justice population. Probation officers are mostly trained in law enforcement, not therapy. In facilities where law enforcement personnel play dual roles as therapists and rule enforcers, researchers are discovering a wide range of complexity in these roles and in the relationships that are forged between workers and clients (Inderbitzen 2007; Abrams and Anderson-Nathe 2012). The issues involved in such interventions are all taught in social work education: group work, involuntary clients, involving family members in the treatment pro-

cess, and strengthening systems for sustained change. Therefore, the youth and families who are served in various ways by the juvenile justice system, and the interventions delivered to them, can benefit greatly from social workers' training and expertise.

## CONCLUSION

The juvenile justice system has long struggled with paradigms and practices for understanding, preventing, and intervening in delinquency. Medical and social sciences have consistently been used as evidence in debates concerning why youth become delinquent, how to divert them from the system, and how best to rehabilitate them once they become involved. However, the answers to most of these fundamental questions remain unresolved, and the juvenile justice system is poised for another wave of potentially large-scale change.

Scientific advances hold a prominent role in the current advocacy movement to restore the integrity and the fundamental mission of a separate juvenile justice system. While the protectionist discourse that neuroscience invokes concerning the developmental uniqueness of adolescence has merit theoretically, at a more practical level, there are questions regarding how this relatively new science can and should be translated into actual legal, policy, and practice prescriptions. Arguing that juveniles are different from adults based on the structure and function of the brain is one matter; determining how that translates into law and practice is a separate question that involves both social and ethical consideration. Given what is at stake for the future of this troubled system, social workers should exercise their voices in these important questions. Specifically, social workers can work with children's advocacy groups to ensure that this research is not used to pathologize youth offenders, particularly in the event that the current fiscal crisis, which has prompted an effort to reduce incarceration, abates or if violent crime rates increase. There is ample historical evidence to indicate that policy makers and practitioners alike should be wary of biodeterministic arguments regarding criminal behavior, and social workers are well aware of the social and human costs associated with this view. As such, social workers should continue to voice publicly an ecological view that prioritizes modifying the risky environments that give rise to delinquency and challenges the racial disparities within the system.

Moreover, as evidence-based practices will likely continue to be infused in the juvenile justice system, it is fitting that social workers assume leadership in the implementation and continued research on these interventions. The large number of youth and families who interact with the juvenile justice system can benefit from an increased social work presence. Yet currently only 26 of the 236 (11 percent) accredited MSW programs listed on the Council on Social Work Education (CSWE) website offer a specialization in criminal justice. This type of more specific training must be increased in order to expand the presence of social workers inside probation and correctional systems and to develop a larger presence in policy reform. While there is much uncertainty about the extent to which social workers will involve themselves in this reform movement, the range of ethical, legal, and practical issues that are currently on the table are likely to influence policy and practices in juvenile justice for decades to follow. This seems to be reason enough for social workers to play a leadership role in shaping the future of this troubled system, looking toward a model of justice that respects both the biological and ecological determinants of juvenile offending, the capacity of young people for rehabilitation, and the knowledge that a variety of interventions, ranging prevention to intervention, must be considered when working with delinquent youth and their families.

#### NOTE

**Laura S. Abrams** is an associate professor of social welfare at Luskin School of Public Affairs, University of California, Los Angeles. She extends appreciation to the editor and the anonymous reviewers of *Social Service Review* for their keen insight and suggestions and to Jeffrey Shook and Ben Anderson-Nathe for their insights on legal history and the juvenile brain discourse, respectively. Finally, thanks to University of California, Los Angeles, graduate students Christina Tam and Elizabeth Ul for assistance in preparing this manuscript. Address correspondence to [abrams@luskin.ucla.edu](mailto:abrams@luskin.ucla.edu).

#### REFERENCES

- Abrams, Laura S., and Ben Anderson-Nathe. 2012. *Compassionate Confinement: A Year in the Life of Unit C*. New Brunswick, NJ: Rutgers University Press.
- Abrams, Laura S., and Susan M. Snyder. 2010. "Youth Offender Reentry: Conceptual Models for Intervention and Directions for Future Inquiry." *Children and Youth Services Review* 32:787–95.



