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Collateral Consequences of Punishment: A Critical Review and Path Forward

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Abstract

The unprecedented growth of the penal system in the United States has motivated an expansive volume of research on the collateral consequences of punishment. In this review, we take stock of what is known about these collateral consequences, particularly in the domains of health, employment, housing, debt, civic involvement, families, and communities. Yet the full reckoning of the formal and informal consequences of mass incarceration and the tough-on-crime era is hindered by a set of thorny challenges that are both methodological and theoretical in nature. We examine these enduring challenges, which include (a) the importance of minimizing selection bias, (b) consideration of treatment heterogeneity, and (c) identification of causal mechanisms underlying collateral consequences. We conclude the review with a focused discussion on promising directions for future research, including insights into data infrastructure, opportunities for policy tests, and suggestions for expanding the field of inquiry.



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INTRODUCTION

The unprecedented growth of the penal system in the United States, largely unanticipated by many twentieth-century criminologists and social scientists, led to a wave of research on the consequences of contact with the criminal justice system. Research directed at these so-called collateral consequences (a debated term) has focused primarily on incarceration, although studies also address other forms of contact such as arrest, misdemeanor conviction, and community supervision. *Annual Reviews* collectively published several pieces on this fast-growing literature that examine the effects of contact with the criminal justice system on social life, health, families, communities, and inequality (Comfort 2007, Massoglia & Pridemore 2015, Morenoff & Harding 2014, Phelps 2016, Rios et al. 2017, Wakefield & Uggen 2010, Wildeman & Muller 2012). Similarly, a recent landmark report from the National Research Council (NRC) (2014) and several other review articles and books provide considerable insight into the consequences of mass incarceration and criminal conviction in the United States.

In this review, we take stock of what is known about the collateral consequences of contact with the criminal justice system; however, recognizing the existence of other authoritative reviews, we elect to review this voluminous literature somewhat more briefly. Instead, our commentary sacrifices detail in terms of extant research to highlight points of departure, uncertainty, and debate that, in our view, present significant challenges to providing a full accounting of collateral consequences. We first review the social facts about correctional populations and the convicted in the United States, noting areas of fruitful future investigation. We then briefly describe what is known about the average effect of contact with the criminal justice system. With these findings in mind, we next detail enduring challenges to the collateral consequences literature, including (a) the importance of minimizing selection bias in studies of the effects of conviction and incarceration, (b) consideration of treatment heterogeneity in collateral consequences, and (c) the importance of identifying causal mechanisms, particularly given the dearth of contemporary research about the inner workings of prisons. We conclude the review with a focused discussion on promising directions for future research, including the necessity of better data infrastructure, opportunities for policy tests, and suggestions for expanding the field of inquiry, using the collateral consequences of punitive anti-immigration practices as a salient example.¹

Before proceeding, it is important to briefly touch on definitional issues. The American Bar Association (ABA) defines “collateral consequences of conviction” as “legal and regulatory sanctions and restrictions that limit or prohibit people with criminal records from accessing employment, occupational licensing, housing, voting, education, and other opportunities” (Am. Bar Assoc. 2013, p. 1). Such consequences are distinguished from prison terms, probation, fines, and fees imposed directly by the court. However, we find the ABA’s definition of collateral consequences too narrow, in that the consequences of punishment extend well beyond the convicted individual to families and communities. Hence, in our view, the range of consequences that we should consider collateral include not only (a) the (formal) legal and regulatory sanctions that the convicted bear beyond the sentence imposed by a criminal court but also (b) the (informal) impacts of criminal justice contact on families, communities, and democracy.

We have a further definitional concern with the metaphor of collateral consequences, specifically with the notion of collateral. The Oxford English Dictionary defines the adjective collateral as “additional but subordinate; secondary” while also noting that collateral is a euphemism for

¹It is beyond the scope of our article to review work on the root causes of mass incarceration and the tough-on-crime era that led to the explosion of collateral consequences, yet the causes are examined extensively in many other works (Alexander 2010, Garland 2001a, Gottschalk 2015, NRC 2014, Pfaff 2017, Phelps 2017, Simon 2007, Wacquant 2009).

an inadvertent act. Quite arguably, the types of consequences discussed in the collateral consequences literature in criminology are often not subordinate or secondary in their effects. Take, for instance, the collateral consequences of an arrest or conviction for an undocumented immigrant. As the Supreme Court opined in *Padilla v. Kentucky* (2010, p. 6), “deportation is an integral part—indeed, sometimes the most important part—of the penalty that may be imposed on non-citizen defendants who plead guilty to specified crimes.” Moreover, the tough-on-crime rhetoric of yesteryear and its post-Obama renewal would seem to make so-called collateral punishments far from inadvertent. In this article, we use the word collateral because it has become accepted phrasing (or at least understood phrasing) among criminologists, scholars of punishment, and reform advocates. However, we do not think many of the consequences described here are subordinate or secondary, and we certainly think it is a worthy debate to consider the intentionality of the policies and practices that have led to these consequences.

DESCRIBING CRIMINAL JUSTICE SYSTEM(S)

The growth of the US criminal justice system and attendant collateral consequences of contact are most often appreciated with respect to the size of the imprisoned population. The imprisonment rate in the United States ballooned from a relatively stable 105 prisoners per 100,000 from 1925 to 1976 to a peak of 506 per 100,000 in 2007 (Univ. Albany 2017). Such high rates of imprisonment are exceptional in both historical and comparative senses (Garland 2001b); the United States incarcerates a much larger share of its population than almost every other country worldwide and far more than other Western societies (Walmsley 2016).²

At the present time, approximately 1 in every 37 US adults—almost 7 million individuals—is in prison, jail, or under some form of community supervision by a probation or parole officer (Kaebel & Glaze 2016). An additional 4.9 million people previously served time in prison at some point and more than 19 million people in the United States have a felony conviction (Shannon et al. 2017; see also Muller & Wildeman 2016). Millions more are subject to the hassles of the system via misdemeanor case processing (Kohler-Hausmann 2013) and frequent police contact (Eith & Durose 2011, Stuart 2016). Although the overall incarceration rate in the United States has declined since its peak in 2007–2008, much of the decline is limited to one state (California) and driven by federal government intervention and a major reform act (the Public Safety Realignment Act of 2011; Petersilia & Cullen 2015). Despite widespread shifts in public opinion toward a preference for reducing the size of the prison population, almost as many states increased their prison populations as reduced them between 2011 and 2015 (Carson & Mulako-Wangota 2017).

