

Court of Appeals

STATE OF NEW YORK

In the Matter of the Application of
TERRENCE STEVENS, *et al.*,

Petitioners-Respondents,

—against—

THE NEW YORK STATE DIVISION OF CRIMINAL JUSTICE SERVICES, *et al.*,

Respondents-Appellants,

For a Judgment Pursuant to Article 78
of the Civil Practice Law & Rules.

**BRIEF FOR *AMICUS CURIAE* ALEXANDER F. ROEHRKASSE
IN SUPPORT OF PETITIONERS-RESPONDENTS**

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Amicus curiae

February 9, 2023

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¹ Because *Amicus* relies on scientific treatises and other sources that are not readily accessible to the Court, a Compendium of Cited Authority is being filed under separate cover containing any authorities herein that are not publicly available on the World Wide Web. In the Table of Authorities, authorities in the Compendium are followed by “[C##]” denoting the Compendium page number.

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INTEREST OF THE AMICUS CURIAE

Amicus curiae Alexander F. Roehrkaase is an assistant professor in the Department of Sociology and Criminology at Butler University. An expert on families, crime, and punishment, his scholarship focuses on racial inequality in the prevalence, causes, and consequences of contact with the United States (U.S.) criminal legal system. His research in this area has been published in leading scientific journals.

INTRODUCTION

Black, Indigenous, and other U.S. residents from minority racial backgrounds have disproportionately high rates of involvement with the criminal legal system, including felony and misdemeanor conviction. Racial disparities in system involvement cannot be entirely explained by underlying racial differences in criminal behavior, and to a meaningful degree reflect differences in the manner and degree to which racial groups are policed, prosecuted, and punished.

Furthermore, owing partly to U.S. racial disparities in system involvement and partly to U.S. consanguineal kinship dynamics, Black U.S. residents who do not have a personal history of criminal legal system involvement are more likely than White residents without a history of involvement to have genetic links to people with prior criminal legal system involvement.

As a result of racial disparities in genetic links to system-involved people, policies and practices that utilize DNA databases of individuals convicted of felonies and misdemeanors to motivate and guide the criminal investigation of such individuals' consanguineal family members ("familial search") have a very high likelihood of subjecting Black New York residents to outside increases in the risk of police encounters and resulting harms. This problem should be remedied by guidance from this Court.

ARGUMENT

I. THE PREVALENCE OF CRIMINAL LEGAL SYSTEM INVOLVEMENT AMONG U.S. RESIDENTS IS RACIALLY DISPARATE.

Black, Indigenous, and other U.S. residents from minority racial backgrounds are more likely than the average U.S. resident to come into contact with the criminal legal system. *See* Peter Hepburn et al., *Cumulative Risks of Multiple Criminal Justice Outcomes in New York City*, 56 *Demography* 1161 (2019); Alexander F. Roehrkasse & Christopher Wildeman, *Lifetime risk of imprisonment in the United States remains high and starkly unequal*, 8 *Sci. Adv.* eabo3395 (2022).

Racial disparities in criminal legal system involvement lead to racial differences in the prevalence of having a felony or misdemeanor conviction. For example, in New York State in 2010, 9–12% of Black residents had a felony

record, compared to 3–4% of all state residents. *See* Sarah K. Shannon et al., *The Growth, Scope, and Spatial Distribution of People With Felony Records in the United States, 1948–2010*, 54 *Demography* 1795 (2017), at Online Resource 1, Table S9.

In turn, racial differences in the prevalence of felony and misdemeanor convictions lead to racial disproportionality in the composition of genetic databases such as New York State’s DNA Databank. *See* Erin Murphy & Jun H. Tong, *The Racial Composition of Forensic DNA Databases*, 108 *Calif. L. Rev.* 1847 (2020). On an annual basis, Black, Indigenous, and other racial minority residents of New York are more than eight times likelier than White residents to be convicted of felonies and misdemeanors requiring them to submit DNA to databases in the state. *Id.* at 1887.

II. RACIAL DISPARITIES IN CRIMINAL LEGAL SYSTEM INVOLVEMENT REFLECT RACIAL BIAS IN LAW ENFORCEMENT AND CRIMINAL LEGAL PROCESS.

Although racial disparity in DNA databanking may partly reflect underlying racial differences in criminal behavior, a variety of evidence indicates that racial bias in law enforcement and criminal legal process contributes meaningfully to racial disparities in criminal legal system involvement and system outcomes. For example, a recent analysis of administrative and survey data by the U.S. Department of Justice found that Black non-Hispanic and American Indian and

Alaska Native non-Hispanic individuals make up a larger percentage of people arrested for nonfatal violent crimes than reported as perpetrators of such crimes in surveys of victims. See Alan J. Beck, *Race and Ethnicity of Violent Crime*

Offenders and Arrestees, U.S. Bureau of Justice Statistics NCJ 255969 (2021), at

2. Similar patterns are found when race-specific arrest rates are compared to race-specific rates of self-reported violent and drug-related offending among men. See

Becky Pettit & Carmen Gutierrez, *Mass Incarceration and Racial Inequality*, 77

Am. J. Econ. & Soc. 1153 (2018), at 1157. Furthermore, among U.S. residents who are arrested, U.S. Black non-Hispanic men are roughly twice as likely as White non-Hispanic men to receive a felony conviction. *Id.*

In summary, racial disparities in the prevalence of criminal legal system involvement cannot be explained solely in terms of underlying racial differences in criminal behavior, and therefore reflect to a meaningful degree racial bias in law enforcement and criminal legal process.

III. AMONG PEOPLE WITHOUT PRIOR CRIMINAL LEGAL SYSTEM INVOLVEMENT, BLACK U.S. RESIDENTS ARE MORE LIKELY THAN WHITE RESIDENTS TO HAVE GENETIC LINKS TO PEOPLE WITH PRIOR SYSTEM INVOLVEMENT.

Not only is the prevalence of criminal legal system involvement in the U.S. racially disparate. Black adults are more likely than White adults to have a family member who has had criminal legal system involvement, including felony and

misdemeanor conviction. See Pil H. Chung & Peter Hepburn, *Mass Imprisonment and the Extended Family*, 5 Sociological Science 335 (2018); Peter K. Enns et al., *What Percentage of Americans Have Ever Had a Family Member Incarcerated?: Evidence from the Family History of Incarceration Survey (FamHIS)*, 5 Socius 1 (2019); Hedwig Lee & Christopher Wildeman, *Assessing mass incarceration's effects on families*, 374 Science 277 (2021); Christopher Muller & Alexander F. Roehrkasse, *Racial and Class Inequality in US Incarceration in the Early Twenty-First Century*, 101 Social Forces 803 (2022).

People with genetic links to system-involved people may be more likely than people without such links to have their own history of criminal legal system involvement. However, if racial disparities in consanguineal family-members' involvement exist even among individuals without their own history of involvement, policies and practices such as familial search are very likely to exacerbate racial disparities in the risk of police scrutiny.

No prior research establishes these facts, so I report an original analysis of recent survey data. Specifically, I analyze the Family History of Incarceration Study (FamHIS), a nationally representative survey fielded in 2018 that has been widely used in research on family-member incarceration. Enns et al., *supra*; Muller & Roehrkasse, *supra* at 813; Lee & Wildeman, *supra*. Incarceration is not synonymous with felony or misdemeanor conviction or with DNA databanking.

However, other research demonstrates that non-Hispanic Black–White disparities in felony and misdemeanor conviction and in incarceration are very closely comparable. *See* Hepburn et al., *supra*, at 1166, 1168. Therefore, analysis of consanguineal family-member incarceration serves as a helpful approximation of racial differences in the prevalence of genetic links to databanked individuals.