- Annie E. Casey Foundation. 2013. "KIDS COUNT Data Snapshot: Reducing Juvenile Incarceration in the United States." Report. Annie E. Case Foundation, Washington, DC.
- Armour, Jeff, and Sarah Hammond. 2009. "Minority Youth in the Juvenile Justice System: Disproportionate Minority Confinement." Report. National Conference of State Legislatures, Washington, DC.
- Aronson, Jay D. 2007. "Brain Imaging, Culpability and the Juvenile Death Penalty." *Psychology and Public Policy Law* 13 (2): 115–42.
- . 2009. "Neuroscience and Juvenile Justice." *Akron Law Review* 42:917–24.
- Arya, Neelum. 2010. "Using *Graham v. Florida* to Challenge Juvenile Transfer Laws." *Louisiana Law Review* 71:99–155.
- . 2011. "State Trends: Legislative Changes from 2005 to 2010 Removing Youth from the Adult Criminal Justice System." Report. Campaign for Youth Justice, Washington, DC.
- Back, Christine. 2008. "When I Die, They'll Send Me Home: Youth Sentenced to Life without Parole in California." Report. Human Rights Watch, New York.
- Bishop, Donna M., Charles E. Frazier, Lonn Lanza-Kaduce, and Lawrence Winner. 1996. "The Transfer of Juveniles to Criminal Court: Does It Make a Difference?" *Crime and Delinquency* 42 (2): 171–91.
- Blomberg, Tom. 1983. "Diversion's Disparate Results and Unresolved Questions: An Integrative Evaluation Perspective." *Journal of Research in Crime and Delinquency* 20:24–38.
- Bower, Bruce. 2004. "Teen Brains on Trial: The Science of Neural Development Tangles with the Juvenile Death Penalty." *Science News* 165 (19): 299–301.
- Breckenridge, Sophonsbia, and Grace Abbott. 1912. *The Delinquent Child and the Home*. New York: Russell Sage Foundation.
- Brenzel, Barbara. 1975. "Lancaster Industrial School for Girls: A Social Portrait of a 19th Century Reform School for Girls." *Feminist Studies* 3 (1/2): 40–53.
- Butts, Jeffrey. 2008. "Beyond the Tunnel Problem: Addressing Cross-Cutting Issues That Impact Vulnerable Youth." Briefing Paper no. 2. Chapin Hall Center for Children, University of Chicago, Chicago.
- Butts, Jeffrey, Gordon Bazemore, and Aundra Saa Meroe. 2010. "Positive Youth Justice: Framing Justice Interventions Using the Concepts of Positive Youth Development." Model. Coalition for Juvenile Justice, Washington, DC.
- California Department of Corrections and Rehabilitation. 2010. "Juvenile Justice Outcome Evaluation Report 2010: Youth Released from the Division of Juvenile Justice in Fiscal Year 2004–05." Report. California Department of Corrections and Rehabilitation, Sacramento, CA.
- Coffey, Alan. 1975. *Juvenile Corrections: Treatment and Rehabilitation*. Englewood Cliffs, NJ: Prentice-Hall.
- Cox, Alexandra. 2009. "Why Brain Science Is Bad for Juvenile Justice." *Huffington Post*, November 23. [http://www.huffingtonpost.com/alexandra-cox/why-brain-science-is-bad\\_b\\_368129.html](http://www.huffingtonpost.com/alexandra-cox/why-brain-science-is-bad_b_368129.html).
- . 2012. "New Visions of Social Control? Young People's Perceptions of Community Penalties." *Journal of Youth Studies* 16 (1): 135–50.
- DeFoor, Allison. 2009. "Florida Can Save Money, Reduce Crime, Salvage Lives." *Journal of the James Madison Institute* 44:54–58.