Less widely appreciated by citizens and social scientists alike is the substantial variation in practices across states, jurisdictions, and stages of the system. Even the phrase criminal justice system is a misnomer, implying more uniformity across jurisdictions and collaboration across stages than is practiced. It is unclear what to make of state variation in incarceration rates, for example. In 2015, the imprisonment rate ranged from a low of 132 per 100,000 in Maine to a high of 776 per 100,000 in Louisiana (Carson & Mulako-Wangota 2017). The lifetime risk of going to

²Walmsley (2016) notes that incarceration data from Eritrea, Somalia, and North Korea are not available and that data from China and Guinea-Bissau are incomplete. The data from China include only information on sentenced prisoners, not individuals held in pre-trial or administrative detention. Moreover, readers should be aware that the precise definitions of incarceration and imprisonment may vary across countries, and that data collection practices may vary as well. This is also true in the United States; some states hold those convicted of a felony in jails for longer periods than others (two years relative to one, for example). Thus, as with crime rates, readers should use caution when comparing imprisonment and incarceration rates across US states or over time.

prison for men is greatest in the South and West regions of the United States (11.3%) but lowest in the Northeast (8.0%) (Muller & Wildeman 2016). Such variations in the rates and cumulative risks of imprisonment are worthy of investigation, but even states with the lowest incarceration rates still incarcerate at a rate greater than that of most European nations (Walmsley 2016). Moreover, states with relatively low incarceration rates also tend to have the highest racial disparities in their prison populations (Mauer & King 2007) and very large probation populations (Phelps 2017).

Likewise, the conditions of confinement differ radically across local jails, state prisons, and federal facilities. These differences are not well understood or systematically documented but likely influence the scope, magnitude, and character of collateral consequences. The most common form of incarceration, confinement in jails, is among the least studied. The average daily jail population is approximately one-half the size of the prison population but this estimate is misleading. On an annual basis, local jails admit almost eleven million people (Minton & Zeng 2016). Unfortunately, comparisons across different types of confinement are nearly impossible to accomplish with available data (for recent attempts, see Apel 2016, Turney 2016, Wildeman et al. 2016).

In contrast, confinement in federal prisons accounts for a disproportionate share of public attention and commentary despite its small size and unusual composition. As one salient example, approximately only 13% of all prisoners are housed in federal prisons and half are there for drug crimes (versus 16% of drug offenders among state prisoners). Moreover, the Trump Administration appears to be doubling down on the War on Drugs in the federal system, with Attorney General Sessions issuing a memorandum to federal prosecutors on May 10, 2017, that reversed Obama-era practices of leniency toward low-level drug offenders in favor of a policy to “pursue the most serious, readily provable offense” (Office Atty. Gen. 2017, p. 1). In contrast to the concentration of drug offenders in the federal system, just 7% of federal prisoners are incarcerated for violence relative to more than 53% of state prisoners (Carson & Anderson 2016). Punitive sentencing policies for drug crimes, unjust prosecutorial practices aimed at drug offenders, and stunningly disparate sentences related to race and class status are worth reforming (Alexander 2010, Lynch 2016, Pfaff 2017); however, even if everyone convicted of a drug offense were released from state and federal prisons, the United States would remain a global leader in the incarceration, surveillance, and supervision of its citizens and residents. Beyond the futility of reducing mass incarceration by focusing only on non-violent drug offenders, policy reform driven by grouping prisoners according to their latest conviction offense also ignores research showing relatively little crime-type specialization among the criminally involved (see, e.g., Gottfredson & Hirschi 1990, Sullivan 2009).

Despite its relatively small size, the federal system may be most consequential with respect to the convergence of immigration and criminal law—known as “cimmigration.” Although the context of cimmigration has changed dramatically in the United States given the outcome of the 2016 presidential election (which is a point we return to below), it is pertinent to recall that the United States had already embarked on a sizable increase in detentions and, especially, deportations of unauthorized immigrants, both criminal and non-criminal, over the preceding two decades. The number of yearly immigrants detained in the United States more than doubled between 2003 and 2012, from 231,500 to nearly 480,000, although with the number of detentions falling more recently (US Dep. Homel. Secur. 2004, 2016b). The annual number of immigrants deported by virtue of a criminal offense increased from roughly 28,000 in 1993 to more than 200,000 in 2012, before declining toward the end of the Obama presidency (see **Figure 1**). This increase reflects an increasing punitiveness toward immigrants rather than a growth in the crime rate among immigrants (Butcher & Piehl 1998). At the start of the Obama presidency, approximately

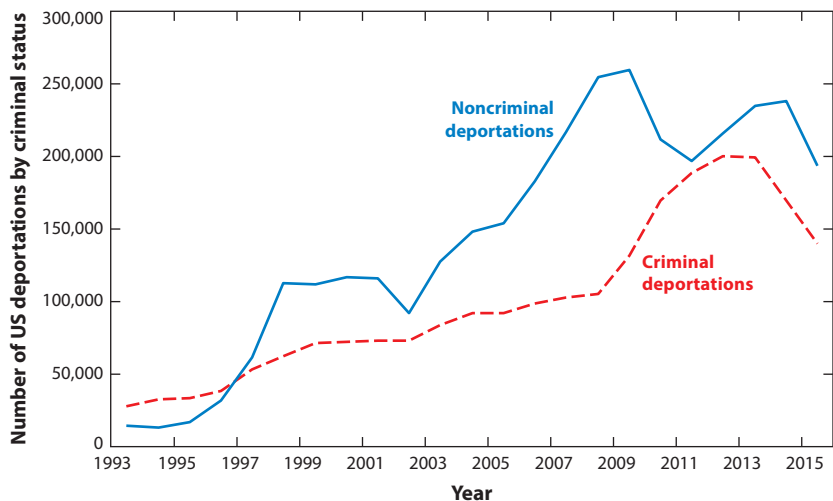


Figure 1

US deportations by criminal status, 1993 to 2015 (US Dep. Homel. Secur 2008, 2016a; US Dep. Justice 2000, 2002a,b).

31% of the unauthorized immigrants deported for a criminal offense were deported for either an immigration offense or a traffic offense. Over the course of President Obama's first term, that percentage increased to 46%, with roughly 15% of the deportations for traffic offenses and 31% for immigration offenses (US Dep. Homel. Secur. 2016b). In November 2014, the Obama Administration sought to change course and announced that priority would be given to deportation of serious criminal offenders. The current presidential administration has returned the focus of enforcement practices to more than just serious immigrant offenders, which will have a substantial bearing on the reach of collateral consequences of immigration punishment.