Figure 1 reports estimates of the prevalence of incarceration among the parents, siblings, and children of individuals who had or had not ever been incarcerated themselves. Among individuals who had not themselves been incarcerated, an estimated one in two Black non-Hispanic individuals (50.2%) had a consanguineal family member who had ever been incarcerated, compared to an estimated one in three White non-Hispanic individuals (32.9%).

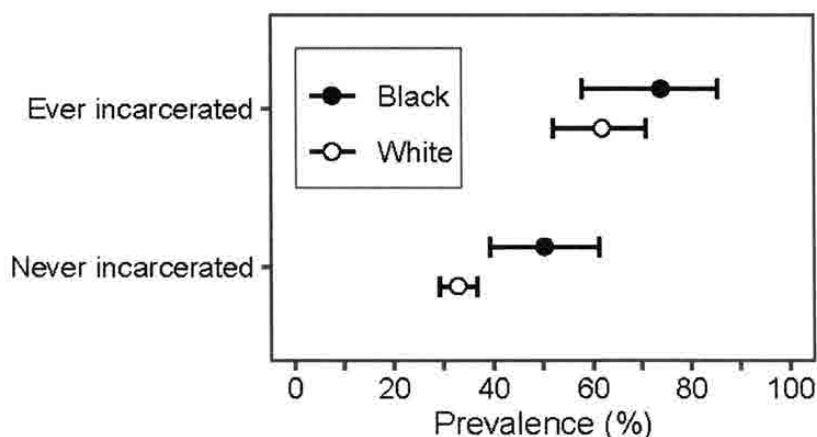


Figure 1. Prevalence of consanguineal family-member incarceration. Circles represent estimates of the percentage of the U.S. adult household population in 2018 with a parent, sibling, or child who had ever been incarcerated in jail or prison. “Black” refers to African American non-Hispanic individuals; “White” refers to White non-Hispanic individuals. “Ever incarcerated” refers to individuals who themselves had ever been incarcerated; “never incarcerated” refers to individuals who themselves had never been incarcerated. Error bars represent 99% confidence intervals around the estimates.

In other words, among individuals who are not themselves likely to be DNA databanked, a large Black–White difference (17.3%) is estimated to exist in the prevalence of genetic links to individuals who are likely to be databanked.

The analysis is based on a sample of U.S. residents, and so a range of true Black–White differences in consanguineal family-member incarceration is possible. Figure 2 reports the results of a statistical test of the hypothesis that no racial difference in consanguineal family-member incarceration actually exists.

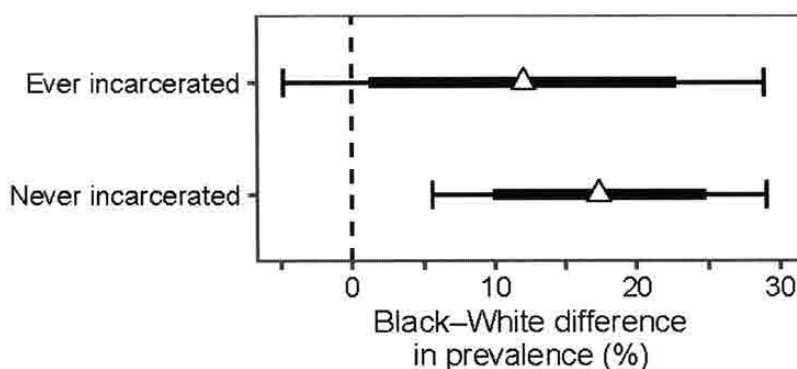


Figure 2. Racial disparity in the prevalence of close family-member incarceration. Triangles represent estimates of the difference in the percentages of Black non-Hispanic and White non-Hispanic U.S. adults with a parent, sibling, or child who had ever been incarcerated in jail or prison. Thick lines and error bars represent 90% and 99% confidence intervals around the estimates, respectively. The dashed vertical line at 0 illustrates whether a racial difference is statistically significant (t-test).

Among people without a personal history of incarceration, I reject with 99.99% confidence the possibility that no Black–White difference in consanguineal family-member incarceration actually exists. In other words, we have a very high degree of confidence that among individuals who are not themselves likely to be DNA

databanked, Black individuals are more likely than White individuals to have genetic links to likely databanked individuals.

IV. IMPLEMENTING FAMILIAL SEARCH THEREFORE HAS A VERY HIGH LIKELIHOOD OF DISPROPORTIONATELY INCREASING BLACK NEW YORK RESIDENTS' RISK OF POLICE ENCOUNTERS AND RESULTING HARMS.

In light of the foregoing analysis, it is very likely that implementing the policy and practice of familial search in New York—which utilizes the state's DNA Databank to motivate and guide the criminal investigation of the consanguineal family members of databanked individuals—will disproportionately increase Black New York residents' risk of police encounters. This is because among people who are not likely to be databanked themselves, Black individuals are more likely than White individuals to have genetic ties to individuals who are likely to be databanked. Given existing contextual evidence, it is also likely but less certain that Indigenous residents and residents of other minority racial backgrounds who are not themselves databanked will also experience outsize increases in the risk of police scrutiny.

Fear of police encounters in the U.S. is widespread and racially disparate. A nationally representative survey conducted in 2021 found that forty-two percent of Black respondents were “very afraid” that the police would kill them within the next five years, compared to eleven percent of White respondents. *See* Justin T.

Pickett et al., *The American racial divide in fear of the police*, 60 Criminology 291 (2022), at 302. Forty-five percent of Black respondents (compared to eighteen percent of White respondents) reported a preference for being robbed or burglarized to being questioned by the police “without good reason.” *Id.* at 310. In its own right, such fear represents an injury in fact. But emerging evidence also indicates that fear of police is strongly associated with adverse mental health symptoms including anxiety, depression, and general psychological distress. *See* Adam D. Fine et al., *Consequences of fearing police: Associations with youths’ mental health and felt obligation to obey both the law and school rules*, 83 J. Crim. Justice 101934 (2022), at 5.

Racial differences in fear of police reflect actual racial disparities in police scrutiny. *See* Emma Pierson et al., *A large-scale analysis of racial disparities in police stops across the United States*, 4 Nat. Hum. Behav. 736 (2020). It is therefore reasonable to expect that increases in the objective risk of encountering police will increase the subjective fear of such encounters. Insofar as this is true, disproportionate increases in the risk of police encounters among Black New York residents will cause meaningful and racially disparate harms.

CONCLUSION

For the reasons discussed above, to prevent substantial and unjustified increases in racial disparity in risk of police encounters and resulting harms, the Court should intervene to prevent the Division of Criminal Justice Services from initiating without legislative sanction a policy and practice of familial search.

February 9, 2023

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Alex Roehrkas", written over a horizontal line.

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CERTIFICATE OF COMPLIANCE

Court of Appeals Rule 500.13(c)(1)

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February 9, 2023

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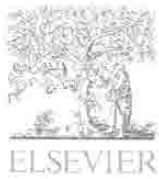
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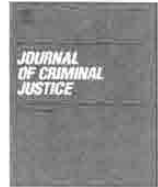
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Consequences of fearing police: Associations with youths' mental health and felt obligation to obey both the law and school rules

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ABSTRACT

The procedural justice framework suggests that negative perceptions of the police are linked to crime-related behavior. General strain theory could illuminate a key mechanism; negative perceptions of the police might undermine the obligation to obey laws and rules through promoting strain and psychological distress. This study integrated these two theoretical perspectives to examine whether youths' fear of the police might undermine their felt obligation to obey authority institutions, including the law and school, through promoting psychological distress. Children ($N = 342$) ages 10–12 were sampled in November of 2020. Consistent with theoretical expectations, children's fear of the police was indirectly associated with their felt obligation to obey both the law and school rules through undermining their mental health. These findings have implications for policy, practice, and research; youths' fear of the police may undermine their mental health and may have downstream consequences on their felt obligation to obey not only the law, but also school rules.