- Deitch, Michele, Amanda Barstow, Leslie Lukens, and Ryan Reyna. 2009. "From Time Out to Hard Time: Young Children in the Adult Criminal Justice System." Special Project Report. Lyndon B. Johnson School of Public Affairs, University of Texas at Austin.
- Delilio, John. 1995. "The Coming of the Super-Predators." *Weekly Standard* 1 (11): 23–28.
- Elrod, Preston, and R. Scott Ryder. 2011. *Juvenile Justice: A Social, Historical, and Legal Perspective*. 3rd ed. Sudbury, MA: Jone & Bartlett.
- Fagan, Jeffrey. 1996. "The Comparative Advantage of Juvenile versus Criminal Court Sanctions on Recidivism." *Law and Policy* 18 (1–2): 77–112.
- Forst, Martin A., Jeffrey Fagan, and T. Scott Vivona. 1989. "Youth in Prisons and Training Schools: Perceptions and the Consequences of the Treatment Custody Dichotomy." *Juvenile and Family Court* 40 (1): 1–14.
- Furman, Rich. 2009. "Ethical Considerations of Evidence-Based Practice." *Social Work* 54 (1): 82–84.
- Gensheimer, Leah K., Jeffrey P. Mayer, Rand Gottschalk, and William S. Davidson. 1986. "Diverting Youth from the Juvenile Justice System: A Meta-analysis of Intervention Efficacy." 39–53 in *Youth Violence: Programs and Prospects*, edited by Steven Apster and Arnold P. Goldstein. New York: Pergamon.
- Gibelman, Margaret. 2004. *What Social Workers Do*. 2nd ed. Washington, DC: NASW.
- Giedd, Jay N., Jonathan Blumenthal, Neal O. Jeffries, F. X. Castellanos, Hong Liu, Alex Zijdenbos, Tom Paus, Alan C. Evans, and Judith L. Rapoport. 1999. "Brain Development during Childhood and Adolescence: A Longitudinal MRI Study." *Nature Neuroscience* 2 (10): 861–63.
- Gogtay, Nitin, Jay N. Giedd, Leslie Lusk, Kiralee M. Hayashi, Deanna Greenstein, A. Catherine Vaituzis, Tom F. Nugent III, D. H. Herman, Liv S. Clasen, Arthur W. Toga, Judith L. Rapaport, and Paul M. Thompson. 2004. "Dynamic Mapping of Human Cortical Development during Childhood through Early Adulthood." *Proceedings of the Academy of Sciences of the United States of America* 101 (21): 8174–79.
- Greenwood, Peter W. 2005. *Changing Lives: Delinquency Prevention and Crime Control*. Chicago: University of Chicago Press.
- . 2008. "Prevention and Intervention Programs for Juvenile Offenders." *Future of Children* 18 (2): 185–210.
- Grisso, Thomas, Laurence Steinberg, Jennifer Woolard, Elizabeth Cauffman, Elizabeth Scott, Sandra Graham, Fran Lexcen, N. Dickon Reppucci, and Robert Schwartz. 2003. "Juveniles' Competence to Stand Trial: A Comparison of Adolescents' and Adults' Capacities as Trial Defendants." *Law and Human Behavior* 27 (4): 333–63.
- Guevara, Meghan, and Enver Solomon. 2009. "Implementing Evidence-Based Policy and Practice in Community Corrections, Second Edition." Unpublished manuscript. Center for Evidence-Based Corrections, Washington, DC.
- Hall, Granville Stanley. 1904. *Adolescence: Its Psychology and Its Relations to Physiology, Anthropology, Sociology, Sex, Crime, Religion and Education*. New York: Appleton.
- Hamilton, Zachary K., Christopher J. Sullivan, Bonita M. Veysey, and Michele Grillo. 2007. "Diverting Multi-problem Youth from Juvenile Justice: Investigating the Importance of Community Influence on Placement and Recidivism." *Behavioral Sciences and the Law* 25: 137–58.

