# Mass Incarceration, Macrosociology, and the Poor

The U.S. prison and jail population has grown fivefold in the 40 years since the early 1970s. The aggregate consequences of the growth in the penal system are widely claimed but have not been closely studied. We survey evidence for the aggregate relationship among the incarceration rate, employment rates, single-parenthood, public opinion, and crime. Employment among very low-skilled men has declined with rising incarceration. Punitive sentiment in public opinion has also softened as imprisonment increased. Single-parenthood and crime rates, however, are not systematically related to incarceration. We conclude with a discussion of the conceptual and empirical challenges that come with assessing the aggregate effects of mass incarceration on American poverty.

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The growth of the American penal system since the mid-1970s has been concentrated from among African Americans and the poor. During the period of the prison boom, African Americans were about six to seven times more likely than whites to be incarcerated. By 2008, young men who had dropped out of high school were about 20 times more likely to be incarcerated than those who had attended college. The inequalities of race and class combine to produce astonishing rates of penal confinement among black men with little schooling. Chances that a black man with no college education would serve time in prison were about 12 percent in the late 1970s, compared to 35 percent today

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(Western and Wildeman 2009). Today, black men under 35 who have dropped out of high school are more likely to be incarcerated (37 percent) than to hold a job (26 percent) (Western and Pettit 2010a, 2010b).

Research on race and poverty has now turned to examine the effects of the penal system on economic and social life. Sociologists and economists have studied the effects of a criminal record on workers' earnings and employment (Pager 2003; Holzer, Raphael, and Stoll 2006; Grogger 1995). Family demographers have considered patterns of divorce and separation following the incarceration of a spouse (Lopoo and Western 2005). Psychologists and criminologists have studied the behavioral and learning problems of children that result from parental incarceration (Murray and Farrington [2008] review the literature). The effects of incarceration on health status, mortality, and crime have also been examined.

Though we are learning more about the effects of incarceration on poor men and women, and their families, much less is known about the macrosociology of poverty under mass incarceration. The macrosociological perspective highlights aggregate levels of poverty and its social correlates. If mass incarceration has become constitutive of the collective experience of poverty, and urban poverty in particular, we would expect to see this reflected in social aggregates such as rates of poverty, unemployment, marriage, and crime. The aggregate influence of mass incarceration suggests a transformation of the social logic of American poverty, in which the institutions of social control substantially contribute to social and economic disadvantage.

Several researchers claim that mass incarceration represents a basic change in the character of social inequality and race relations. Wacquant (2009) describes "hyper-incarceration" as a key feature of American neoliberalism in which the penal system has grown, filling a void in social policy efforts left by a contracting welfare state. Alexander (2010) describes the era of mass incarceration as "the New Jim Crow," maintaining deep racial inequalities with crime-control institutions that are, on their face, race-neutral. Stratification and poverty researchers have also claimed that the penal system exerts a systematic influence on the life chances of the poor, particularly young African American men (Bound and Freeman 1992; Holzer, Offner, and Sorensen 2005; Western 2006). Despite these claims, we argue that neither a high rate of incarceration nor evidence of the micro-level effects of incarceration, by themselves, demonstrate their aggregate significance.

In this article, we describe the conceptual and empirical challenges of assessing the aggregate effects of mass incarceration on American poverty. A brief empirical survey suggests that the correlates of poverty, in the aggregate, are unevenly related to the growth of the prison population. This may be partly due to the invisible inequality created by large-scale incarceration. In this scenario, when a large fraction of the poor are institutionalized, the usual social indicators appear optimistic because the most disadvantaged are not reflected in the statistics. The micro-level effects of incarceration may also be too small to register at the aggregate level. Finally, because those incarcerated are so loosely connected

to mainstream social institutions, such as households and the labor market, they are hard to observe with the usual social scientific instruments. We review these challenges to assessing the aggregate effects of mass incarceration and suggest directions for future research.

# The Empirical Contours of Mass Incarceration

The term "mass imprisonment" was originally coined by the sociologist David Garland (2001). For Garland, mass imprisonment is a historically specific concept that describes the scale and effect of incarceration in the United States in the last decades of the twentieth century. Garland provides a two-part definition of American mass imprisonment. First, mass imprisonment involves a rate of incarceration that is markedly above the comparative and historical norm for affluent liberal democracies. Second, and a little more elliptical, incarceration must be so extensive and concentrated that it imprisons not just the individual but the group.

The comparative and historic novelty of the American penal system is easily seen. The scale of a penal system is often measured by an incarceration rate that quantifies the number in prison or jail per 100,000 of the population. Comparative incarceration statistics are compiled by the International Prison Studies Centre at Kings College in London. Their 2009 World Prison Population List puts the U.S. incarceration rate of 743 (per 100,000) first among all countries, exceeding second-place Russia (577) by more than 25 percent (Walmsley 2009). Compared to the affluent democratic countries, the United States is in a class of its own, topping New Zealand (200), and England and Wales (152). On the European continent, incarceration rates vary from about 50 to 100 per 100,000.

Today's incarceration rates are also historically unprecedented. Statistics on state and federal prisons go back to the mid-1920s. From 1925 until the mid-1970s, imprisonment rates fluctuated around 100 per 100,000, similar to the level we now see in Western Europe. The U.S. penal system grew, starting in the mid-1970s, and increased steadily for the next 35 years. From 1972 to 2009, the imprisonment rate grew more than fivefold from 93 to 502 (Maguire 2010). The true incarceration rate is about a third higher once we count those serving short sentences or awaiting trial in local jails.

The increase in incarceration was driven almost entirely by changes in criminal justice policy (Blumstein and Beck 2005). The revision of criminal sentences implemented long, and often mandatory, periods of confinement for violent offenses and repeat offenders. Penalties and prosecution for drug crimes escalated sharply through the 1980s, significantly increasing the proportion of those convicted for drugs in state and federal prison populations. Finally, parole supervision intensified though the 1990s, and an increasing fraction of prison admissions were parolees who were readmitted for violating the conditions of their supervision. Together, increased time served, increased prison admissions for

drug crimes, and increased revocation of parolees contributed significantly to the increase in prison populations from the mid-1970s (Blumstein and Beck 1999, 2005).

The punitive turn in criminal justice policy unfolded in a broader context in which electoral politics were generally becoming more conservative than they had been in previous decades. Partly in response to rising rates of crime, and partly in response to social protest and civil disorder in American cities through the 1960s, elected officials increasingly touted a law-and-order politics that promised to get tough on crime. Punitive sentiment often concealed racial appeals to white voters discomfited by social movement activism and the erosion of race privilege in the wake of civil rights. Three strikes laws, which increase the sentences of second- and third-time felony offenders; mandatory minimums, which require custodial sentences for certain offenses; truth in sentencing, which requires offenders to serve the majority of their prison sentence; and a large-scale abandonment of rehabilitative programming emerged from these politics.