AVERAGE EFFECTS OF CRIMINAL JUSTICE SYSTEM ENGAGEMENT

With a glimpse of the reach of the criminal justice system(s), we turn now to an assessment of the average effects of engagement with these systems. Incarceration is associated with a number of poor physical and mental health outcomes for the formerly incarcerated as well as their families (Johnson & Raphael 2009, Lee et al. 2014, Massoglia & Pridemore 2015), declining employment prospects and future earnings (Apel & Sweeten 2010, Western & Pettit 2005), the breakup of fragile families (Apel 2016, Massoglia et al. 2011, Turney 2015), reductions in civic and institutional engagement (Brayne 2014, Goffman 2014, Haskins & Jacobsen 2017, Lerman & Weaver 2014, Manza & Uggen 2006, Sugie 2015, Weaver et al. 2014), increases in material insecurity and reliance on public assistance (Schwartz-Soicher et al. 2011, Sugie 2012), rising legal debts (Harris 2016), housing and residential instability (Harding et al. 2013, Herbert et al. 2015), and poor educational and health outcomes for children of incarcerated parents (Geller et al. 2012, Haskins 2014, Wakefield & Wildeman 2013). High rates of incarceration and the churning of people between communities and prison are also associated with declining levels of neighborhood informal social control and collective efficacy (Clear 2007, Drakulich et al. 2012) and increasing levels of cynicism of the law among neighborhood residents (Kirk 2016). In turn, these conditions contribute to elevated rates of crime and recidivism (Kirk 2015, Kirk & Papachristos 2011).

These effects of criminal justice contact on social life and well-being are both widespread and repressive. Many more people have contact with the US criminal justice system today than two generations ago, and the formal and informal consequences of such contact are more wide-ranging. Yet disabilities that arise from criminal justice contact are heaped disproportionately on men, racial and ethnic minorities, and those already severely disadvantaged. The risk of arrest is much higher for black men relative to white men (Brame et al. 2014), and more than one-quarter of black men who came of age during the prison boom were incarcerated relative to 5% of white men (Western & Pettit 2010). For black males born since the mid-1970s who have dropped out of high school, 68% have been imprisoned (Western & Pettit 2010). The incarceration rate of men greatly outstrips that of women, but criminal justice experiences affect women through their own imprisonment as well as the imprisonment of family members. Lee and colleagues (2015) found that 44% of black women had a family member incarcerated relative to only 12% of white women. Similarly, whereas 7% of all children may have a residential parent incarcerated at some point during childhood (Murphey & Cooper 2015), almost a quarter of all black children will experience the incarceration of a parent before their fourteenth birthday (Wildeman 2009; see also Sykes & Pettit 2014, Wildeman & Wakefield 2014). The disparate and repressive nature of collateral consequences reflects existing stratification patterns but also creates new inequalities (Johnson & Raphael 2009; Light et al. 2014; Sampson & Loeffler 2010; Wakefield & Wildeman 2013; Western 2002, 2006; Wildeman & Muller 2012).

The evidence is overwhelming that mass incarceration has produced significant social harms and that these harms are disproportionately visited on the poor, disadvantaged, and non-white. Yet a comparison across studies suggests that the underlying processes linking criminal justice contact to such harms are not well understood and the evidence often appears inconsistent. Inconsistencies are further complicated by study design and measurement. For instance, survey data tend to find stronger effects on later employment status (Freeman 1992, Western 2006) but is mixed on wage and earnings outcomes (Apel & Sweeten 2010, NRC 2014, Ramakers et al. 2014). Studies using administrative data or instrumental variable strategies often find null or only weak effects of incarceration on later employment and wages/earnings (Kling 2006, Loeffler 2013, NRC 2014, Pettit & Lyons 2007). Troublingly, one study found that gaps between self-reported income and employer-reported unemployment insurance explained the difference between null and positive program impacts, but the measurement issue influenced only estimates for men with criminal records (Kornfield & Bloom 1999).

Parental incarceration represents another salient example of mixed findings and highlights the ubiquity of treatment heterogeneity. Parental incarceration is more consistently harmful to children in the case of paternal (Geller et al. 2012, Haskins 2014, Murray et al. 2012, Wakefield & Wildeman 2013) relative to maternal incarceration (Cho 2009, Turney & Wildeman 2015, Wildeman & Turney 2014; but see Kruttschnitt 2010, Foster & Hagan 2015). What accounts for the difference? Some evidence suggests it is driven by distributional and compositional differences between incarcerated fathers and mothers; qualitative and survey studies show that children of incarcerated mothers may be exposed to more instability prior to incarceration (e.g., Giordano 2010, Siegel 2011, Turney & Wildeman 2015), such that the experience of maternal incarceration does not impose additional harms on already severely disadvantaged children. Still, others argue that the effects of maternal incarceration are more often indirect and unaccounted for in existing research (Foster & Hagan 2015). Basic problems of sample attrition in surveys also appear to be more severe in the case of children of incarcerated mothers because this group is far more likely to enter the foster care system as a result of maternal incarceration (and therefore drop out of longitudinal surveys) (Berger et al. 2016, Johnson & Waldfogel 2004).

COLLATERAL CONSEQUENCES OF WHAT?

Inconsistency across observational studies is not uncommon in any area of research, but work on collateral consequences is plagued by three related and consequential problems that lead to perceived inconsistency in inferences: selection bias and inappropriate counterfactuals, neglect of treatment heterogeneity, and an inability to discern causal mechanisms. Nearly all these problems result from a lack of appropriate and detailed data on criminal justice processing, the incarceration experience, and later life outcomes. Here, we detail the difficulties imposed by each of these threats and suggest fruitful strategies for overcoming them. Unfortunately, many of them cannot be overcome without significant investments in original data collection, creative linking of administrative data with existing surveys, and more rigorous research designs.

Selection Bias and Counterfactuals

Any study devoted to the description of consequences that flow from contact with the criminal justice system must account for very large differences between the types of people who select into prison versus the unincarcerated (or, similarly, the arrested versus non-arrested). Even a cursory comparison of the two populations yields massive differences in demographic characteristics (Pettit & Western 2004), extreme and cumulative disadvantages (Wakefield & Uggen 2010), and histories of violence and abuse as both victims and perpetrators (Western 2015). Consider also Gottfredson & Hirschi's (1990) *A General Theory of Crime*, among the most widely cited explanations for criminal conduct. Per their self-control theory, some of the purported collateral consequences of punishment are likely to be spurious (e.g., declining employment and increased likelihood of school dropout), with both the crime leading to the punishment and the supposed collateral consequences of that punishment explained by low self-control. Without belaboring the point, any analysis that hopes to isolate the effects of incarceration (or arrest or conviction) must account for individual differences, and few available data sets allow researchers to do so without some limitations. In the face of such substantial challenges driven by selection bias and data limitations, it would be nearly impossible for the body of literature on contact with the criminal justice system to have precisely estimated causal effects in all domains. This represents a problem for basic science but also limits the ability of research to be translated into effective policy reforms.