Following the recent deaths of Breonna Taylor, George Floyd, and many other people of color at the hands of law enforcement, youth today are growing up within the context of the largest protests in U.S. history (Joseph-Salisbury, Connelly, & Wangari-Jones, 2020; McDowell & Fernández, 2018). Scholars are certainly paying attention to attitudes toward the police considering individuals who perceive police negatively tend to commit more crime, cooperate less with their directives, and feel less obligated to obey the law (Trinkner, Kerrison, & Goff, 2019; Trinkner, Mays, Cohn, Van Gundy, & Rebellon, 2019; Tyler, 2006). Indeed, recent studies of adults find that poor perceptions of the police are linked to less felt obligation to obey the law (Baker & Gau, 2018; Fine & van Rooij, 2021; Mazerolle, Bennett, Davis, Sargeant, & Manning, 2013; Walters & Bolger, 2019).

Despite surging recognition of the importance of individuals' perceptions of law enforcement (Cavanagh & Cauffman, 2015; Cavanagh, Fine, & Cauffman, 2022; Tyler, Goff, & MacCoun, 2018), critical gaps exist in the literature. First, when studies do examine the consequences of attitudes toward the police, they rarely focus on youth in the community. Considering that early adolescence is an onset period for encounters with the police (Hagan, Shedd, & Payne, 2005; Weaver & Geller, 2019), examining how early adolescents in the community view the police can shed light on when negative views toward the police begin

to emerge and solidify (Fine, Donley, Cavanagh, & Cauffman, 2020; Fine, Thomas, van Rooij, & Cauffman, 2020). Second, while extant studies find that youths' poor views of the police can be associated with more delinquency (Del Toro et al., 2019; Gottlieb & Wilson, 2019), more empirical attention should be paid specifically to understanding youths' felt obligation to obey the law, the mechanisms underlying why fear of the police might affect attitudes, and whether effects extend to other contexts in which youth spend time and interface with authority figures. Specifically, mental health is likely a psychological means through which experiential factors shape behaviors in the short- and long-term (Agnew, 1992, 2016); thus, in the present study, we examine youth's mental health vis-à-vis their indirect experiences with law enforcement (i.e., fear of the police) and their felt obligations toward the law and school.

The present study bridges the procedural justice framework (Tyler, 2003) with general strain theory (Agnew, 1992, 2016) to examine whether youths' fear of the police might undermine their felt obligation to obey the law through promoting psychological distress and mental health symptomatology. Critically, from a developmental and contextual perspective, there is ample reason to believe that the effects of youths' fear of the police on their mental health symptomatology and subsequent attitudes may also bleed over into other domains of youths'

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lives (i.e., schools). Rather than focusing on the law alone, we also consider schools in large part because they are authority institutions and developmental contexts in which youth spend the majority of their waking hours. Focusing on children's perceived obligation toward the law and school rules provides us with a holistic picture of children's relationship with authority and governmental institutions. As such, within this large, cross-sectional sample of predominately Latinx early adolescents from low-income families, we examined whether adolescents' fear of the police undermined their mental health symptomatology and their perceived obligation to obey both the law and school rules.

1. General strain theory and the procedural justice framework

General strain theory (GST; Agnew, 1992, 2016) focuses on understanding how different types of experiences produce individual strain. At a broad level, GST elucidates the emotional, social, and psychological processes that contribute to crime and delinquency. GST posits that exposure to certain strains, such as events or general conditions that individuals dislike, will increase their inclination to engage in crime-related behaviors. In Agnew's model, strain and stress include stressful events, having goals blocked, losing positive stimuli, or general negative life experiences (Agnew, 1992). When individuals experience strains, they often then experience a range of negative emotions, including mental health symptoms linked to anxiety, depression, and anger (Agnew, 2013). For instance, Agnew, Brezina, Wright, and Cullen (2002) posit that, "the impact of strain on delinquency is at least partly mediated by negative emotions" (p. 43), which modern researchers typically assess using a variety of metrics of mental health symptomatology (see Agnew, 2006; Dennison & Finkeldey, 2021; Glassner, 2020; Oh & Connolly, 2022; Turney, 2021). To alleviate these feelings, at least momentarily, individuals will have a proclivity to lash out and express their strong negative feelings through deviance, delinquency, and other forms of anti-authority misbehaviors. Such reactions and behaviors do not need to be domain specific (Agnew, 2016). As such, phenomenological effects following exposure to such strains cause individuals to cope by engaging in a variety of behaviors contrary to the dominant norms and values within a society (Agnew, 1992, 2016).

Poor relationships with law enforcement constitute a critical yet understudied source of strain (Del Toro, Jackson, & Wang, 2022; Liu, Vishni, & O'Connell, 2020). To understand why, we leverage Tyler's (2003, 2006) process-based model of procedural justice that drives much of the modern studies on individuals' perceptions of the police. Tyler's model (Tyler, 2003; Tyler, 2006) argues that people feel more obligated to obey the law when they believe that authorities treat people fairly, justly, with concern for their rights, and without bias. To the extent that community members believe that police act in procedurally just ways, they are more likely to view them as legitimate and are more likely to feel obligated to obey the law that the police represent (Mazerolle et al., 2013; Reisig, Tankebe, & Mesko, 2012; Tankebe, Reisig, & Wang, 2016; Walters & Bolger, 2019).

Yet police do not merely represent the maintenance or promotion of the law and public safety within society; police are an important representation of the dominant norms and values within a society (see also Loader & Mulcahy, 2003). How police treat individuals communicates to them the extent of their inclusion, value, and status within society (Tyler, 2006). Fair treatment strengthens the individual's sense that they have a rightful and respected place, whereas unfair treatment and abuse of power, inversely, alienate individuals from the larger, dominant society that the police represent (Bradford, Quinton, Myhill, & Porter, 2014; Loader & Mulcahy, 2003). To the extent that individuals fear the police, they may experience this as a strain (Liu et al., 2020), report worse mental health symptomatology (Del Toro et al., 2019), and then feel less obligated to obey the laws of the broader society that the police represent (Fine & van Rooij, 2021; Sherman, 1993).

Certainly, the relationships between police and the public are

frequently characterized by emotionally charged interactions (see Demarest, 2021; Greenberg & Ganegoda, 2007). To date, only a handful of researchers have considered procedural justice within general strain theory (Liu et al., 2020; Makin et al., 2019; Murphy & Tyler, 2008). For instance, in a seminal paper in this area, Bairdworth and Murphy (2015) examined how negative affect mediated the association between procedural justice and compliance within samples of Australian adults and college students. Studies have found, however, that individuals with greater exposure to police stops and unjust policing reported more psychological distress and post-traumatic symptoms (Del Toro et al., 2019; Gottlieb & Wilson, 2019; Jackson, Fahmy, Vaughn, & Testa, 2019; McLeod, Heller, Manze, & Echeverria, 2020; Sewell, Jefferson, & Lee, 2016). In turn, scholars have argued that more psychological distress contributes to greater willingness to engage in delinquency, especially as a coping mechanism (Agnew, 2016; Del Toro et al., 2019; Jackson, Seimenza, Testa, & Vaughn, 2021). Combining these largely piecemeal perspectives generates a highly plausible, comprehensive model: youths' negative perceptions of police should undermine the felt obligation to obey the law through promoting psychological distress and poorer mental health symptomatology.