Though comparative and historical patterns are striking, demographic inequalities in incarceration are even more remarkable. This is illustrated in Table 1, which reports incarceration statistics at two points in time. First, we report incarceration in the late 1970s and 1980, before the large expansion of prison and jail populations. Second, we report statistics on incarceration in 2008 and 2009. Considering just the rate—the percentage of people in prison or jail—we see large, but relatively stable, racial disparities and increasing educational inequality. Young men with very little schooling show very high rates of contact with penal institutions. The incarceration rate for white male dropouts, under 35, was nearly 12 percent by 2008. For black dropouts, the 2008 incarceration rate was more than 35 percent. Incarceration rates for Hispanic high school dropouts were exceptionally low, perhaps related to their unusually high rate of employment. Around 7 percent of Hispanic male dropouts younger than 35 were in prison or jail in 2008.

An alternative statistic asks about the likelihood of ever serving time in prison. Prison time, as opposed to jail incarceration, typically involves at least a year of penal confinement for a felony conviction in a state or federal facility. For Hispanic dropouts, whose incarceration rates are lowest, about one in five now in their mid-30s have served time in prison at some point in their lives. For white male dropouts under 35 in the late 1970s, less than 4 percent had prison records, but the prevalence of imprisonment increased to 28 percent by 2009. For black male dropouts, nearly 70 percent of those in their early 30s had served time in prison in 2009. In sum, large race and class inequalities combined with a historically unprecedented scale of incarceration to produce extremely high rates of incarceration among very low-educated black men.

## The Effects of Mass Incarceration

In the context of very high incarceration rates, researchers turned their attention to the effect of imprisonment on a variety of social and economic indicators. We

TABLE 1
Men's Incarceration before and during Mass Incarceration

	Before	During
Incarceration rate (%), 1980 and 2008		
Whites, under 35	0.65	1.75
Whites, high school (HS) dropouts, under 35	2.35	11.95
Blacks, under 35	5.24	11.43
Blacks, HS dropouts, under 35	10.58	37.15
Hispanics, under 35	2.34	3.68
Hispanics, HS dropouts, under 35	3.23	6.97
Imprisonment by age 35 (%), 1979 and 2009		
Whites, under 35	1.35	5.35
Whites, HS dropouts, under 35	3.77	27.96
Blacks, under 35	10.35	26.84
Blacks, HS dropouts, under 35	14.68	67.98
Hispanics, under 35	2.83	12.16
Hispanics, HS dropouts, under 35	4.14	19.6

SOURCE: Western and Pettit (2010b).

can broadly divide this research program into four areas: recidivism and crime, social and economic outcomes, external effects on family members, and cultural effects on the legitimacy of authorities.

Research on the effects of incarceration on crime has a long history that significantly predates mass incarceration (see Durlauf and Nagin [2011] for a recent review). Two hypotheses dominate this area. One claims that prison is criminogenic—crime-causing—perhaps by promoting criminal behaviors, by integrating prison inmates into the networks of criminal offenders, or by conferring a stigma that limits legitimate opportunities. The other hypothesis claims that prison reduces crime, chiefly through deterrence or incapacitation. Deterrence may be general (diverting the general population from crime by the threat of punishment) or specific (diverting ex-inmates from recidivating). Incapacitation describes the crime avoided by locking up those who would otherwise offend in free society (Zimring and Hawkins 1995). (Arguments about incapacitation take no account of crimes committed in prison.)

The research suggests the effects of incapacitation may be larger than the effects of deterrence (Nagin 1998). Criminal offenders tend to be less likely to weigh the severity of punishment or the likelihood of incarceration than the chances of apprehension. Thus, the deterrent effect of incarceration compared to arrest, for example, is relatively small. The size of incapacitation effects are also hard to assess. Researchers often rely on self-reports of offending immediately before incarceration (e.g., Marvell and Moody 1994, 111). Still, an individual's propensity to offend is unlikely to be stable over time, will tend to be highly situational, and is likely to decline with age. Moreover, there tends to be little

effect of incapacitation for crime organized in groups—such as drug dealing—where offending is barely reduced by the incarceration of one member.

Though the contributions of incapacitation and deterrence are difficult to estimate with certainty, there is a strong consensus that incarceration reduces crime, at least in the short run. The strongest evidence for the crime-reducing effect of mass incarceration is provided by the crime drop in the 1990s. Following a dramatic increase in violent crime rates in the early 1990s—vividly reflected in murder rates for black youths—reported crime fell across the country. Large declines in crime were recorded in large cities and suburbs, for all demographic and economic groups. These crime data drove the conclusion that the increase in imprisonment contributed substantially to public safety (Levitt 2004; Spelman 2006). The magnitude of the crime-reducing effect of incarceration is hotly contested, with 10 to 30 percent of the 1990s crime drop attributed to the rising prison population (Western 2006). Still, the negative effect of incarceration on crime has not been fully absorbed by new research that examines the negative social consequences of incarceration. The crime drop (which has been sustained through the 2000s) represents a real improvement in the quality of life of the urban poor and these benefits should be counted in any aggregate assessment of mass incarceration.

Another growing line of research has examined not crime, but its social and economic correlates. Two outcomes stand out in the broader context of research on poverty. A number of studies (Kling 2006; Pager 2003; Pager, Western, and Bonikowski 2007; Western 2002, 2006; Western and Pettit 2005) try to estimate the effect of incarceration on wages, employment, and other labor market outcomes. These studies have tracked trends in wages and employment before and after incarceration and examined how employers view job applicants with criminal records. The leading hypothesis in this area claims that job seekers coming out of prison do poorly in the labor market either because of employers' aversion to hiring those with criminal records or because incarceration has undermined skills and reduced the social contacts that might provide legitimate job opportunities. Harry Holzer (2007) reviews the literature on incarceration and the labor market and concludes that, on balance, serving time in prison is likely to reduce employment and wages. The empirical literature is somewhat mixed, because those going to prison have such poor employment prospects to begin with. Adjusting for acute sample selection bias is thus a major challenge for this research.

The other key outcome in research on the social and economic consequences of incarceration is family formation. Similar to the analysis of employment, incarceration is thought to negatively affect family formation and foster single parenthood, chiefly by undermining the quality of men in communities with high incarceration rates. Anticipating current research by more than two decades, Wilson and Neckerman (1986) famously argued that the pool of marriageable men in poor inner-city communities was eroded by joblessness, incarceration, and mortality. Men who are incarcerated are obviously unlikely candidates for

marriage. Even after incarceration, the stigma of criminality and poor economic prospects may reduce marriage rates among men with prison records. Ethnographers similarly point to the intense strains on marital and romantic relationships that incarceration produces (Braman 2004; Edin 2000; Comfort 2008; Nurse 2002). As for research on employment, the problems of selectivity are acute in studying marriage and divorce. Adjustments for selectivity have probably been less convincing in the area of family formation than in research on employment. In part, this may reflect a perspective that focuses on men's observable characteristics as the basis for women's marriage decisions. Young men who are at greatest risk of incarceration are also likely to be weakly connected to households, involved in crime, and embedded in criminal peer networks. These characteristics, which may reduce the appeal of marriage for young men, may be harder to observe with standard data sources.