- Harris, Philip W., Jeremy Mennis, Zoran Obradovic, Alan J. Izenman, and Heidi E. Grunwald. 2011. "The Coaction of Neighborhood and Individual Effects on Juvenile Recidivism." *Cityscape* 13 (3): 33–55.
- Heilbrun, Kirk, William Brock, Dennis Waite, Ayonda Lanier, Martin Schmid, Gretchen Witte, Michelle Keeney, Melissa Westendorf, Luis Buinavert, and Michael Shumate. 2000. "Risk Factors for Juvenile Criminal Recidivism: The Post-release Community Adjustment of Juvenile Offenders." *Criminal Justice and Behavior* 27 (3): 275–91.
- Henggeler, Scott W. 1997. "Treating Serious Anti-social Behavior in Youth: The MST Approach." Bulletin. US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, Washington, DC.
- Henggeler, Scott W., Sonja K. Schoenwald, and Cynthia C. Swenson. 2006. "Methodological Critique and Meta-analysis as Trojan Horse." *Children and Youth Services Review* 28 (4): 447–57.
- Inderbitzin, Michelle. 2007. "A Look from the Inside: Balancing Custody and Treatment in a Juvenile Maximum Security Facility." *International Journal of Offender Therapy and Comparative Criminology* 51 (3): 348–62.
- Jennings, Joanna C. 2010. "Juvenile Justice, Sullivan, and Graham: How the Supreme Court's Decision Will Change the Neuroscience Debate." *Duke Law and Technology Review* 6: 1–10.
- Justice Policy Institute. 2009. "The Cost of Confinement: Why Good Juvenile Justice Policies Make Good Fiscal Sense." Report, May. Justice Policy Institute, Washington, DC.
- Klein, Malcolm W. 1979. "Deinstitutionalization and Diversion of Juvenile Offenders: A Litany of Impediments." *Crime and Justice* 1:145–201.
- Krisberg, Barry. 2006. "Rediscovering the Juvenile Justice Ideal in the United States." 6–18 in *Comparative Youth Justice*, edited by John Muncie and Barry Goldson. Thousand Oaks, CA: Sage.
- Krisberg, Barry, and James F. Austin. 1993. *Reinventing Juvenile Justice*. Newbury Park, CA: Sage.
- LaTessa, Edward J. 2004. "The Challenge of Change: Correctional Programs and Evidence-Based Practices." *Criminology and Public Policy* 3 (4): 547–60.
- Levin, Mark. 2010. "Getting More for Less in Juvenile Justice: Innovative and Cost-Effective Approaches to Reduce Crime, Restore Victims, and Preserve Families." Report. Texas Public Policy Foundation, Austin, TX.
- Lipsey, Mark L. 2009. "The Primary Factors That Characterize Effective Interventions with Juvenile Offenders: A Meta-analytic Overview." *Victims and Offenders: An International Journal of Evidence-Based Research, Policy, and Practice* 4 (2): 124–47.
- Littell, Julia H. 2005. "Lessons from a Systematic Review of Effects of Multi-systemic Therapy." *Children and Youth Services Review* 27 (4): 445–63.
- . 2006. "The Case for Multi-systemic Therapy: Evidence or Orthodoxy?" *Children and Youth Services Review* 28 (4): 458–72.
- Lou, Herbert. 1927. *Juvenile Courts in the United States*. Chapel Hill: University of North Carolina Press.
- MacArthur Foundation Research Network on Adolescent Development and Juvenile Justice. 2006. "Less Guilty by Reason of Adolescence." Issue brief. Temple University, Philadelphia. [http://www.adjj.org/downloads/6093issue\\_brief\\_3.pdf](http://www.adjj.org/downloads/6093issue_brief_3.pdf).

- Males, Michael. 2009. "Does the Adolescent Brain Make Risk Taking Inevitable? A Skeptical Appraisal." *Journal of Adolescent Research* 24 (1): 3–20.
- . 2010. "Is Jumping Off the Roof Always a Bad Idea? A Rejoinder on Risk Taking and the Adolescent Brain." *Journal of Adolescent Research* 25 (1): 48–63.
- Mason, Mary Ann. 1994. *From Father's Property to Children's Rights: The History of Child Custody in the United States*. New York: Columbia University Press.
- Mendel, Richard A. 2011. "No Place for Kids: The Case for Reducing Juvenile Incarceration." Report. Annie E. Casey Foundation, Baltimore.
- Miller, William R., and Stephen Rollnick. 2002. *Motivational Interviewing: Preparing People for Change*. New York: Guilford.
- National Juvenile Justice Network. 2012. *Understanding Adolescent Brain Research to Inform Policy: A Guide for Juvenile Justice Advocates*. Washington, DC: National Juvenile Justice Network.
- Paus, Tomas. 2005. "Mapping Brain Maturation and Cognitive Development during Adolescence." *Trends in Cognitive Sciences* 9 (2): 60–68.
- Peters, Clark M. 2011. "Social Work and Juvenile Probation: Exploring Historical Tensions and Contemporary Challenges." *Social Work* 56 (4): 355–65.
- Peterson, Julie. 2012. "Juvenile Justice Reform: A Blueprint." Pamphlet. Youth Transitions Funders Group, Chicago.
- Pew Center on the States. 2008. "One in 100: Behind Bars in America 2008." Report. Pew Center on the States, Washington, DC.
- Platt, Tony. 1969. *The Child Savers: The Invention of Delinquency*. Chicago: University of Chicago.
- President's Commission on Law Enforcement and Administration of Justice. 1967. *Task Force Report: Juvenile Delinquency and Youth Crime: Report on Juvenile Justice and Consultants' Papers*. Washington, DC: US Government Printing Office.
- Public Opinion Strategies and Mellman Group. 2012. Public Opinion on Sentencing and Corrections in America. Survey. Pew Charitable Trust, Washington, DC. [http://www.pewstates.org/uploadedFiles/PCS\\_Assets/2012/PEW\\_NationalSurveyResearchPaper\\_FINAL.pdf](http://www.pewstates.org/uploadedFiles/PCS_Assets/2012/PEW_NationalSurveyResearchPaper_FINAL.pdf).
- Raley, Gordon A. 1995. "The JJDP Act: A Second Look." *Juvenile Justice* 2 (2): 11–18.
- Redding, Richard E. 2003. "The Effects of Adjudicating and Sentencing Juveniles as Adults: Research and Policy Implications." *Youth Violence and Juvenile Justice* 1 (2): 128–55.
- Richardson, Theresa R. 1989. *The Century of the Child: The Mental Hygiene Movement and Social Policy in the United States and Canada*. Albany: State University of New York Press.
- Rosen, Jeffrey. 2007. "The Brain on the Stand." *New York Times Magazine*, March 11, 49.
- Scott, Elizabeth S., and Laurence Steinberg. 2008a. "Adolescent Development and the Regulation of Youth Crime." *Future of Children* 18 (2): 15–33.
- . 2008b. *Rethinking Juvenile Justice*. Cambridge, MA: Harvard University Press.
- Sercombe, Howard. 2010. "The Gift and the Trap: Working 'the Teen Brain' into our Concept of Youth." *Journal of Adolescent Research* 25 (1): 31–47.
- Shoemaker, Donald J. 2009. *Theories of Delinquency: An Examination of Explanations of Delinquent Behavior*. New York: Oxford University Press.
- Shook, Jeffrey J., and Rosemary C. Sarri. 2008. "Trends in the Commitment of Juveniles to Adult Prisons: Toward an Increased Willingness to Treat Juveniles as Adults?" *Wayne Law Review* 54 (4): 1725–65.