2. Fear of police transcends school walls

Examining the rates and consequences of early adolescents' fears of the police is important especially in the modern era considering the country recently bore witness to the deaths of young people of color, including Breonna Taylor and George Floyd, at the hands of law enforcement and some of the largest protests in U.S. history (Joseph-Salisbury et al., 2020; McDowell & Fernandez, 2018). Yet identifying the consequences and correlates of youths' fears of the police is also critical considering several features of adolescence. First, delinquency involvement increases during the adolescent years (Shulman, Steinberg, & Piquero, 2013). Second, the onset of early adolescence marks a period when youth begin to have more personal and direct encounters with the police (Mazerolle, Antrobus, Cardwell, Piquero, & Bennett, 2021; Nivette, Eisner, & Ribeaud, 2020). Third, the physical maturation that occurs may mean that others – especially non-parental adults – are likely to react to adolescents of color as older, more threatening, and more menacing than their same-aged White peers (Epstein, Blake, & Gonzalez, 2017; Goff, Jackson, Di Leone, Culotta, & DiTomasso, 2014).

There is convincing reason to believe that youths' responses to strains caused by the police may extend beyond their felt obligation to obey just the law and into the school context. Both law enforcement and schools share similar identities as surveilling institutions as both institutions adhere to policies and practices that mandate strict order and discipline (Brayne, 2014; Hirschfield, 2008). Schools' zero-tolerance policies and practices stemmed from law enforcement practices to utilize harsh punishment as a mechanism to reduce crime (American Psychological Association, 2008). Unfortunately, though, these practices in schools and neighborhoods resulted in the disproportionate representation of racial minorities in discipline from both law enforcement and school adults (NYCLU, 2019; Okonofua, Walton, & Eberhardt, 2016). These similarities between law enforcement and schools facilitate racial minority youths' abilities to ascribe qualities of an authority figure from one institution onto a separate authority figure in another institution (LaFree, 2018; Reider, 1953). Consequently, law enforcement's impacts on adolescents may undermine their beliefs, attitudes, and behaviors also within school, where they are surveilled, required to obey authorities, and spend most of their time.

Only a handful of studies have examined how views of the police shape perceptions toward school. Using a cross-sectional design of urban American youth, Gottlieb and Wilson (2019) found that those with lifetime exposure to police stops were more likely to incur reductions in their school grades and negative attitudes toward their teachers. In the second study, using administrative data of more than 250,000 youth in New York City, Legewie and Fagan (2018) revealed that higher police

presence in the neighborhood reduced test scores and school attendance. Most studies within this small body of research examine the consequences of direct and indirect police-initiated contact among teenagers in mid-to-late adolescence; however, it is important to examine more general views as they pertain to police contacts, especially among early adolescents who many not have personally experienced police contact yet. Further, none have tested the theoretical model informed by the general strain theory (Agnew, 1992, 2016) to explain why youths' negative views of police might be associated with their felt obligation to obey both the law and school rules, especially through psychological distress.

3. The mediating role of psychological affect

Agnew (2006) extended GST by arguing that while there are various types of strains, specific types are more likely to promote crime. In particular, Agnew (2006) argued that there are subjective and objective strains. Subjective strains refer to events or conditions disliked by people who experience them. In Agnew's words, "Subjective strain deals with the individual's evaluation of an event or condition" (Agnew, 2001, p. 322). Objective strains, in contrast, refer to events or conditions that are generally assumed to be disliked by most people. That is, objective strains are considered equally negative to all individuals, whereas individuals vary in how they subjectively evaluate strains due to differences in cognitive appraisal (Agnew, 2013). Thus, there is a distinction between subjective and objective strains, and subjective strains are more likely than objective strains to lead to crime especially when the strains are viewed as unjust and promote negative cognitive appraisals and negative emotionality (Frogglo & Agnew, 2007).

Thus, rather than assessing specific officer behaviors that may be interpreted as procedurally just by some and unjust by others (see Terpstra & van Wijk, 2021), we focus on youths' fear of police in their neighborhood. This approach aligns with Agnew's (2006, 2013) depiction of strains, as Agnew (2013) argues that, "individuals often differ in their subjective evaluation of the same objective strains" (p. 654). He continues, stating that, there is "a sharp distinction between objective stressors and the 'cognitive appraisal' of those stressors, and contends that the cognitive appraisal has the larger effect on outcome variables" (p. 654). That is, the cognitive appraisal of the strain is vital. In particular, he argues that "strains evaluated as unjust may be more strongly linked to anger... and those involving impending threats seen as uncontrollable to fear" (p. 656). Continuing, he states that negative emotions provide "the major impetus for coping" (p. 656). Leveraging a gendered approach, Agnew (2001) further clarifies the differences between the strain and its emotional valence and the resulting mental health symptomatology, stating, "Although both males and females may experience anger, the anger of females is more likely to be accompanied by feelings of guilt, depression, and anxiety" (Agnew, 2001, p. 322). As such, we measured fear of the police considering it constitutes a subjective, cognitive appraisal of one's view of the police as a source of strain, and we used a validated scale to assess their negative emotional state (i.e., psychological distress).

Although studies have not examined how psychological distress may facilitate the link between fear of the police and the felt obligation to obey the law or school rules, such links are likely. For instance, studies suggest that individuals with greater exposure to police stops experience more negative affect, including psychological symptoms commensurate with acute and post-traumatic stress (Gordlieb & Wilson, 2019; Sewell et al., 2016). Unfortunately, elevated psychological distress has been associated with increased delinquent outcomes (Fagan & Tyler, 2005; Del Toro et al., 2019). Given that psychological distress is malleable and responsive to youth's environments (Das, 2016), understanding of the consequences of youths' experiences with and views of police can be used to inform interventions aimed at reducing negative outcomes (Fine & Del Toro, 2022).

4. The present study

The present study leveraged GST (Agnew, 1992, 2016) and the procedural justice framework (Tyler, 2003) to explain why youths' fear of the police might be associated with their psychological distress and their felt obligation to obey both the law and school rules. To the extent that police officers represent the dominant society (Bradford et al., 2014) yet youth are afraid of them, youths' fear of the police may predict greater psychological distress, prompting them to cope with the strain in harmful ways including being more willing to violate the law and school rules and engage in delinquency.

We sampled a large group of predominately Latinx early adolescents from low-income families to test three hypotheses:

- H1. : Youths' fear of the police would be negatively associated with the felt obligation to obey both the law and school rules.
- H2. : More fear of police would be associated with worse mental health symptomatology. Driven by the general strain theory, youths' fear of police should constitute a strain that undermines their mental health.
- H3. : Youths' mental health symptomatology would partially mediate the associations between their fear of police and their felt obligation to obey both the police and school rules. This hypothesis aligned with expectations set by the general strain theory and procedural justice framework.

5. Methods

5.1. Sample

Students in the 5th and 6th grades from two schools ($N_1 = 155$; $N_2 = 187$) in the southwestern United States were sampled in November of 2020 (total $N = 342$). Youth completed the short survey during class. Participation rates in each school were above 80%. To encourage honest reporting, before completing the surveys, youth were reminded that, "This is not a test. There are no right or wrong answers. You can skip any questions you want. Your answers are private. No one who knows you will see your answers." Due to school administrators' concerns about student confidentiality, the students' self-identified races and ethnicities were not assessed, but the children in the schools were predominantly Latinx (School 1: 85%, School 2: 90%). The vast majority of students in these schools participated in the National School Lunch Program, a proxy for poverty (School 1: 88%; School 2: 91%; Nicholson, Slater, Chiriqui, & Chaloupka, 2014; Day et al., 2016). Students were on average 10.7 years old ($SD = 0.66$, range [10,12]). Approximately 49.5% of the students self-identified as female, 46.8% identified as male, and 3.8% left the question blank. Teachers administered the surveys to students and were available to help them if they had any difficulties understanding the questions.