Research on the social consequences of incarceration has also studied the well-being of children whose parents have been to prison. Researchers in this area have examined social behaviors, mental health outcomes, and cognitive test scores. A large number of studies now find that the children of incarcerated parents are likely to experience diminished well-being. Aggressive behaviors, depressive symptoms, and reduced academic achievement have all been observed among children whose parents have been sent to prison (Murray and Farrington 2008; Wildeman and Western 2010). There is also some evidence that these effects may be larger for boys than girls, perhaps reflecting the substantially higher incarceration rate among men than women. For much of this research, selection is poorly controlled so behavioral and academic problems among the children of incarcerated parents may be equally symptomatic of serious poverty. Rosa Cho (2010) uses a relatively strong research design to examine educational outcomes from a sample of children whose mothers entered Cook County Jail in Illinois. Cho's data allow her to study sibling pairs and to construct comparison groups from mothers serving very short spells in jail. This research reports some effects of maternal incarceration on school dropout for adolescents, but no effect of incarceration on children's math and reading scores.

Looming behind the research on children of incarcerated parents is the broader implication that incarceration reproduces itself and its related social and economic inequalities across generations. Because of school failure and behavioral problems, perhaps concentrated among boys, parental imprisonment today may sow the seeds of poverty and incarceration tomorrow. Though evidence for the intergenerational reproduction of incarceration is mixed (Cho 2010; Wildeman 2010; Hagan and Foster 2012), recent studies have yet to follow the children of incarcerated parents into adulthood.

Finally, we consider the cultural effect of incarceration on the legitimacy of crime-control authorities. While incarceration may broadly affect perceptions of life chances and marriage markets, for example, the problem of institutional legitimacy has been a key topic for criminologists but of marginal interest for poverty researchers who share an interest in highly incarcerated groups. While

little is known about the broad cultural effects of mass incarceration, research on the legitimacy of crime-control agencies offers a point of contact for researchers studying criminal punishment and those focused on urban poverty.

Indeed, poverty researchers have long-standing interests in the values of the poor and their commitment to mainstream social institutions such as employment and marriage (recent contributions include Newman 1999; Anderson 2000; Edin and Lein 1997). The idea that those who are subject to formal crime-control agencies—whether schools, police, or prisons—may come to reject those authorities has a long history in interpretative criminology, in the work of Albert Cohen (1955), Howard Becker (1963), David Matza (1964/1990), and Gresham Sykes (1958/2007), among many others. In this account, formal social-control agencies are delegitimated as a byproduct of validating oneself in an alternative set of values to those established by the authorities.

Contemporary research on attitudes to the criminal justice system suggests a significant race gap in legitimacy. Surveys regularly find that African Americans have less trust and confidence in the criminal justice system than do whites (Hagan and Albonetti 1982; Sherman 2002; Weitzer and Tuch 2005). For example, Gallup data show that more than 60 percent of whites report confidence in the police compared to 34 percent of blacks (Sherman 2002, 8). More than a third of whites reported confidence in local courts, compared to just one in six blacks (Sherman 2002, 8). Still, we know of no study that shows in a clear-cut way that the emergence of black mass incarceration has reduced confidence in the criminal justice system among African Americans. The most suggestive research reports that blacks are much less likely to believe in the fairness of the criminal justice system and are more likely to view the police suspiciously in their interactions with black citizens (Hurwitz and Peffley 2005). Unnever (2008) reports that 71 percent of African Americans compared to 37 percent of whites consider police bias a "big reason" for racial disparity in imprisonment, while 67 percent of African Americans compared to 28 percent of whites believe the same of bias in the courts. Furthermore, the more African Americans report that they have been the object of racial discrimination, the more likely they are to attribute racial disparity in imprisonment to disparities in schooling and job opportunities, as well as racial discrimination within the criminal justice system (Unnever 2008).

Some studies link attitudes toward specific officials—police or prosecutors, for example—to more fundamental beliefs about social inequality. For African Americans, beliefs about the unfairness of the criminal justice system are often associated with broader beliefs about racial bias in American society. Blacks are more likely to view police-minority interactions as unfair and racially tinged because they are highly sensitized to racial discrimination in general (Hurwitz and Peffley 2005). For whites, confidence in the criminal justice system is often associated with support for harsh punishment and a belief in the legitimacy of a hierarchical ordering of society. Sidanius and his colleagues (2006) interpret such evidence to show that beliefs in the legitimacy of the criminal justice system are part of a broader ideology that operates to legitimate racial and other inequalities.

Ethnographic research points in a similar direction. For the black youths Elijah Anderson studied in Philadelphia, poor educational and economic opportunities promoted an oppositional culture skeptical about school and the legitimate labor market as sources of life chances. The police occupy a special place in Anderson's (2000) account:

The code of the street is actually a cultural adaptation to a profound lack of faith in the police and the judicial system. . . . The police, for instance, are most often viewed as representing the dominant white society and as not caring to protect inner-city residents. When called, they may not respond, which is one reason many residents feel they must be prepared to take extraordinary measures to defend themselves and their loved ones against those who are inclined to aggression. (p. 34)

In Anderson's analysis, youths who doubted the legitimacy of criminal justice institutions also rejected the value of nonviolence in the resolution of daily conflicts. The illegitimacy of the institutions of public safety thus contributes to the violence in poor inner-city neighborhoods in Anderson's account. Police disrespect, differential treatment, and suspicion directed at poor inner-city residents are other sources of illegitimacy identified in qualitative studies (Stoutland 2001; Weitzer 2000; Brunson 2007).

This brief review examines only several of the effects of incarceration in which research is most developed. A less developed but burgeoning epidemiological literature studies the consequences of high rates of incarceration for population health. For example, one study links the large race differential in AIDS infection rates to the racial disparity in incarceration (Johnson and Raphael 2009; Wildeman and Muller [2012] review the literature). Researchers are also investigating the spatial patterning of incarceration and describing its effects on neighborhood dynamics (Clear 2009; Sampson and Loeffler 2010).

These other strands of the larger research program on mass incarceration offer a similar picture to the work on crime, family formation, employment, child well-being, and public opinion. High contemporary rates of incarceration, highly concentrated in poor urban communities, may yield some short-term improvement in public safety, but at the cost of an increase in crime and inequality in the long-run.

# Macrosociological Implications

Though there is evidence for the micro-level effects of incarceration, little in the research that we have reviewed depends on the historically high rate of incarceration. The effects of incarceration on employment or marriage, for example, are thought to arise from criminal stigma and the diminished human and social capital produced by penal confinement. Cynicism regarding authorities is produced through individual and vicarious contacts with police and other criminal justice agencies. Researchers have treated these mechanisms as operating at the micro level, largely independent of the historic scale of the penal system.