A related problem is that even when data limitations are less severe, counterfactuals are generally inadequate. The work reviewed herein is often devoted to making never versus ever incarcerated comparisons. These comparisons between the incarcerated and otherwise equivalent non-incarcerated individuals strain credulity for an already difficult process to model. Studies that move beyond the never/ever comparison may also suffer from muddy definitional problems. For example, a number of studies compare the effects of incarceration relative to a community probation sentence. But given the well-publicized challenges of an exorbitant bail system and the ubiquity of pre-trial detention, the proportion of probationers who served significant time in jail prior to sentencing (or others measured as never incarcerated) is likely non-trivial and often unmeasured (Dobbie et al. 2016, Geller et al. 2016, Minton & Zeng 2016). In this sense, setting probationers as a counterfactual relative to prisoners does not necessarily yield a comparison between those who have been incarcerated versus those who have not because plenty of probationers spend a considerable amount of time locked up before conviction. The larger point, discussed in more detail in the NRC (2014) report on mass incarceration, is that extant research is often unclear on the precise content of the treatment in question, which often results because of the inadequacy of data on criminal justice contacts.

Although our focus in this section thus far has been on individual-level counterfactual comparisons, meso-level studies focused on neighborhoods are also challenged by issues of selection

(Morenoff & Harding 2014). As described in the aforementioned NRC (2014) report, to assess the consequences of high rates of removals or returns to a neighborhood on community dynamics, an adequate counterfactual would be an otherwise similar neighborhood characterized by the types of community disadvantages typically associated with high rates of incarceration—particularly crime and poverty—but where the neighborhood somehow had low levels of incarceration. Studies employing such counterfactual designs are rare because, quite simply, such comparisons do not readily exist in reality. One exception is found in a recent study by Kirk (2015), who used the sudden increase in the neighborhood density of ex-prisoners in Louisiana cities outside of New Orleans following Hurricane Katrina to examine the effect of concentrated prisoner reentry on subsequent recidivism rates.

As for remedies for the selection issue, improving data infrastructure to allow for more appropriate comparisons would advance knowledge considerably. Prison populations, even in an era of mass incarceration, remain characterized by those who have been convicted of relatively serious crimes. As a result, jail populations may serve as a more plausible comparison group to the never incarcerated and provide a more compelling lower-bound estimate of collateral consequences. Data measuring jail incarcerations and distinguishing between jail and prison incarcerations would provide an important step forward. Other promising approaches to minimizing selection bias include strategic comparisons between the incarcerated and those who will later be incarcerated (Porter & King 2015), sample restrictions to compare recent and multiple incarcerations (Wakefield & Wildeman 2013), placebo regressions (Wakefield & Wildeman 2013), and the study of groups that have separation experiences that mirror those experienced by prisoners' families (for a comparison leveraging military families, see Massoglia et al. 2011). Comparisons across different forms of incarceration (e.g., across different types of prisons or even different units within a given prison complex) offer potential benefits insofar as comparisons between incarceration experiences (rather than between incarcerated and unincarcerated persons) yield more plausible counterfactual comparisons. Random assignment of judges to criminal cases offers an innovative method for identifying the consequences of incarceration on employment and other outcomes (Kling 2006, Loeffler 2013, NRC 2014, Pettit & Lyons 2007). In a similar manner, random assignment of probationers and parolees to probation and parole officers provides an opportunity to examine the consequences of community supervision on various outcomes (Andersen & Wildeman 2015). Research involving policy shocks is advantageous for minimizing selecting issues, but these shocks have been relatively uncommon in the United States during the prison boom era outside of the California Public Safety Realignment Act (Petersilia 2014). Of course, experimental research employing random assignment is in the best position to offer causal inferences about the collateral consequences of the conditions of confinement or the stigma of a criminal record (Gaes & Camp 2009, Pager 2003, Schwartz & Skolnick 1962, Vuolo et al. 2017).

Treatment Heterogeneity

Divergent findings across studies assessing average effects may reflect differences in design quality, but may also reflect treatment heterogeneity. Simply put, not all prisons or people are created equal but the almost singular focus of existing research on average effects masks significant variability (NRC 2014; for a related discussion of incarceration effects on recidivism, see Mears et al. 2015). In a simplified sense, heterogeneity in the consequences of punishment may occur from variation in the characteristics of convicted persons, characteristics in the nature of criminal justice contacts and punishments, and characteristics of the families and environments they return to following punishment.

On variation in effects by individual characteristics, Pager's (2003, 2007) widely cited work on the consequences of a criminal record for employment examines whether applicant race conditions the effect of a criminal record, finding that the consequence of a criminal record for job call-backs is more severe for blacks relative to whites. Conversely, other research reveals that whites are more severely impacted in terms of post-prison neighborhood attainment. Massoglia and colleagues (2013) find that whites tend to live in more socioeconomically disadvantaged neighborhoods post-prison relative to where they lived pre-prison, but blacks and Latinos do not suffer such a consequence in declining neighborhood attainment.

With respect to variation by punishment, treatment heterogeneity may arise from the type of criminal justice contact or supervision (e.g., arrest, conviction, incarceration, or community supervision) (Kirk & Sampson 2013, Phelps 2017, Sugie & Turney 2017), the type of facility and security level (Apel 2016, Gaes & Camp 2009, Wildeman et al. 2016), the duration of incarceration (Andersen 2016, Apel 2016, Kling 2006, Loughran et al. 2009, Ramakers et al. 2014), and prison conditions, such as the availability of rehabilitation programs (Phelps 2011), overcrowding, the presence of gangs and gang conflict (Skarbeck 2014), the level of disorder and violence (Listwan et al. 2011), prisoner culture and social relationships (Crewe 2009, Schaefer et al. 2017), and the proclivity to use solitary confinement as a control mechanism (NRC 2014, Reiter 2016). Notably, there is a large and ubiquitous literature devoted to examining the influence of conditions of confinement on later recidivism (e.g., Listwan et al. 2011, Loughran et al. 2009) but very little research on such variability in conditions for outcomes related to work, family, community engagement, or health.

Of importance, the discussions of selection bias and treatment heterogeneity are related. In a recent study, Breen and colleagues (2015) show that selection bias may lead researchers to find evidence of heterogeneous treatment effects when the true effect is in fact homogeneous. Selection bias may lead to erroneous conclusions about the magnitude and even the sign of heterogeneous effects. Although we advocate for greater consideration of treatment-effect heterogeneity in the study of collateral consequences, we concur with Breen et al.'s (2015) suggestion to use robustness tests like the method employed in their study to assess the extent to which observed treatment-effect heterogeneity is robust to different forms of selection bias.