5.2. Measures

5.2.1. Psychological distress

The Mental Health Index (MHI-5) is a widely used short scale for assessing symptoms of depression, anxiety, and general psychological distress among both child and adult samples (Berwick et al., 1991; Rivera-Riquelme, Piqueras, & Cuijpers, 2019). The prompt read, "How much time over the past month have you..." Using a five-point Likert scale from *None of the time* (1) to *All of the time* (5), students responded to five questions: ...been a very nervous person; ...felt calm and peaceful; ...felt downhearted and blue; ...been a happy person; ...felt so down in the dumps that nothing could cheer you up. The two positively valenced items were reverse coded. The items were mean-scored such that higher values indicated worse mental health symptomatology.

5.2.2. Fear of the police

Using a five-point response scale from *Not at all true* (1) to *Very true* (5), youth self-reported their agreement with the item, "Thinking about the police in my neighborhood...I am afraid of them." Unfortunately, the surveys had to be as short as possible to minimize the study's impact on class time as well as to remain developmentally appropriate when it comes to reading level and attention spans, thus we were limited to a single-item measure here.

5.2.3. Obligation to obey the law

Using a five-point response scale from *Strongly disagree* (1) to *Strongly agree* (5), youth self-reported their agreement with the item, "I feel it is sometimes okay to break the law." The item was reverse coded such that higher values indicated more felt obligation to obey the law. Similar to above, because the surveys had to be as short as possible, we were limited to a single-item measure here.

5.2.4. Obligation to obey school rules

Using a five-point response scale from *Strongly disagree* (1) to *Strongly agree* (5), youth self-reported their agreement with the item, "I feel it is sometimes okay to break the rules in school." The item was reverse coded such that higher values indicated more felt obligation to obey school rules.

5.3. Analytic plan

First, a bivariate correlation matrix was produced. The bivariate associations were modeled as Spearman's correlations rather than Pearson's correlations due to the response scales. Second, using *Mplus* version 8 (Muthén & Muthén, 2017), a path analysis tested the model for the obligation to obey the law presented in Fig. 1a. Obligation to obey the law was treated as ordinal and the model used the default robust weighted least squares estimator. The model accounted for age, gender, and school. Significance tests for the indirect effects were calculated using bootstrapped standard errors (10,000 samples) and nonsymmetric 95% bias-corrected confidence intervals (Allison, 2019; Preacher & Hayes, 2008). Because the outcome was skewed, we conducted an internal robustness check by replicating the model using a dichotomized

version of the dependent variable, *Mplus*' logit link function, and maximum likelihood; ultimately, the findings were the same (results available by request), so we presented the original model for parsimony. The model was then repeated replacing the obligation to obey the law with the obligation to obey school rules to test the model presented in Fig. 1b.

6. Results

6.1. Descriptive statistics

Table 1 presents means and standard deviations of key constructs. Here, early adolescents' fear of the police was on average just below the scale's midpoint, indicating that they were moderately afraid of police. Adolescents' average mental health symptoms was at the scale's midpoint. Noticeably, early adolescents reported highly on their felt obligation to obey the law (clustered around "Somewhat Agree") and more so on their felt obligation to obey school rules (clustered around "Strongly Agree"), $t(320) = 7.89, p < .001$. Recall that many students in the present study are sixth graders who may have recently started the recent transition into middle school where they are adjusting to different developmental expectations from school adults (Eccles et al., 1993). Due to this recent transition, it is expected that youth would have less favorable perceptions toward their schools.

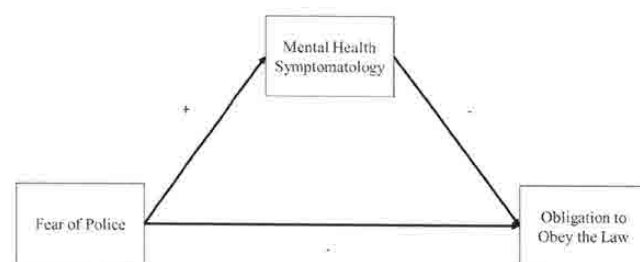
The results of the bivariate correlations (Table 1) indicated that fear of the police was not related to the obligation to obey either the law or school rules, but it was positively associated with worse mental health symptomatology. That is, we found evidence supporting the second hypothesis but not the first hypothesis. Worse mental health symptomatology, however, was associated with all other constructs, including less felt obligation to obey the law and school rules. The obligation to obey the law and the obligation to obey school rules were positively associated with each other, as expected.

7. Fear of the police and obedience: the mediating role of psychological distress

The results of the first path model (Table 2) indicated that while fear of the police was not directly associated with the felt obligation to obey the law, it operated entirely indirectly through mental health symptomatology. Fear of the police was associated with worse mental health symptomatology among youth, and worse mental health symptomatology was associated with less felt obligation to obey the law. Similarly, the results of the second path model (Table 3) indicated that while fear of police was not directly associated with the felt obligation to obey school rules, it operated entirely indirectly through mental health symptomatology. These models provide support for both the second and third hypotheses.

(a)

Hypothesized Model for the Obligation to Obey the Law



(b)

Hypothesized Model for the Obligation to Obey School Rules

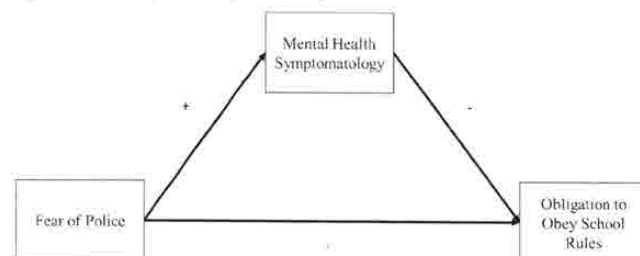


Fig. 1. a. Hypothesized Model for the Obligation to Obey the Law. b. Hypothesized Model for the Obligation to Obey School Rules.

Table 1

Bivariate correlation matrix.

Variable	Statistic	1	2	3	Mean (SD)
1. Fear of the Police		—			2.39 (1.49)
2. Mental Health Symptomatology	<i>rho</i>	0.15	—		2.48 (0.82)
	<i>p</i>	0.007			
3. Obligation to Obey School Rules	<i>rho</i>	−0.02	−0.21	—	4.52 (0.95)
	<i>p</i>	0.74	<0.001		
4. Obligation to Obey the Law	<i>rho</i>	−0.02	−0.23	0.44	3.99 (1.28)
	<i>p</i>	0.78	<0.001	<0.001	

Note: Correlations are Spearman's rho due to the distribution of the variables. Bolded values indicate significant correlations at $p < .05$; non-bolded values indicate non-significant correlations at $p \geq .05$.

Table 2

Path analysis results for the obligation to obey the law.