Though research on micro-level effects does not integrate the level of incarceration directly into the analysis, several commentators argue that historically high rates of incarceration have transformed the nature of social and economic inequality in America. Claims of the macrosociological significance of the contemporary penal system have been made in several ways. For the sociologist Loïc Wacquant, "hyper-incarceration" represents both a criminalization of poverty and a new form of racial domination. Wacquant (2009) argues that the enlargement of the penal system has accompanied the shrinking of the welfare state. The punitive turn in criminal justice policy is seen as a response to the social problems that followed the fraying of the safety net for poor communities. Wacquant also argues that mass incarceration filled the vacuum of social control left by the ghetto as it crumbled under deindustrialization. For Wacquant, hyper-incarceration (in combination with the jobless ghetto) is the fourth peculiar institution ensuring the subordination of African Americans following slavery, Jim Crow, and the ghetto of the industrial era. Everyday life has been transformed, as the social routines and interactions of the urban poor bring them into regular contact with police, parole officers, courtrooms, and prisons.

The idea of mass incarceration as a system of racial domination is also developed in Michelle Alexander's *The New Jim Crow* (2010). For Alexander, mass incarceration is a distinctive social invention of the post–civil rights period. Born out of a politics of conservative reaction, mass incarceration reestablished the subjugation and incomplete citizenship of African Americans. Following the legislative and legal victories of the civil rights movement, a superficially race-neutral institution—the criminal justice system—emerged to sustain the second-class citizenship of African Americans. Mass incarceration represents a repudiation of the aspirations of the civil rights movement, by effectively denying full citizenship to the poorest African Americans.

Wacquant and Alexander touch on the social and economic consequences of incarceration, but the chief significance of the prison boom in their analyses is the deprivation of liberty and the surveillance it entails. For a social group whose relationship to American society is defined by a history of forced confinement, from slavery to the ghetto, mass incarceration represents the latest chapter.

In these analyses, mass incarceration is fundamentally a political institution. The penal system is important for its production of the pains of imprisonment and its defiance of the values of a republic built on universal citizenship. Though the political significance of mass incarceration is profound, the empirical claims sustaining this significance are quite limited. The collective injury to black America and the republic to which African Americans are sometimes tenuously connected are produced largely by the pure fact of penal confinement.

But research on both the demography of imprisonment and its micro-level effects suggests that the historic significance of mass incarceration may be even greater. We argue that the micro-level effects of incarceration may have broader importance if they are sufficiently large enough to shift the aggregate social correlates of American poverty. If penal institutions significantly increase unemployment, undermine family stability, diminish the life chances of poor children, and

discredit police and the courts as sources of social order, we can say that mass incarceration has become constitutive of the social experience of poverty in contemporary America. These aggregate effects would contribute to the formation of a distinct social group whose collective status and welfare, originating in incarceration, is wholly different from mainstream American society.

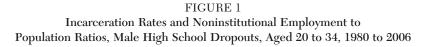
If, indeed, mass incarceration through the aggregation of its micro-level effects deepens social inequality, the marginality of America's urban poor would be rooted in the coercive power of the state. Typically, we think of advanced economies as arrayed on a continuum in which various combinations of state and market yield different distributions of social welfare. In Esping-Andersen's (1999) typology, for example, the European social democracies, with their expansive welfare states, are associated with low levels of inequality and broadly distributed opportunity. The conservative welfare states of continental Europe are extensive, though status-bound, and reinforce traditional family relations. The United States falls into the third category of liberal welfare states populated by the Anglo countries. Under the liberal regime, the welfare state is stingy, providing a residual source of well-being, subsidiary to a lightly regulated and highly unequal labor market.

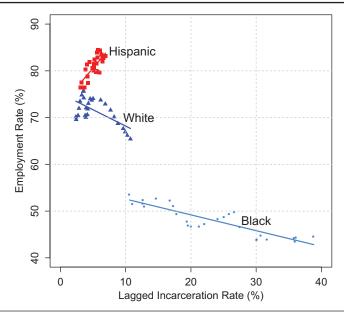
Poverty under mass incarceration, however, suggests another possibility. In this case, the state, not the market, is actively involved in deepening social and economic inequalities and contributing to the reproduction of inequality from one generation to the next. The prison here is not a purely political institution that transforms African Americans into a subject people, as Alexander and Wacquant would have it. It is also an economic institution, significantly affecting the distribution of rewards and life chances.

This larger claim is empirically stronger and depends on the prevalence and magnitude of the micro-level effects of incarceration and how they aggregate. In addition to this, scholars must weigh the short-run positive effects of crime reduction against the long-run negative effects of unemployment, family disruption, and institutional delegitimation. Criminal victimization poses a substantial threat to social and economic well-being among the poor. If the improvement in public safety through deterrence and incapacitation exceeds the social costs of the penal system, it would be difficult to sustain the hypothesis that the net effect of mass incarceration on urban poverty has been negative.

Researchers have concentrated mostly on the micro-level effects of incarceration. Less is known about the aggregate effects. As a preliminary step in studying the aggregate effects of mass incarceration, we briefly review some aggregate data on employment, family formation, public opinion, and crime—outcomes that have been studied at the micro-level. This is simply an effort to gauge plausibility and, we hope, encourage other researchers to study similar questions.<sup>1</sup>

We study employment by focusing on male high school dropouts under 35, the group for whom incarceration rates are highest. Employment is measured, using data from the Current Population Survey (CPS) from 1980 to 2006, by the percentage employed in the noninstitutional population. This figure expresses the probability of employment among those who are not incarcerated. Because





employment rates also fluctuate with the business cycle—especially for young men with little schooling—we work with a smoothed employment series that captures the underlying trend. High rates of incarceration also have the effect of raising noninstitutional employment rates by removing those at risk of unemployment from the labor force. (This selectivity tends to bias the incarceration effect on employment to zero.) To reduce selection, we compare employment rates to incarceration rates, lagged two years.