- Sickmund, Melissa. 2003. "Juveniles in Court." Bulletin. US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, Washington, DC.
- Sickmund, Melissa, T. J. Sladky, and Wei Kang. 2013. "Easy Access to Juvenile Court Statistics: 1985–2010." Application. <http://www.ojjdp.gov/ojstatbb/ezajcs/>.
- Snyder, Howard N., and Melissa Sickmund. 2006. "Juvenile Offenders and Victims: 2006 National Report." US Department of Justice, Office of Juvenile Justice and Delinquency Prevention, Washington, DC.
- Sowell, Elizabeth R., Paul M. Thompson, Kevin D. Tessner, and Arthur W. Toga. 2001. "Mapping Continued Brain Growth and Gray Matter Density Reduction in Dorsal Frontal Cortex: Inverse Relationships during Post-adolescent Brain Maturation." *Journal of Neuroscience* 21 (22): 8819–29.
- Streib, Victor L. 2005. "The Juvenile Death Penalty Today: Death Sentences and Executions for Juvenile Crimes, January 1, 1973 to February 28, 2005." Report no. 77, Ohio Northern University, Ada, OH.
- Sullivan, Christopher J., and Edward Latessa. 2011. "The Coproduction of Outcomes: An Integrated Assessment of Youth and Program Effects on Recidivism." *Youth Violence and Juvenile Justice* 9:191–206.
- Tanenhaus, David S. 2004. *Juvenile Justice in the Making*. New York: Oxford University Press.
- Trulson, Chad R., James W. Marquart, Janet L. Mullings, and Tory J. Caeti. 2005. "In between Adolescence and Adulthood: Recidivism Outcomes of a Cohort of State Delinquents." *Youth Violence and Juvenile Justice* 3 (4): 355–87.
- Vera Institute of Justice. 2009. "Charting a New Course: A Blueprint for Transforming Juvenile Justice in New York State." Vera Institute of Justice, New York. [http://ocfs.ny.gov/main/rehab/http.www%20vera%20org\\_download\\_file2944\\_Charting-a-new-course-A-blueprint-for-transforming-juvenile-justice-in-New-York-State.pdf](http://ocfs.ny.gov/main/rehab/http.www%20vera%20org_download_file2944_Charting-a-new-course-A-blueprint-for-transforming-juvenile-justice-in-New-York-State.pdf).
- Whitehead, John T., and Steven P. Lab. 1989. "A Meta-analysis of Juvenile Correctional Treatment." *Journal of Research in Crime and Delinquency* 26:276–95.
- Ziedenberg, Jason, and Vincent Schiraldi. 1997. "Risks Juveniles Face When They Are Incarcerated with Adults." Report. Justice Policy Institute, San Francisco.
- Zimring, Franklin E. 2000. "The Common Thread: Diversion in Juvenile Justice." *California Law Review* 88 (6): 2477–95.