Variable	Estimate	SE	p	95% CI	
Mental Health					
Age	0.06	0.07	0.36	-0.07	0.20
Sex ^a	0.14	0.09	0.14	-0.05	0.32
School	0.08	0.09	0.41	-0.11	0.26
Fear of Police	0.09	0.04	0.009	0.02	0.16
Obligation to Obey the Law					
Mental Health	-0.39	0.07	<0.001	-0.53	-0.25
Age	-0.50	0.13	<0.001	-0.77	-0.27
Sex ^a	0.42	0.15	0.006	0.13	0.74
School	-0.12	0.15	0.46	-0.43	0.17
Fear of Police					
Indirect ^b	-0.04	0.02	0.02	-0.07	-0.01
Direct	0.04	0.05	0.49	-0.07	0.14

^a Female coded 1, male coded 0.^b Indirect effect of fear of the police on the obligation to obey the law through mental health symptomatology (fear of the police → mental health symptomatology → obligation to obey the law).**Table 3**

Path Analysis Results for the Obligation to Obey School Rules

Variable	Estimate	SE	p	95% CI	
Mental Health					
Age	0.06	0.07	0.36	−0.07	0.20
Sex ^a	0.14	0.09	0.14	−0.05	0.32
School	0.08	0.09	0.41	−0.11	0.26
Fear of Police	0.09	0.04	0.009	0.02	0.16
Obligation to Obey School Rules					
Mental Health	−0.34	0.08	<0.001	−0.49	−0.19
Age	−0.34	0.11	0.002	−0.55	−0.13
Sex ^a	0.38	0.13	0.004	0.13	0.64
School	−0.01	0.13	0.95	−0.27	0.25
Fear of Police					
Indirect ^b	−0.03	0.02	0.034	−0.06	−0.01
Direct	0.01	0.05	0.83	−0.08	0.10

^a Female coded 1, male coded 0.^b Indirect effect of fear of the police on the obligation to obey school rules through mental health symptomatology (fear of the police → mental health symptomatology → obligation to obey school rules).

8. Discussion

Since the emergence of Agnew's GST (Agnew, 1992) in the 1990s, researchers from the general strain tradition have been focusing on understanding the consequences of negative experiences. Primarily, researchers illuminate how experiencing marginalization and disadvantaged life experiences, or strains, contribute to stress and psychological symptoms that the individual, in turn, attempts to cope with through crime and generalized antisocial or antiauthority behavior. Simultaneously, researchers from the procedural justice perspective have been focused on understanding how poor authority relations impact attitudes and law-related behaviors (Tyler, 2006). The literature tends to find that negative interactions with law enforcement undermine the felt obligation to obey the law. Considering that police are an important representation of the dominant norms and values within a society, how police treat individuals communicates their level of inclusion, value, and status (Tyler, 2006). Specifically, perceived unfair treatment, abuse of power, and marginalization alienate individuals from the dominant society that the police represent (Bradford et al., 2014).

The present study sought to examine linkages between GST and the procedural justice framework from a developmental perspective. In doing so, we considered from a contextual perspective how youths' fear of the police and their mental health symptomatology may bleed over into other domains of youths' lives, particularly whether the mediating psychological mechanism extended to the developmental context where

youth spend most of their waking hours: schools. Given how traumatizing interactions with police can be (Del Toro et al., 2019; Jackson et al., 2019) and the fact that modern youth are growing up within the context of the largest protests in U.S. history (Joseph-Salisbury et al., 2020; McDowell & Fernandez, 2018), there was little reason to believe that any effects of youth fearing police would be limited to their felt obligation to obey just the law. In addition, considering the pervasive presence of law enforcement in schools (e.g., school resource officers) and the documented rates of police stops in schools (Jackson et al., 2019), youth's fear of the police may also map onto their fear of school adults who serve as school resource officers.

The results largely conformed to the theoretically grounded expectations. While youths' fear of police was not directly associated with the felt obligation to obey either the law or school rules, youths' fear of the police indirectly predicted their felt obligation to obey these authority institutions through mental health symptomatology. This set of findings provides preliminary evidence of the nexus between the general strain theory and the procedural justice framework as it pertains to youth and law enforcement. A growing body of literature demonstrates that police-initiated contact is associated with worsened psychological well-being and physical health (Geller, Fagan, Tyler, & Link, 2014; Sewell et al., 2016) and more subsequently delinquency (Del Toro et al., 2019). Indeed, it is becoming known that exposure to intrusive and procedurally unjust policing should be considered traumatic events that can result in maladaptive coping strategies (Del Toro, Wang, Thomas, & Hughes, 2021; Jackson, Del Toro, Semenza, Testa, & Vaughn, 2021). Recent evidence indicates that when Black male youth are vicariously exposed to a recent police-related death in their county, their average nightly cortisol spikes by almost 50% (Browning et al., 2021), demonstrating the real impacts vicarious police-related trauma may have on youth physiological stress and mental health. Therefore, youths' fear of the police may emanate from negative direct encounters with the police, which can generate physiological stress responses and trigger youth's reactance against society.

GST argues that both acute and aggregate stressors could increase delinquency. In this study, we focused on more generalized fear of police, regardless of the source, as a prevailing and enduring strain and the results indicated that those who fear police more – regardless of whether they are fueled by personal or vicarious experiences – may also be experiencing associated psychological symptoms and be in need of mental health resources. As such, this study suggests that by assessing generalized fear of police, researchers could potentially overcome such measurement and disclosure challenges but still tap into the cumulative effects of personal and vicarious exposure to problematic policing. Altogether, in order to address the deleterious psychological impact of unjust police behavior among youth, the results of this study indicate that perhaps one possible route forward would be to ask youth about their general fear of police rather than their personal, direct experiences that they may be more reluctant to share.

This study's findings also have implications for youths' school lives. The impact of police-involved trauma experienced outside of the school environment may directly affect youth attitudes and behaviors in schools, the space in which they spend most of their day. Strain resulting from negative interactions with the police has the potential to seep into the school setting in the form of poor mental health symptomatology (Del Toro et al., 2019), which may manifest as antisocial outcomes. While not directly related to police-adolescent interactions, negative feelings stemming from police-induced trauma may result in a diminished desire to obey rules or follow norms synonymous with law and order as embodied by the police and other authority figures (LaFree, 2018; Reider, 1953). Such strain may lead to increased levels of delinquency and other problem behaviors among youth who have experienced such trauma (Agnew, 2016; Del Toro et al., 2019), whether as a coping mechanism or a response to what the police represent more broadly in the form of rule following and obedience to the law. Authority figures and what they represent may transcend domains, and in turn, negative

experiences with law enforcement may directly influence adolescents' attitudes and behaviors when expected to obey rules in a school context. Ultimately, the external strain and stress incurred from police-induced trauma has direct implications for willingness to obey rules in a structured setting like school. As such, if fearing the police undermines youths' mental health and their felt obligation to obey school rules, the results would suggest a critical loop between contexts: Fearing the police might actually promote and sustain the school-to-prison pipeline. More research is clearly necessary to test this notion.

8.1. Limitations

This study's contributions and findings must be considered in light of several important limitations. Overall, the surveys were administered during class. While educators helped choose items based on the youths' developmental considerations, the surveys had to be as short as possible to minimize the study's impact on class time. While we were able to provide the validated MHI-5 measure for mental health symptomatology, other measures, including youths' felt obligation to obey the law and school rules, were restricted to one-item measures. For instance, while the items were developmentally appropriate and face valid, future studies should use measures for the obligation to obey that can differentiate among its subdimensions (e.g., dull compulsion, coercion, and truly free consent; Fine & van Rooij, 2021; Pösch, Jackson, Bradford, & MacQueen, 2020). A single-item measure is clearly not ideal. Further, it would be advantageous for future studies to use longitudinal designs with repeated observations over short time frames to assess how changes in constructs may contribute to changes in outcomes. There is a distinct possibility that there may be reverse causality. For instance, people who are facing mental health issues may be more likely to fear authority figures like the police. As such, longitudinal studies are clearly necessary to parse the temporal ordering. In addition, due to schools' constraints, we were unable to identify the ethnic/racial identification of individual participants or conduct a longitudinal study; thus, we could not examine possible ethnic/racial group differences, and the cross-sectional design precludes any causal inferences.