Figure 1 shows the relationship between lagged incarceration and noninstitutional employment for male high school dropouts aged 20 to 34. Each point in the figure is an annual observation in the period from 1980 to 2006. Because incarceration rates are rising over this period, points on the plot go from left to right with the passage of time from the 1980s to the 2000s. Data for whites, blacks, and Hispanics fall into three clusters. For whites and blacks, we see some evidence for the negative aggregate relationship between incarceration and employment. As incarceration rates steadily increased, employment rates declined for both groups. For whites, a 5 percentage point increase in the incarceration rate is associated with a 5 point decline in employment. For blacks, the incarceration rate increased by about 30 points and employment declined by about 10 points from 1982 to 2008. Exceptionally, the relationship between incarceration and employment does not hold for Hispanics. For young Hispanic

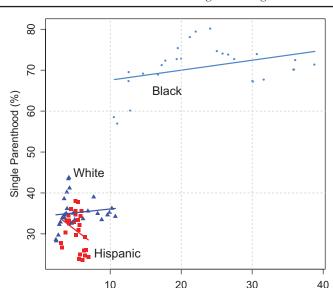


FIGURE 2 Incarceration Rates and Rates of Single Parenthood among Family Heads with Fewer than 12 Years of Schooling, under Age 40, 1980 to 2006

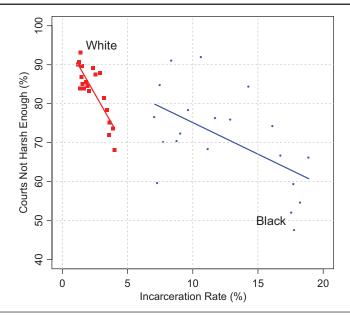
high school dropouts, the rising rate of incarceration is associated with a rising rate of employment in the noninstitutional population. In this case, the population may include a large number of immigrants unexposed to incarceration and its negative effects.

Incarceration Rate (%)

We can look at the association between incarceration and family formation in a similar way. Research on incarceration and family structure suggests that single men who have been incarcerated are unlikely to marry, while formerly incarcerated, married men are likely to divorce or separate (Western 2006). With data from the 1980 to 2006 March CPS, we can construct rates of single parenthood for family heads at different levels of education. If mass incarceration contributes to family breakdown, we would expect rates of single parenthood to increase with the incarceration rate. We examine annual rates of single parenthood for blacks, whites, and Hispanics for family heads under 40 who have not completed 12 years of schooling. This is clearly a rough empirical test. Still, assuming homogamy by education, race and ethnicity, and age, the data are at least suggestive.

Figure 2 shows annual observations on rates of incarceration and single parenthood for blacks, Hispanics, and whites from 1980 to 2006. The data show no consistent relationship between incarceration and single parenthood at the aggregate level. Incarceration rates steadily increased in the 26 years since 1980, but rates of single parenthood both increased and declined in this period. Among

FIGURE 3 Incarceration Rates and the Percentage of GSS Respondents Reporting That "Courts Have Not Been Harsh Enough" in Dealing with Criminals, Noncollege Blacks and Whites, under Age 40, 1980 to 2008



African Americans with little schooling, there was a large increase in single parenthood from the 1980s until the mid-1990s. The relationship between incarceration and single parenthood was strongly positive initially, but weaker once data from the late 1990s and early 2000s are included. Among Hispanics, single parenthood tended to fall as the incarceration rate increased. Unlike the data for employment, then, the aggregate relationship between incarceration and family formation is relatively weak.

The legitimacy of criminal justice institutions is harder to observe than the direct measurement of employment or family structure. We follow other research by examining public opinion data. Since the early 1970s, the General Social Survey (GSS) has asked respondents, "In general, do you think the courts in this area deal too harshly or not harshly enough with criminals?" We tabulate responses in each survey year for black and white respondents with no college education under age 40. Focusing on the response category that "courts have not been harsh enough," we plot the relationship between the incarceration rate and public opinion for noncollege men in their 20s and 30s, with annual measurements of incarceration and public opinion from 1980 to 2008.

The GSS data show clear race differences in beliefs about the harshness of the criminal justice system (Figure 3). The beliefs of both racial groups have become more liberal, particularly in the past 10 years. In the early 1980s, when incarceration

rates were relatively low, 80 to 90 percent of black and white respondents reported that the courts were not dealing harshly enough with criminals. The liberalization of public opinion dates from the late 1990s, roughly in equal degree for each racial group. By 2008, when incarceration rates were highest, support for harsher treatment of criminals had widely fallen. Around 70 percent of whites and 50 percent of blacks reported that the courts are not harsh enough. These bivariate data thus provide rudimentary support for the idea that rising incarceration rates are associated with the declining legitimacy of criminal justice institutions. Despite the decline in punitive sentiment, it is also striking that about half of noncollege blacks under 40 would prefer more punitive courts when one in five men in that group is already behind bars.

Finally, we compare incarceration rates to crime rates. Here, the hypothesis is that incarceration is criminogenic—associated with higher crime rates in the long run. To study the relationship between incarceration and crime we have annual state-level data from 1970 to 2001. Crime is measured by the Uniform Crime Reports' rate of index crimes, and incarceration is measured by the rate of state imprisonment. Because incarceration reduces crime in the short run, largely through incapacitation, we compare crime rates to a four-year lag in incarceration rates. Crime and incarceration rates are both subject to substantial unobserved heterogeneity, which we reduce by fitting state and year fixed effects. With these data, we are unable to disaggregate our results by race and education as before, but we can look at the crime-incarceration relationship for different states in different time periods.

Figure 4 shows the relationship between crime and incarceration for each of the forty-eight continental United States. For each state, we estimate a regression line to summarize the scatterplot, where each point on the plot is an annual observation. The figure shows that there is no consistent relationship between incarceration and crime across the United States. In sixteen states, incarceration is associated with a higher crime rate four years later, in twenty states crime and incarceration are negatively related, and crime is unrelated to the lagged level of incarceration in the remainder. Figure 5 shows how the relationship between crime and incarceration varies over time. Across all forty-eight states, crime and incarceration are generally uncorrelated, except between 1985 and 1994, when we see evidence of a strong negative relationship. In sum, the simple bivariate relationship between crime and the lagged incarceration rate offers little consistent evidence of criminogenic effects of imprisonment. Nor do the data suggest that increased incarceration is systematically associated with reduced crime as deterrence and incapacitation effects suggest.

# Challenges for Research

Our brief survey of the evidence on the aggregate effects of incarceration on employment, family formation, public opinion, and crime provides mixed

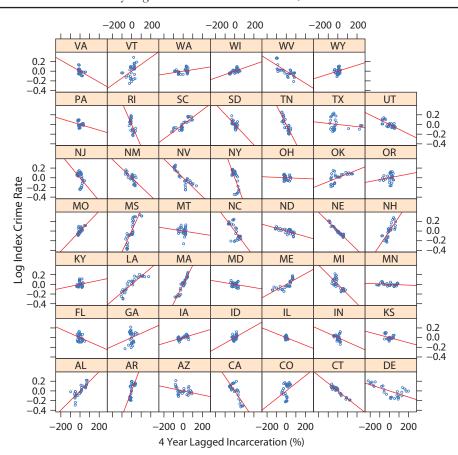
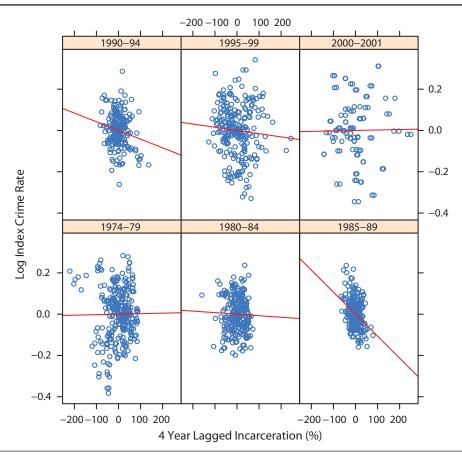


FIGURE 4 Log Index Crime Rates by Incarceration, in Forty-Eight Continental United States, 1974–2001

evidence for the idea that high rates of incarceration are deeply implicated in a new social logic of urban poverty. Employment clearly declined and public opinion turned against punitive courts as incarceration rates increased, but rates of single parenthood increased unevenly and crime shows no consistent relationship with incarceration.