Causal Mechanisms

Whereas much of the collateral consequences literature has been dedicated to establishing the correlation between punishment and its potential consequences, examining the mechanisms that explain how, for instance, different types of prison conditions or forms of punishment bring about an outcome is crucial to fully grasp collateral consequences. Correctional facilities (especially jails) are often difficult for researchers to access in the contemporary era and prison ethnographies, once a staple of the research literature, are much rarer today (Crewe 2009, Jacobs 1977, Kreager et al. 2015, Kruttschnitt & Gartner 2005, NRC 2014, Simon 2000, Sykes 1958/2007). Yet work along these lines is critical to understanding the black box of the incarceration experience and how what happens inside structures life on the outside. For instance, recent examples of scholarship examining the social life of inmates and the culture of prison units demonstrate the wide variety of experiences typically unmeasured in contemporary scholarship on collateral consequences (Crewe 2009, Kruttschnitt & Gartner 2005, Reiter 2016, Schaefer et al. 2017, Skarbeck 2014, Walker 2016). Importantly, these examples leverage a range of methods—from intensive interviews and (participant) ethnography to content analysis of prison records and social network analysis—to significantly expand the view of social order (and variation) in life behind bars. They also pair nicely with a renewal in ethnographic and interview studies interrogating inequality, crime, policing, and

prisoner reentry outside of the prison walls (e.g., Braman 2004, Comfort 2008, Eason 2017, Fader 2013, Stuart 2016; for a recent review, see Rios et al. 2017).

Contemporary research struggles to adequately measure and interrogate how the conditions of confinement shape recidivism and reentry experiences, but some evidence reveals the potentially enormous consequences of conditions of confinement on post-release outcomes. For instance, in a study of prisoners randomly assigned to prisons with different security levels, Gaes & Camp (2009) find that prisoners assigned to higher security prisons were more likely to recidivate post-release. Further work is needed to determine whether prison security level is important insofar as it influences the extent of psychological strain on the prisoner, increases the likelihood of criminogenic peer effects, and perhaps undermines trust in the criminal justice system.

Outside of incarceration effects, there has been some attention to disentangling the intervening mechanisms between other forms of criminal justice contact and collateral outcomes. For instance, Kirk & Sampson (2013) examine whether the mechanism leading from juvenile arrest to an increased likelihood of school dropout is a decline in educational expectations, school attachment, or support of friends. They find little explanatory power of these mechanisms and instead suggest that arrestees may be involuntarily pushed out of school through formal zero tolerance policies or through ostracism of problem students by teachers. In a similar vein, Rios (2011) provides a penetrating qualitative account of the consequences of a criminal stigma for educational outcomes, finding that the stigma produces a change in teacher expectations that paves the way for student failure and the school-to-prison pipeline. Wildeman and colleagues (2017) even find evidence of an indirect stigma, in that knowledge of a father's incarceration changes teacher expectations of the children (see also Dallaire et al. 2010). Beyond this work on teacher expectations, further work is necessary to untangle how educational institutions, whether high school or college, directly use knowledge of criminal records in decisions related to admission and expulsion.

Thus far we have said little about the collateral consequences of punishment for housing availability and the risk of homelessness, but this is an area in need of greater attention to causal mechanisms. In April 2016, the US Department of Housing and Urban Development (2016) issued a guidance to public and private housing providers with information about the fact that because of the vast racial and ethnic disproportionality in the criminal justice system, the use of criminal records in housing decisions has civil rights implications in accordance with the Fair Housing Act. Yet will the threat of civil rights lawsuits have much bearing on the availability of housing opportunities for individuals with criminal convictions? This is an incredibly important question, yet the answer depends on the intervening mechanism between a criminal record and narrowed housing opportunities. Beyond the stigma of a criminal record, convicted individuals must contend with the burdens of low income, mounting debt, and a poor credit history often made worse by a criminal conviction (Harris 2016). Fair housing protections are important but may not resolve the housing problem for persons with criminal records if there are other mechanisms at play besides criminal stigma that explain housing insecurity (Geller & Curtis 2011).

Although this section has described existing work on mechanisms, a more complete accounting of the intervening mechanisms between punishments and their so-called collateral consequences is an important next step for this research enterprise.

DIRECTIONS FOR FUTURE RESEARCH

Although there has been an explosion of research on collateral consequences, it is plainly obvious that there is much that is not known. We have described the necessity of greater attention to selection bias and forming adequate counterfactual comparisons as well as the importance of examining heterogeneous treatment effects and causal mechanisms. In the remainder of the review,

we offer additional recommendations for advancing future research on collateral consequences, with insights focused on data infrastructure, testing policy reforms, and new substantive questions.

Data Infrastructure

The data challenges for advancing research on collateral consequences are considerable. Many of these challenges have been extensively documented elsewhere. For instance, the landmark NRC (2014) report on mass incarceration in the United States calls for a national database on the characteristics and conditions of the various prison facilities across the country. We focus our discussion here on the tradeoffs between surveys and administrative records, and the value of linking the two, particularly in longitudinal study designs.

Social science relies heavily on the use of sample surveys to conduct research, but the decline in response rates in this era of cell phones and avoidance of telemarketers means that surveys are increasingly costly to conduct but often still render unacceptable response rates at an elevated cost. Even the well-resourced longitudinal surveys with acceptable response rates often used in studies of collateral consequences are not without limitations. Overreporting and underreporting of crimes and criminal justice contact are well-known problems in the criminological literature, and attrition also challenges the study of crime and collateral consequences. As one example, Kirk (2006) compared self-report responses of juvenile arrest from the *Project on Human Development in Chicago Neighborhoods* (PHDCN) to administrative arrest records obtained from the Illinois State Police and Chicago Police Department and found a substantial amount of both over- and underreporting. The good news from his study, however, was that inferences about the main correlates of arrest were robust to whether he measured arrest with administrative data or self-report survey data.

In a more recent study, Geller and colleagues (2016) link survey data from a subsample of the *Fragile Families and Child Wellbeing Study* (hereafter *Fragile Families*) with administrative records from the New York State Computerized Criminal History Files. In the wave of data from *Fragile Families* that Geller et al. (2016) use in their analysis, both the child's mother and father were asked about the father's incarceration history. Geller et al. (2016) found that the prevalence of incarceration is underreported by more than 20% in *Fragile Families* compared to administrative records. Moreover, their findings reveal that relying on a mother's survey responses about the father's incarceration is problematic. In half of the cases in which the mother reported that the father had been incarcerated but the father's survey response was missing as a validity check, administrative data revealed that the father had not been incarcerated at all. Moreover, in cases where the mother and father give conflicting responses about whether the father has been incarcerated, usually the discrepancy results from the mother overreporting the father's incarceration. Measurement problems such as these underscore the need to link surveys to administrative sources as a matter of course.