8.2. Implications

On a practical level, the results indicate that police must improve the way they interact with the community. Yet there are also clinical implications. In light of evidence that psychological distress is malleable and responsive to children's contexts (Day et al., 2016), assessing youths' psychological distress can be used to inform interventions aimed at improving police-youth interactions and police officers' engagement with the community. Certainly, social workers and school counselors should consider screening youth for personal exposure to unjust policing in order to provide them with relevant mental health resources. However, Jackson, Semenza, et al. (2021) noted that when police mistreatment occurs, the overall context is marked by substantial age, status, and power differentials that may demoralize and induce hopelessness among youth, which in turn may reduce their willingness to report or discuss police contact. Problematically, youth are less likely to disclose being stopped by police if their experience was more procedurally unjust, if they anticipated social stigma from disclosure, and if they reported worse legal cynicism (Jackson, Semenza, et al., 2021). From an intervention perspective, social and mental health resources and supports for youth clearly cannot be provided if youth refuse to report traumatic police encounters, which may further exacerbate racial and ethnic disparities in adolescent health. As such, practitioners are encouraged to assess youths' general fear of police as it may be easier for them to report yet still serve as a critical proxy for traumatic experiences with police, both personal and vicarious, that may undermine youths' mental health.

9. Conclusion

Scholars recently argued that the United States was entering an "era of mistrust" of police (Trinkner & Tyler, 2016). Yet in the years since, the country bore witness to many more deaths of young people of color, including Breonna Taylor and George Floyd, at the hands of law enforcement (Joseph-Salisbury et al., 2020; McDowell & Fernandez, 2018). While the study cannot establish causality, within this large, cross-sectional group of predominately Latinx early adolescents from low-income families, the results indicated that youths' fear of police was indirectly associated with the felt obligation to obey both the law and school rules through undermining youths' mental health symptomatology. On a theoretical level, this study provides important empirical support for integrating the general strain theory and the procedural justice framework and applying them to youth and policing. On a practical level, in line with the growing body of work on the effects of policing on youth health and mental health (e.g., Del Toro et al., 2021; Jackson, Del Toro, et al., 2021), this study suggests that mental health practitioners should screen youth for their fear of police because it could indicate a traumatic, generalized strain that can result in poor mental health and maladaptive coping strategies.

Author note

None of the analyses in the current article appear in other publications and they have not been disseminated at any academic conferences. We have no conflicts of interest to disclose.

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Mass Incarceration and Racial Inequality

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ABSTRACT. Despite two decades of declining crime rates, the United States continues to incarcerate a historically and comparatively large segment of the population. Moreover, incarceration and other forms of criminal justice contact ranging from police stops to community supervision are disproportionately concentrated among African American and Latino men. Mass incarceration, and other ways in which the criminal justice system infiltrates the lives of families, has critical implications for inequality. Differential rates of incarceration damage the social and emotional development of children whose parents are in custody or under community supervision. The removal through incarceration of a large segment of earners reinforces existing income and wealth disparities. Patterns of incarceration and felony convictions have devastating effects on the level of voting, political engagement, and overall trust in the legal system within communities. Incarceration also has damaging effects on the health of families and communities. In short, the costs of mass incarceration are not simply collateral consequences for individuals but are borne *collectively*, most notably by African Americans living in acutely disadvantaged communities that experience high levels of policing and surveillance. In this article, we review racial and ethnic differences in exposure to the criminal justice system and its collective consequences.

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Introduction

Despite two decades of declining crime rates and significant and sustained policy attention to criminal justice reform, the United States continues to incarcerate a comparatively large segment of the population. (For a discussion of some recent policy initiatives, see Obama (2017).) The United States experienced unprecedented increases in the volume and rate of incarceration between the mid-1970s and the first decade of the 2000s. The number of individuals incarcerated in America's prisons and jails peaked in 2008, when just over 2.3 million people, or 1 in 100 adults, were behind bars. Recent estimates suggest that close to 2.2 million people are incarcerated in the United States on any given day (Carson 2018). Figure 1 shows that although

Figure 1

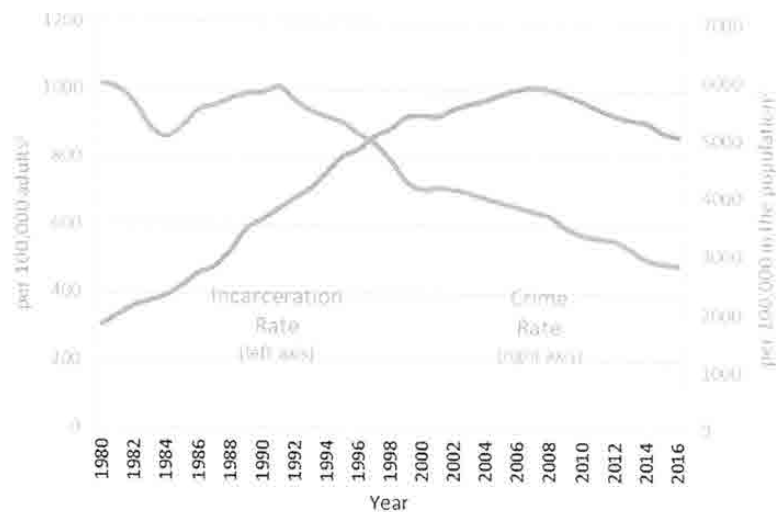
Incarceration and crime trends in the U.S., 1980–2016.

Sources: U.S. Bureau of Justice Statistics (1980–2016) for incarceration rates. U.S. Federal Bureau of Investigation (1980–2016) for crime rates. U.S. National Cancer Institute (1969–2017) for resident population of the United States.

Note: The incarceration rate includes prison and jail inmates.

¹The adult population includes all U.S. residents ages 18 and older.

²The population includes all U.S. residents of all ages.



crime rates hover near their lowest level in decades, the incarceration rate is three times higher than the rate in 1980.

High rates of incarceration in the contemporary United States are also unique in comparison to incarceration rates in other countries. Even after recent declines in the total number of people held in prisons and jails, the United States continues to incarcerate a much higher fraction of its population than any other wealthy nation in the world. People living in the United States are more than 10 times as likely to be in prison or jail as people living in Denmark, Sweden, or the Netherlands and four times as likely compared to residents of the United Kingdom (Aebi, Mélanie, and Burkhardt 2016; Coyle et al. 2016; Hartney 2006; Kaeble and Cowhig 2018).

Mass incarceration, or the widespread incapacitation of people in prisons and jails, does not randomly or equally affect all subgroups in the population. Rather, mass incarceration is characterized by its systematic targeting of particular segments of the population (Garland 2001). Indeed, like other forms of criminal justice contact, incarceration is disproportionately concentrated among men, African Americans, and those with low levels of formal schooling. No other group suffers the overwhelming likelihood of imprisonment experienced by young black males in the United States who do not complete high school (Pettit and Western 2004; Western and Wildeman 2009; Pettit 2012; Travis et al. 2014: ch. 2).

Despite the concentrated incarceration of young black men, the effects of mass incarceration extend well beyond the individuals living behind bars. Mass incarceration has generated not only *direct* implications for inequality through the systematic removal of young black men from free society but also *indirect* consequences for inequality as a result of its impacts on children, families, and communities that simultaneously suffer. Mass incarceration, and other forms of criminal justice contact, from police stops to community-based supervision, generate consequences related to employment, wages, political engagement, health, neighborhood stability, and a host of other considerations (Clear 2007; Kling 2006; Lee, Porter, and Comfort 2014; Massoglia, Firebaugh, and Warner 2013; Massoglia and Pridemore 2015; Pager 2003, Pager 2007; Sampson and Loeffler 2010; Schnittker

and John 2007; Uggen and Manza 2002; Weaver and Lerman 2010; Western 2002, 2006; Western and Pettit 2000). In this article, we discuss research on the consequences of incarceration and the other ways the criminal justice system disrupts people's lives and how exposure to the system and its effects collectively impact social equality.