These results seem at odds with research at the micro level that examines the effects of incarceration on individuals and families. Many studies, quantitative and qualitative, now point to the destabilizing effects of incarceration on family life. Research on recidivism, the conditions of penal confinement, and on the trust and confidence in law enforcement of residents of high-incarceration communities all point to the criminogenic effects of imprisonment. Why do we not see clearer evidence of the negative aggregate effects of incarceration on the



 ${\it FIGURE~5}$  Log Index Crime Rates by Incarceration in Six Time Periods, 1974–2001

correlates of poverty? We offer four general answers to this question, each pointing to slightly different directions in research.

# The micro-level effects may be near zero

Motivation for the aggregate effects of incarceration is based on the high rate of incarceration and the negative effects of incarceration at the individual level. The high rate of incarceration is well established, though its exact scale is often not fully understood. Research consensus on the negative effects of incarceration is weaker, however. Because of the endogeneity of incarceration to criminal behavior and other hard-to-measure characteristics of individuals and their social contexts, the negative effects of incarceration are often overestimated. High rates of single parenthood or violence observed among formerly incarcerated men and

women may often be more directly related to things such as cognitive ability, personality traits, peer networks, or neighborhood characteristics than to incarceration status. A few studies on incarceration effects with strong identification strategies, capitalizing on natural experiments in the legal system, have returned null results (Kling 2006; LaLonde and Cho 2008). Even if the nonexperimental designs are accurately estimating the micro-level effects of incarceration, but the effects are small, we would also expect to see weak relationships at the aggregate level because incarceration simply has too little causal force compared to all the other sources of aggregate variation.

The problem of causal inference at the micro level is also difficult because of the scale of incarceration. Incarceration has become pervasive among recent cohorts of low-educated black men. With lifetime risks of imprisonment of around 70 percent, the added risks of jail incarceration, probation, criminal conviction, and arrest would make criminal justice involvement nearly universal for this group. When nearly all those in a population are at risk of receiving a treatment, comparison groups for causal analysis are hard to define. In communities where nearly every prime-age male is getting locked up, the unincarcerated comparison groups in even the most ingenious natural experiment may be so unusual as to be of little scientific interest. Causal questions can be devised for the world, as it presents itself—the effect of three year's incarceration versus two, say—but these kind of questions, adapted to an extreme policy environment, are typically not of key scientific interest and admit policy conclusions of a very limited kind.

#### Problems with data and measurement

Those who go to prison are commonly men who are young or in early middle age, mostly black or Hispanic, who have not completed high school. Such men are only tenuously attached to stable households and weakly connected to stable jobs in the formal labor market. As a result, efforts to study these men with conventional social science methods of household surveys and administrative records are subject to significant undercounts even in the target population. Becky Pettit (2012) calls those involved in the criminal justice system "invisible men," who through their severe economic disadvantage slip under the radar of social science research. The undercount is likely to be highest precisely among those who are most marginal. Population estimates of employment or marriage rates, say, among those at highest risk of incarceration may be too high because many of the formerly incarcerated are not included in the usual data collections.

The problem of the undercount is related to the invisible inequality associated with high rates of incarceration. At high rates of incarceration, nonrandom selection biases social statistics based on counts of the noninstitutional population. In this case, employment or marital status in the noninstitutional population does not fully reflect the negative effect of incarceration because those at the bottom of the socioeconomic ladder are under observed due to their incarceration. With

a large number of people in prison and jail, beyond the sampling design of household surveys, social and economic disadvantage is underestimated. As prison and jail populations grow, the egalitarian bias in measures of inequality also grows. One approach to this problem involves correcting for the incomplete observation of the population by including prison and jail inmates in estimates of inequality. An analysis of this kind was conducted for trends in the black-white wage gap for men in their 20s. Accounting for high rates of incarceration and other joblessness among African American men largely explained the shrinking black-white wage gap through the 1980s and 1990s (Western and Pettit 2005).

A related challenge for research on crime concerns measurement, rather than the undercount or sample selectivity. The limitations of official crime statistics are well known. Crimes that are unreported to the police are not reflected in official statistics. In communities skeptical of the authority of law enforcement, crime may be greatly underreported. Even where police have retained their legitimacy, very high levels of crime may be met with resignation that can also suppress complaints to the police. Ethnographers have also suggested that in high-crime neighborhoods, violence and interpersonal conflict suffuses social interaction (Anderson 2000; Goffman 2009). The ubiquitous and unexceptional character of crime in these settings is poorly suited for measurement by police reports or incident-based victimization surveys. More direct observation of social interaction, hospital administrative records, or measures of health status may offer alternative strategies for gauging violence in high crime settings such as these.

## Problems of aggregation

We view the aggregate effects of mass incarceration as the sum of micro-level effects. For example, if incarceration reduces an individual's probability of employment by 20 percent, and 10 percent of a sample has been incarcerated, we estimate that incarceration is reducing employment by .10  $\times$  .20 = .02, or 2 percent. However, micro-level effects may accumulate in a more complicated, nonadditive way. Todd Clear, for example, describes how the spatial concentration of prison admissions and releases into poor urban neighborhoods contributes to crime. The large number of men circulating in and out of poor neighborhoods unsettles the family and community ties that help to promote social order. Clear claims a strong nonlinearity in the effect of incarceration in which crime increases sharply when prison admission and release rates reach a tipping point in a small geographical area. Below the tipping point, community networks monitor the streets and maintain regularity in social interaction (Clear 2009). Above the tipping point, community networks erode and their capacity to maintain social order is significantly weakened.

Observing these kinds of nonlinear effects of incarceration may depend greatly on the level of aggregation. The spatial dimension of networks that sustain social order appears critical in Clear's account, so aggregating at the level of demographic groups may be a poor design for detecting aggregate effects. The state-level analysis of crime and incarceration above at least examined spatial units over time, but states are likely far too large and heterogeneous to observe neighborhood dynamics.

#### Community responses

Communities may also respond to the problems of unemployment, family instability, and crime, cushioning the social consequences of incarceration. In this case, the social consequences of incarceration are not fully observed because communities adapt through public and private efforts. There are indications that policymakers view incarceration—particularly the return of released prisoners as a significant challenge for poor communities. Many states have increased support for so-called prisoner reentry policy, which aims to promote the reintegration of the formerly incarcerated, largely through the provision of social services. The federal government, through the Second Chance Act, also provides money to states and localities for prisoner reentry programming. Increased policing and community supervision might also be understood as part of the community response to high rates of incarceration. A record number of prisoners have also produced a record number of people under community supervision on probation and parole. All these collective responses—such as reentry programming and increased criminal justice presence in high-incarceration communities—may promote employment and suppress crime. Endogenous policy or other community responses leads us to underestimate the social consequences of incarceration.