Beyond the over- and underreporting issues, well-known surveys such as the National Longitudinal Survey of Youth, the National Longitudinal Study of Adolescent to Adult Health (Add Health), the Panel Study of Income Dynamics, and the Cambridge Study in Delinquent Development, along with the PHDCN and *Fragile Families*, generally lack crucial information about duration of incarceration, the number of spells of incarceration, the conditions of confinement, non-prison sentences, whether a suspected individual was detained pre-trial, and even whether incarceration occurred in a local jail, state prison, or federal facility. These are valuable data sets, and we have used and continue to use them ourselves to advance our research agendas, but essential questions about the consequences of punishment remain challenging to answer by relying solely on prevailing surveys.

Because of the challenges of conducting surveys, there has been much discussion in the research community and the US government in recent years about reducing reliance on surveys and increasing the use of administrative and digital data in the pursuit of science (Natl. Acad. Sci. Eng. Med. 2017, Prewitt 2010). Certainly, one timely issue is whether (and in what cases) so-called Big Data has sufficient quality and reliability to be put to use to answer questions about crime and punishment (Natl. Acad. Sci. Eng. Med. 2017).

One challenge to reducing reliance on surveys is the fragmented nature of administrative data systems in the United States, between not only the disparate states and local governments but even federal agencies. A recent National Academies of Sciences, Engineering, and Medicine (2017, p. ES-i) report on federal statistics observed, “In the decentralized U.S. statistical system, there are 13 agencies whose mission is primarily the creation and dissemination of statistics and more than 100 agencies who engage in statistical activities. However, there is currently no agency directly charged with facilitating access to and the use of multiple data sources for the benefit of the entire statistical system.” Each of the various statistical agencies specializes in the subject matter of the department in which it is situated—e.g., the Bureau of Justice Statistics specializes in crime and justice data. In contrast, in many other countries there is a central government agency responsible for gathering and disseminating statistics. Given the current presidential administration’s hostility toward inconvenient facts, it seems unlikely that progress will be made toward reducing the fragmentation in federal statistics and data collection any time soon.

So what is possible if the United States could muster up the political will, resources, and proper consideration of privacy controls to augment the current data infrastructure? The data infrastructure in Nordic countries provides a model to potentially emulate (see Lyngstad & Skardhamar 2011 for a thorough review of the Nordic register data). Prewitt (2010, p. 12) notes, “European populations understand and cooperate with national registration systems that track such key variables as birth, schooling, changes in residence, employment, marriage and divorce, parenting, retirement, and death. The United States has administrative data on all these population variables. . . . But of course this is fragmented and decentralized record keeping. There is no national registration system to integrate it.” The emphasis on a national registration system is a key component of the Nordic data, with a unique identifier for the same person common to their records across all government data systems. For instance, crime and punishment data from the justice register can be linked to basic demographic information from a main population register, which can be linked to the education register for information on individuals’ full education trajectories, and the tax and employment registers for information on full employment history. In contrast, many of us who have done research on the consequences of punishment with US data have embarked on the surprisingly monumental effort it takes to link data on the same person just across the various stages of the criminal justice system within a single county or state. If, for instance, a researcher wanted to track the residential histories among former prisoners in the United States, she or he might have to review paper parole files to establish residential histories (see, e.g., Harding et al. 2013). For formerly incarcerated individuals not on parole, there is no cost-effective way to determine where a large sample of such individuals resided after incarceration or how often they moved. In Denmark, one could just use a unique identifier common across government data systems to link data from the Prison and Probation Service on all people who were formerly incarcerated with housing register data that provide information on places of residence where someone has lived as well as the timing of residential moves.

As discussed previously, studies of collateral consequences continue to be challenged by defining a proper counterfactual comparison—i.e., the incarcerated population tends to be so fundamentally different than the non-incarcerated population that studies of the collateral consequences of incarceration based on such a comparison tend to suffer from major shortcomings. The beauty of

population register data is that one can use it to measure an individual's full criminal history (and life history), thereby making possible the construction of defensible counterfactuals and the interrogation of many questions that are almost unanswerable in the US context. Because European population register data also provide a way to link individuals to a common family identifier and even to other members of the household, answering questions about the collateral consequences of punishment on families is readily possible (see, e.g., Andersen 2016). And because the data are longitudinal without the challenge of attrition (absent international migration), it is possible to examine the effects of incarceration on the extended life course of those convicted of a crime.

We end our discussion of European register data by briefly noting that the register data can be linked to survey data if surveys obtain identifying information on the national registration number, thus allowing for studies that can rely on the unique strengths of both surveys and administrative records. For instance, Wermink and colleagues (2017) explicitly merged data from the Prison Project, a multiwave interview-based study of 1,900 prisoners in the Netherlands, with population register data to not only obtain information about respondents' full criminal careers but also to link to administrative records about marriage and children. Similarly, Raaijmakers et al. (2017) use interview data from the Prison Project linked to administrative records on criminal justice contacts found in government population register data to investigate whether the severity of imprisonment has a deterrent effect. They found no support for this hypothesis.

To be fair, in the US, researchers with access to Federal Research Data Centers can link census survey data to administrative records from social security records and the IRS (Prewitt 2010), but linking survey data to multiple different government data systems is likely to be far more challenging than it is with the Nordic and Dutch register data.

In sum, it is a common refrain among criminologists to bemoan the fact that the existing data infrastructure is oftentimes ill-suited to answer even the most basic research questions. For instance, because of the alarming undercounting in FBI data of the number of people killed by the police, *The Guardian* and *The Washington Post* decided to collect the data on their own by scouring media reports, public records, and social media. The United States perhaps has an insurmountable complexity problem in its administrative data infrastructure, with multiple layers of government each with independent data systems. Even the federal government is characterized by deep fragmentation of data systems. Our point in discussing European register data is simply to illustrate that another way is possible. However, legal barriers, interagency resistance to data sharing, and a vast assortment of other challenges may make such a data infrastructure a pipe dream in the United States. Nevertheless, to fully grasp the collateral consequences of contact with the criminal justice system and conviction, sustained investment in data infrastructure is imperative.