Policy measures moderating the negative effects of incarceration should be included among the social costs of incarceration, similar to increased unemployment, family instability, crime, or correctional budgets. In this scenario, the aggregate relationship between incarceration and crime might be relatively flat, but this will not be because incarceration does not increase crime; rather, it will be because community responses have helped to create a new equilibrium in which the costs of incarceration are at least somewhat contained by social spending.

## Conclusion

Over the past four decades, the penal system has absorbed a large number of mostly young black and Hispanic men with very little schooling. The involvement of African American men in the criminal justice system is pervasive. A burgeoning research literature indicates that incarceration is associated with a high risk of unemployment, family instability, and other social hazards. Men who have been incarcerated are more involved in crime and significantly more likely to be arrested and incarcerated again than those who have never served time in prison. The prevalence of imprisonment among poor men and the effects of imprisonment at the micro level on the correlates of socioeconomic disadvantage suggest

that the penal system is now deeply embedded in the social logic of urban poverty. But is this true, and how would we test that claim?

We examined some aggregate evidence that offered a mixed picture of the social consequences of mass incarceration. Employment rates have declined with rising incarceration rates, as we would expect. Attitudes toward the criminal justice system have also become less punitive, particularly since the late 1990s. Family structure is less consistently related to incarceration. Rates of single parenthood among family heads who dropped out of high school increased from the early 1980s to the mid-1990s. Since the mid-1990s, however, the proportion of single-mother families has not greatly increased, despite a steady increase in the incarceration rate. If mass incarceration is undermining family structure among the poor, this effect is not clearly indicated in trends in single parenthood.

We also expected mass incarceration to be associated with rising crime, in the long run. As cynicism about criminal justice institutions mounted in communities with very high incarceration rates, and as the key sources of criminal desistance—employment and marriage—were undermined by the effects of incarceration at the individual level, we expected to see crime increase in states that had the highest increase in incarceration. Instead, we found that the relationship between crime and incarceration showed enormous variation across states, positive in some place, but negative in others.

The empirical evidence that we surveyed was only intended to be suggestive, helping to identify the conceptual challenges for understanding the aggregate effects of high rates of incarceration. We argue that a macrosociology of carceral inequality is a compelling problem for students of contemporary urban poverty. To tackle this problem, researchers must go beyond the usual focus on individual-level effects. The prevalence of incarceration and the magnitude of effects become fundamentally important for assessing the causal force of the penal system in the aggregate. Our usual methods of data collection and measurement may be poorly suited, however, to studying an institution that is so deeply segregative. Incorporating the insights of ethnographic research, which directly observes social interaction, we believe, holds promise in pushing quantitative measurement in an important new direction. Finally, students of the macro-dynamics of mass incarceration must consider how the individual effects of incarceration aggregate, and consider how communities adapt to high rates of population turnover, collective stigma, and the expansion of social control in daily life.

In sum, the emergence of mass incarceration presents the challenging hypothesis that the penal system has become a pervasive and substantial influence on the life chances of the urban poor. In this scenario, we have argued that mass incarceration has become constitutive of the social experience of American poverty, influencing aggregate levels of poverty and its social correlates. We have learned a lot about the contemporary extent of incarceration and its distribution across the population. Researchers have also turned to studying the micro-level effects on formerly incarcerated individuals and their families. In the context of this micro-level research, the aggregate significance of mass incarceration for

levels of poverty, employment, family instability, and crime is often assumed but insufficiently studied. A clear accounting requires a deliberately macrosociological perspective that makes an empirical connection between micro-level effects and their aggregate consequences.

#### **Notes**

- 1. A clear improvement on the current approach would involve developing estimates of aggregate effects from micro-level analyses. Aggregate implications of micro-level estimates of incarceration in the labor market have been studied by Western and Pettit (2005) and Western (2006).
- A few experimental and quasi-experimental studies have provided evidence of the negative effects of incarceration on employment (see Pager 2003; Pager, Western, and Bonikowski 2007).

### References

Alexander, Michelle. 2010. The new Jim Crow: Mass incarceration in the age of colorblindness. New York, NY: New Press.

Anderson, Elijah. 2000. Code of the street. New York, NY: Norton.

Becker, Howard. 1963. Outsiders. New York, NY: Free Press.

Blumstein, Alfred, and Allen J. Beck. 1999. Population growth in U.S. prisons, 1980–1996. Crime and Justice: A Review of Research 26:17–61.

Blumstein, Alfred, and Allen J. Beck. 2005. Reentry as a transient state between liberty and recommitment. In Prisoner reentry and crime in America, eds. Jeremy Travis and Christy Visher, 50–79. New York, NY: Cambridge University Press.

Bound, John, and Richard B. Freeman. 1992. What went wrong? The erosion of relative earnings and employment among young black men in the 1980s. *Quarterly Journal of Economics* 107:201–32.

Braman, Donald. 2004. Doing time on the outside: Incarceration and family life in urban America. Ann Arbor, MI: University of Michigan Press.

Brunson, Ronald K. 2007. "Police don't like black people": African American young men's accumulated police experiences. Criminology and Public Policy 6:71–102.

Cho, Rosa Minhyo. 2010. Maternal incarceration and children's adolescent outcomes: Timing and dosage. Social Service Review 84:257–82.

Clear, Todd. 2009. Imprisoning communities: How mass incarceration makes disadvantaged neighborhoods worse. New York, NY: Oxford University Press.

Cohen, Albert. 1955. Delinquent boys: The culture of the gang. Glencoe, IL: Free Press.

Comfort, Megan. 2008. Doing time together: Love and family in the shadow of the prison. Chicago, IL: University of Chicago Press.

Durlauf, Steven N., and Daniel S. Nagin. 2011. Imprisonment and crime: Can both be reduced? Criminology and Public Policy 10:13–54.

Edin, Kathryn. 2000. Few good men: Why low-income single mothers don't get married. American Prospect 11:26–31.

Edin, Kathryn, and Laura Lein. 1997. Making ends meet: How single mothers survive welfare and low-wage work. New York, NY: Russell Sage Foundation.

Esping-Andersen, Gøsta. 1999. Social foundations of postindustrial economies. New York, NY: Oxford University Press.

Garland, David. 2001. Introduction. In *Mass imprisonment: Social causes and consequences*, ed. David Garland, 1–3. Thousand Oaks, CA: Sage Publications.

Goffman, Alice. 2009. On the run: Wanted men in a Philadelphia ghetto. American Sociological Review 74:339–74.

Grogger, Jeffrey. 1995. The effect of arrests on the employment and earnings of young men. Quarterly Journal of Economics 110:51–71.

- Hagan, John, and Celesta Albonetti. 1982. Race, class, and the perception of criminal injustice in America. American Journal of Sociology 88:329–55.
- Hagan, John, and Holly Foster. 2012. Intergenerational effects of mass imprisonment in America. Sociology of Education 85:259–86.
- Holzer, Harry. 2007. Collateral costs: The effects of incarceration on the employment and earnings of young workers. Technical Report 3118, IZA Discussion Paper. Bonn, Germany.
- Holzer, Harry J., Paul Offner, and Elaine Sorensen. 2005. Declining employment among young black men: The role of incarceration and child support. *Journal of Policy Analysis and Management* 24:329–50.
- Holzer, Harry J., Steven Raphael, and Michael Stoll. 2006. Perceived criminality, criminal background checks, and the racial hiring practices of employers. *Journal of Law and Economics* 49:451–80.
- Hurwitz, Jon, and Mark Peffley. 2005. Explaining the great racial divide: Perceptions of fairness in the U.S. criminal justice system. *Journal of Politics* 67:762–83.
- Johnson, Rucker C., and Steven Raphael. 2009. The effects of male incarceration dynamics on acquired immune deficiency syndrome infection rates among African American women and men. *Journal of Law and Economics* 52:251–93.
- Kling, Jeffrey R. 2006. Incarceration length, employment, and earnings. *American Economic Review* 96:863–76.
- LaLonde, Robert J., and Rosa Cho. 2008. The impact of incarceration in state prison on the employment prospects of women. *Journal of Quantitative Criminology* 24:243–65.
- Levitt, Steven D. 2004. Understanding why crime fell in the 1990s: Four factors that explain the decline and six that do not. *Journal of Economic Perspectives* 18:163–90.
- Lopoo, Leonard M., and Bruce Western. 2005. Incarceration and the formation and stability of marital unions. *Journal of Marriage and the Family* 67:721–34.
- Maguire, Kathleen, ed. 2010. Sourcebook of criminal justice statistics. Albany, NY: University at Albany, Hindelang Criminal Justice Research Center. Available from http://www.albany.edu/sourcebook/.
- Marvell, Thomas B., and Carlisle E. Moody. 1994. Prison population growth and crime reduction. *Journal of Quantitative Criminology* 10:109–40.
- Matza, David. 1964/1990. Delinquency and drift. New Brunswick, NJ: Transaction Publishers.
- Murray, Joseph, and David Farrington. 2008. Effects of parental imprisonment on children. Crime and Justice 37:133–206.
- Nagin, Daniel S. 1998. Criminal deterrence research at the outset of the twenty-first century. Crime and Justice 23:1–42.
- Newman, Katherine S. 1999. No shame in my game: The working poor in the inner city. New York, NY: Knopf/Russell Sage Foundation.
- Nurse, Anne M. 2002. Fatherhood arrested: Parenting from within the juvenile justice system. Nashville, TN: Vanderbilt University Press.
- Pager, Devah. 2003. The mark of a criminal record. American Journal of Sociology 108:937–75.
- Pager, Devah, Bruce Western, and Bart Bonikowski. 2007. Discrimination in a low-wage labor market: A field experiment. American Sociological Review 74:777–99.
- Pettit, Becky. 2012. Invisible men: Mass incarceration and the myth of black progress. New York, NY: Russell Sage Foundation.
- Sampson, Robert J., and Charles Loeffler. 2010. Punishment's place: The local concentration of mass incarceration. *Daedalus* 139:20–31.
- Sherman, Lawrence W. 2002. Trust and confidence in criminal justice. National Institute of Justice Journal 248:23-31.
- Sidanius, James, Michael Mitchell, Hillary Haley, and Carlos David Navarrete. 2006. Support for harsh criminal sanctions and criminal justice beliefs: A social dominance perspective. Social Justice Research 19:433–49
- Spelman, William. 2006. The limited importance of prison expansion. In The crime drop in America, 2nd edition, eds. Alfred Blumstein and Joel Wallman, 97–129. New York, NY: Cambridge University Press.
- Stoutland, Sara E. 2001. The multiple dimensions of trust in resident/police relations in Boston. *Journal of Research in Crime and Delinquency* 3:226–56.
- Sykes, Gresham M. 1958/2007. The society of captives: A study of a maximum security prison. Princeton, NJ: Princeton University Press.

- Unnever, James D. 2008. Two worlds far apart: Black-white differences in beliefs about why African-American men are disproportionately imprisoned. Criminology 46:511–38.
- Wacquant, Loïc. 2009. Prisons of poverty. Minneapolis, MN: University of Minnesota Press.
- Walmsley, Roy. 2009. World prison population list, 7th ed. Technical report, International Prison Studies Centre. London: Kings College.
- Weitzer, Ronald. 2000. Racialized policing: Residents' perceptions in three neighborhoods. *Law and Society Review* 34:129–55.
- Weitzer, Ronald, and Steven A. Tuch. 2005. Racially biased policing: Determinants of citizen perceptions. Social Forces 83:1009–30.
- Western, Bruce. 2002. The impact of incarceration on wage mobility and inequality. American Sociological Review 67:526–45.
- Western, Bruce. 2006. Punishment and inequality in America. New York, NY: Russell Sage Foundation.
- Western, Bruce, and Becky Pettit. 2005. Black-white wage inequality, employment rates, and incarceration. *American Journal of Sociology* 111:553–78.
- Western, Bruce, and Becky Pettit. 2010a. Incarceration and social inequality. Daedalus 139:8-19.
- Western, Bruce, and Becky Pettit. 2010b. Technical report on revised population estimates and NLSY79 analysis tables for the Pew Public Safety and Mobility Project. Unpublished report. Cambridge, MA: Harvard University.
- Western, Bruce, and Christopher Wildeman. 2009. The black family and mass incarceration. Annals of the American Academy of Social and Political Science 621:221–42.
- Wildeman, Christopher. 2010. Paternal incarceration and children's physically aggressive behaviors: Evidence from the Fragile Families and Child Wellbeing Study. Social Forces 89:285–310.
- Wildeman, Christopher, and Christopher Muller. 2012. Mass imprisonment and inequality in health and family life. *Annual Review of Law and Social Science* 8:11–30.
- Wildeman, Christopher, and Bruce Western. 2010. Incarceration in fragile families. Future of Children 20:157–77.
- Wilson, William Julius, and Kathryn Neckerman. 1986. Poverty and family structure: The widening gap between evidence and public policy issue. In *Fighting poverty: What works and what doesn't*, eds. Sheldon Danziger and Daniel Weinberg, 232–59. Cambridge, MA: Harvard University Press.
- Zimring, Franklin E., and Gordon Hawkins. 1995. Incapacitation: Penal confinement and the restraint of crime. New York, NY: Oxford University Press.