Testing Policy Reforms

We have suggested that much remains uncertain about the collateral consequences of conviction and incarceration, in part because of the inadequacy of data to illuminate these themes. Nevertheless, the criminal justice community oftentimes does not wait for research to coalesce around an accepted understanding before implementing reform, yet such reforms present excellent opportunities for refining our understanding of collateral consequences. Hence, an important next phase of research on collateral consequences is to examine the efficacy of interventions designed to reduce collateral consequences. The latter years of the Obama Administration yielded a bipartisan push toward criminal justice reform, although it remains to be seen to what extent the Right on Crime reform movement buoyed by libertarian principles will maintain legitimacy among conservative thinkers in the face of the renewed tough-on-crime rhetoric coming from the White House. Analyzing the efficacy of reforms enacted in recent years is imperative.

Here, we touch on findings from just one set of reforms related to employment. “Ban the box” refers to the practice of removing questions about a criminal record from job applications (i.e., removing the check-box asking applicants whether they have been arrested or convicted of a crime), thereby delaying any criminal background check until after the applicant’s qualifications for the job in question have been assessed. The assumption is that banning the box would lead to an expansion of job opportunities for people with criminal records because they would at least have a chance at demonstrating their qualifications before the criminal record check occurred.

More than a decade ago, Holzer and colleagues (2006) somewhat counterintuitively suggested that criminal background screening of job applicants may actually be beneficial to the employment prospects of black individuals, at least for those without a criminal record. Absent information about criminal history, prospective employers may statistically discriminate against blacks, assuming that they have a criminal record in the absence of information to counter that assumption. As it relates to ban the box, the implication is that removing the box from job applications with information about criminal history may eliminate a critical piece of information in the hiring process of black applicants. Despite this early warning about the potential downsides of ban-the-box policies, there has been an explosion of jurisdictions in recent years implementing some form of ban the box for both government employers and even private employers operating in a jurisdiction. The National Employment Law Project (Rodriguez & Avery 2017) reported that as of May 2017, more than 150 cities and counties in the United States had banned the box, as well as 27 states.

In a field experiment of the efficacy of ban the box, Agan & Starr (2017) find support for Holzer et al.’s (2006) contention. They submitted roughly 15,000 fictitious online job applications to employers in New Jersey and New York City, both before and after these jurisdictions adopted ban-the-box policies. Agan & Starr (2017) found that before the policy went into effect, there was a 7% race difference in favor of whites relative to blacks in the likelihood of an applicant receiving a call-back about a job. After ban the box went into effect, the gap grew to 45%. Although findings from this study should be tested in other jurisdictions, Agan & Starr’s (2017) results suggest that at least for this one reform designed to reduce collateral consequences of a criminal record, the policy may backfire or at least have negative unintended consequences (see also Doleac & Hansen 2016, Vuolo et al. 2017).

The rigor of quasi-experimental and experimental designs certainly enhances the prospects of performing conclusive analyses about policy reforms, but we also see value in cross-national comparisons as a means of understanding the potential efficacy of reforms. Here again, we focus on the association between criminal background checks and employment opportunities.

The criminal background check industry in the United States is a \$4 billion industry, and more than 90% of employers in the United States obtain criminal background checks on at least some of their hires (Jacobs 2015). In contrast, in continental Europe, the background check industry is essentially non-existent because criminal records are largely private. Not only are conviction records in Europe considered personal and protected by a right to privacy, there is also recognition that the public disclosure of criminal records undermines a right to rehabilitation (Jacobs 2015). At the heart of the right to privacy in Western Europe is the right of an individual to control the types of information disclosed about her or him as well as the right to maintain one’s reputation and to be spared from unwanted humiliation and shame. This approach to privacy is a far cry from the shaming practices in the United States, where, for example, police departments and blogs regularly post identifying information about arrestees online, including humiliating mugshot photos (Lageson 2017).

Policies about sealing and expungement of criminal records vary considerably across jurisdictions in the United States. Even for those cases in the United States in which an individual’s

criminal record is eligible for sealing or expungement, very rarely is it automatic. In contrast, in many European countries expungement for certain offenses is automatic or at least far closer to automatic than in the United States. In Spain, all convictions are eligible to be sealed after the sentence is completed. The United Kingdom's Rehabilitation of Offenders Act of 1974 was a law enacted by Parliament with the intent of lowering the barriers to reintegration back into society among rehabilitated individuals. Under the law, if a former prisoner has had no further convictions, then after a specified period of time following release from prison—from two to seven years depending on the criminal sentence length—the former prisoner is deemed rehabilitated and the prior conviction is considered spent. This means that the conviction no longer needs to be disclosed by the individual on employment applications or housing applications.

The cross-national differences in approaches to privacy and the resulting handling of access to criminal records provide an opportunity to investigate the extent to which American exceptionalism in the disclosure of criminal records fosters the types of collateral consequences perhaps not seen in other advanced societies. However, if we assume that open access to criminal records is damaging to prisoner reintegration in the United States, then why are recidivism rates in many European countries just as high and in some cases even higher than in the United States? For instance, in the United Kingdom, 45% of individuals released from prison are rearrested and adjudicated within one year of release (UK Minist. Justice 2017). By comparison, 43% of individuals released from US prisons each year are rearrested within one year (Durose et al. 2014). Moreover, it could be the case that European countries suffer from the kind of statistical discrimination found in the Agan & Starr (2017) study. In the absence of information about criminal history, employers may draw on stereotypes related to race, ethnicity, and perceived social class to draw conclusions about an applicant's background and fitness for employment. Although our focus in this section has been on the efficacy of different ways to manage the stigmatizing effects of a criminal record, our larger recommendation is for researchers to take advantage of opportunities to move beyond a cataloging of collateral consequences to a focus on testing the efficacy of reforms designed to reduce collateral consequences.

Breaking New Ground

In the course of writing this review, two unexpected events occurred that are already having far-reaching consequences for the world economy, the geopolitical landscape, the principles of democracy, and inequality and discrimination broadly defined: Brexit and the election of Donald Trump to the American presidency. These events, and the waves of nationalism that led to them, also have substantial implications for the reach of collateral consequences. Our focus here is on the United States.

As shown in the preceding pages, even before the 2016 presidential election, the United States had already embarked on a sizable increase in immigrant detentions and deportations in the period after the passage of The Illegal Immigration Reform and Immigrant Responsibility Act of 1996 and the 9/11 terrorist attacks in 2001. On February 21, 2017, the US Department of Homeland Security issued a memorandum outlining the new presidential administration's enforcement strategy for illegal immigration. The memo states "Department personnel should prioritize removable aliens who: (1) have been convicted of any criminal offense; (2) have been charged with any criminal offense that has not been resolved; (3) have committed acts which constitute a chargeable criminal offense" (US Dep. Homel. Secur. 2017, p. 2). Whereas the Obama Administration prioritized serious criminal offenders for deportation proceedings, the Trump Administration gives priority to the deportation of any alleged criminal offender, convicted or not. The memo describes an immediate plan for Immigration and Customs Enforcement (ICE) to hire an additional 10,000

enforcement officers to help ICE expeditiously carry out this escalation in deportation practices. Adding that many new officers would nearly triple the number of ICE officers with enforcement and deportation responsibilities.

There are numerous research questions to ask in the coming years about the collateral consequences of punitive policies and practices toward immigrants. To be sure, there has been an abundance of research on the consequences of punitive immigration policies and deportation in the disciplines of sociology, demography, and migration studies (e.g., Menjivar & Abrego 2012, Roberts et al. 2017), yet the literature on collateral consequences in criminology often speaks to a separate audience than the literature on migration studies in sociology and demography. Regarding criminology, to the extent that existing studies fail to sample the roughly 400,000 to 500,000 immigrants detained each year pre-conviction and the roughly 20,000 convicted and sentenced to prison (recognizing that these figures are likely to increase significantly), studies of the collateral consequences of incarceration need to be augmented and inferences reassessed in light of the substantial use of incarceration in the United States against immigrants.

Discussion of the collateral consequences of incarceration for families should also include the implications for the thousands of accompanied and unaccompanied immigrant children held in immigrant detention centers. In 2014, roughly 69,000 unaccompanied children were apprehended by US Border Patrol, most in the southwest border region near Mexico (US Cust. Bord. Prot. 2016). Accompanied and unaccompanied children have often been detained in institutions that the US government artfully calls family reception centers, but that have been purported to have many similarities to typical prisons, with suspected cases of verbal, physical, and sexual abuse and assorted human rights violations (Inter-Am. Comm. Hum. Rights 2015). The consequences of these conditions on the life course of detained children and families have not yet been systematically investigated.

There are many pertinent research questions about the collateral consequences of immigration detention. What are the consequences for the well-being of those individuals deported? What are the consequences for US-based families and communities of deported individuals (see, e.g., Hagan et al. 2015)? Moreover, what are the effects on a family unit when a family member is detained or imprisoned by the US government? Some research suggests that family instability and separation brought about by the detention and deportation of family members can have deleterious effects on children, including depression (Dreby 2015). The inability of a detained or deported individual to earn a wage and pay off debts to border smugglers may put other family members (whether in origin or destination countries) at risk of violence, and the loss of income may make a precarious living situation for family members exponentially worse.

A mountain of evidence reveals that immigrants are generally less criminally involved than native-born populations (e.g., Bersani 2014, Ousey & Kubrin 2017, Sampson et al. 2005), and there is evidence that immigrant non-citizens detained by ICE actually express a stronger obligation to obey the law than the average US citizen (Ryo 2017b). Hence, another potential consequence worth investigating is whether an increase in crime in the United States will occur as a result of the fact that the United States is seemingly closing its borders to many law-abiding individuals. Moreover, will a crime wave result from the further delegitimacy of the law and the police that will likely occur as a result of Trump-era immigrant round-ups (Kirk et al. 2012, Ryo 2017a)?

Beyond these specific research questions, our general recommendation is to make immigration a more central focus of the collateral consequences research agenda. We also raise this example to conclude with a more general point. Much of the research on collateral consequences of punishment was produced well after the prison boom started (and peaked). The focus on incarceration and the identification of ever more collateral consequences that flow from it are important enterprises. Yet this focus obscures other stages of the system, other forms of punishment, and, importantly,

challenges that rapidly emerge. As another example, both policing practices and incarceration policies are experiencing a legitimacy crisis and are currently subject to significant debate among policymakers and the public—yet in the discipline of criminology, policing and punishment scholars rarely collaborate and exchange ideas. Research that utilizes innovative and rigorous methods, integrates knowledge on the different stages of criminal case processing, and appropriately situates criminal justice system(s) within the larger political and institutional contexts would move the field forward substantially.

MOVING FORWARD

Whereas we have offered a critical review of the collateral consequences literature, let us be clear that the weight of the evidence reveals that mass incarceration has come with significant social costs and considerable implications for rising social inequality (NRC 2014). These social costs of a massive criminal justice system come with few countervailing payoffs for crime control and public safety. The crime reduction influence of mass incarceration suffers from a ceiling effect, whereby further increases in the incarceration rate yield smaller crime reductions. Massive increases in the incarceration rate contributed to a decrease in the violent crime rate on the order of 10% to 25% (Johnson & Raphael 2012, Sampson 2011, Western 2006). Such estimates are non-trivial but these benefits leveled off in the early 1990s (Johnson & Raphael 2012, Levitt 1996, Liedka et al. 2006, Raphael & Stoll 2009). Following that period, further increases in the incarceration rate did little to reduce crime and created new and costly collateral harms; mass incarceration is, at best, an inefficient way of improving public safety (Durlauf & Nagin 2011). Moreover, the punitiveness of the mass incarceration era and the gross racial and ethnic disparities that have come with it may have delegitimized the law and the government to such an extent that an increase in future crime should not be unexpected.

It thus appears clear that mass incarceration in the United States is an ineffective and ill-advised public policy, yet a full accounting of its costs remains elusive. By providing this critical review, we do not suggest that research on the collateral consequences of criminal justice contact is weaker or more inconsistent than any other. Indeed, research on collateral consequences has made great strides in amassing an initial and critical accounting of the harms to social life that resulted from massive criminal justice expansion. As reviewed here and elsewhere (e.g., NRC 2014), precise causal claims may be hard to make, yet the evidence base is voluminous that incarceration is associated with detrimental health outcomes, reduced employment opportunities and earnings, rising debt, housing insecurity, declining civic engagement, and adverse consequences for family stability and well-being.

Still, fundamental questions remain. Although the initial wave of research on collateral consequences offered a series of baseline effects against which later advances could be compared, the field has struggled to move from its initial conceptual simplicity to operational complexity. It remains unclear, for example, what consequences specifically flow from arrest, conviction, incarceration, or the myriad other disadvantages that draw people into the criminal justice system. Unfortunately, researchers (including us) often have no alternative to treating all contacts with the criminal justice system as alike because of critical data limitations. Data limitations will continue to hinder research on collateral consequences, but we encourage researchers to look beyond the United States for sources of data and criminal justice system variations that will enhance our understanding of the social costs of punishment. Through this review, we hope to have laid the groundwork for the next set of insights, again emphasizing the importance of minimizing selection bias, giving proper consideration to the possibility of treatment heterogeneity, and the necessity of identifying causal mechanisms underlying collateral consequences.

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