Trends in Exposure to Mass Incarceration and Criminal Justice Contact

After steadily rising for nearly 40 years, the number of people incarcerated in the United States has hovered close to 2.2 million throughout the last decade (Kaeble and Cowhig 2018). Other forms of criminal justice supervision such as probation and parole have also grown to the extent that an additional 4.7 million people are under the surveillance of probation or parole agencies (Kaeble 2018). Far more commonly than either incarceration or community supervision, however, people encounter the criminal justice system for misdemeanor, or other relatively minor, infractions. Estimates suggest that nearly 20 million people have a felony conviction (Shannon et al. 2012). Around 70 million Americans, or slightly more than one-third of adults, have a criminal record (Sentencing Project 2014a). Nearly 25 million people are pulled over each year for routine traffic stops that can carry criminal sanctions, like fines and fees, which may widen the net of criminal justice involvement (Langton and Matthew 2013). A growing body of research considers how misdemeanor offenses, or other relatively minor infractions against the law, shape the way people interact with the police and the judicial system even in the absence of spending time in prison or jail (Comfort 2016; Kohler-Hausmann 2013, 2018; Lageson 2016; Napatoff 2015; Uggen et al. 2014). Excessive and unnecessary traffic stops uniquely concentrated among African Americans can fuel racial inequality in experiences with a maze of criminal justice procedures and their consequences (Baumgartener et al. 2018).

Simple counts of the number of people incarcerated, under criminal justice supervision, arrested, or stopped by the police do not fully reveal the extent to which different forms of contact with the criminal justice system are stratified by gender, race, ethnicity, or education and thus represent a critical axis of inequality. Table 1 presents

Table 1
Criminal activity among men (by race/ethnicity) and points of contact with the criminal justice system (arrest, conviction, incarceration, and probation)

	Race/Ethnicity			Magnitude Differences		
	White ^a	Black ^a	Latino	Black: White	Latino: White	Black: Latino
Criminal offending ¹						
Sold drugs ^{1a}	22.0	16.6	19.7	0.8	0.9	0.8
Committed violence ^{1b}	8.4	9.8	2.7	1.2	0.3	3.6
Risk of arrest ²	37.9	48.9	43.8	1.3	1.2	1.1
Felony conviction ³	12.8	33.0	-	2.6	-	-
Risk of incarceration ⁴	5.4	26.8	12.2	5.0	2.3	2.2
Imprisonment rates						
Jail ^{5a}	0.2	1.5	0.6	7.5	3.0	2.5
Prison ^{5b}	1.6	9.1	3.9	5.7	2.4	2.3
Community supervision						
Probation	2.4	8.3	-	3.5	-	-

^aNot of Hispanic or Latin origin.

¹Self-reported estimates.

^{1a}Percent of youth ages 12–29 who reported ever having sold illicit drugs (Mitchell and Caudy 2017).

^{1b}Rate of simple assault incidents per 1,000 persons age 12 and older from 2012 to 2015 (Morgan 2017).

²Percent of men ever arrested by age 23, born 1980–1984 (Brame et al. 2014).

³Percent of voting-age men in the population with a felony conviction in 2010 (Shannon et al. 2012).

⁴Percent of men ever incarcerated in state or federal prison by age 30–34, born 1975–1979 (Western and Wildeman 2009).

^{5a}Percent of adult men age 18 and older in jail at midyear in 2005 (Harrison and Beck 2006).

^{5b}Rate of incarceration for adult men ages 20–34 in 2015 (Pettit and Sykes 2017).

estimates of adult men's exposure to the criminal justice system by race and ethnicity. Consistent with accounts that emphasize racial differences in surveillance, policing, prosecution, and sentencing, racial disproportionality in exposure to the criminal justice system varies in relation to types of contact.

Low-level forms of engagement with the police and judicial system are more evenly distributed by race and ethnicity than are more intensive forms of contact and supervision. Self-reports of criminal offending are relatively similar between young black and white men. According to recent estimates of the National Longitudinal Survey of Youth 1997 and the National Crime Victimization Survey, whites are slightly more likely to report having ever sold illicit drugs (Mitchell and Caudy 2017). By contrast, blacks are slightly more likely to report having been involved in violence (Morgan 2017). While there are no national estimates on the prevalence of police stops and surveillance across socio-demographic groups, local studies show that despite similarities in rates of offending, African Americans, and black men in particular, are disproportionately surveilled and stopped by the police (Beckett et al. 2005; Fagan and Davis 2000; Fagan et al. 2010; Kohler-Hausmann 2013; Stuart 2016).

Table 1 also shows that engagement with the police and judicial system that does not involve spending time in jail or prison—from arrests to community-based supervision—are disproportionately concentrated among racial and ethnic minority groups, though the extent of that disproportionality varies widely. Brame et al. (2012, 2014) estimate that fully one-quarter (25.3 percent) of young adults are arrested by age 23 and further show that nearly half (48.9 percent) of black men are arrested by the time they reach age 23, compared to 37.9 percent of white men. One in 55 adults is under criminal justice supervision through probation or parole (Kaeble 2018). Although disproportionality in exposure to this type of supervision is less severe than inequalities in incarceration rates, black men are 3.4 times as likely as white men to be under supervision (Phelps 2017). Fully 8 percent of all adults, 13 percent of male adults, and 33 percent of adult males who are African American have a felony conviction (Shannon et al. 2012). Among men between 20 and 40, the share of those with a

felony conviction is over seven times greater for blacks and almost three times greater for Latinos, relative to the felony conviction rate among whites (Wakefield and Uggen 2010).

In the United States, incarceration is even more acutely concentrated among African American and Latino men than most other forms of criminal justice contact. By the end of 2015, approximately 1.6, 9.1, and 3.9 percent of young white, black, and Hispanic men, ages 20 to 34, were incarcerated on any given day, respectively. These numbers are substantially higher among those without a high school diploma (Travis et al. 2014: ch. 2). Table 1 also shows that lifetime risks of spending at least a year in prison are significantly higher than point-in-time estimates of the incarceration rate: over one-quarter of black men born in the late-1970s experienced incarceration by the time they reached their 30s. For black men born in the late-1970s who did not complete high school, the odds of imprisonment for at least a year by the time they reached their 30s increased to over 60 percent (Pettit 2012; Pettit and Western 2004; Travis et al. 2014: ch. 2; Western and Wildeman 2009).

Socio-demographic differences in punishment among adults translates into disproportionality in exposure to the criminal justice system and its consequences for partners, family members, children, and communities. Black women, in particular, face extraordinarily high chances of having a partner or family member incarcerated. They can expect to have almost two family members incarcerated, on average, whereas the average number of family members that white women can expect to have incarcerated is 0.14 (see Table 2). Even highly educated black women face a disproportionate risk of having one or more family members incarcerated, thus drawing attention to how the criminal justice system uniquely disadvantages African Americans, including those without criminal records (Lee and Wildeman 2013; Lee et al. 2014, 2015; Foster and Hagan 2007).

An increase in children's exposure to parental incarceration over time and socio-demographic differences in children's exposure to parental incarceration, both over time and over the life course, have important implications for social inequality (Wakefield and Wildeman 2013). Data from Surveys of Inmates of State and Federal

Table 2
Exposure to the criminal justice system among children and women by race and ethnicity

	Race/Ethnicity			Magnitude Differences		
	White ^a	Black ^a	Latino	Black : White	Latino : White	Black : Latino
CHILDREN						
Parent currently incarcerated ¹	1.8	11.4	3.5	6.3	1.9	3.3
Parent ever incarcerated ²	3.9	24.2	10.7	6.2	2.7	2.3
WOMEN						
Family member incarcerated ³	11.6	43.8	—	3.8	—	—
Number of family members incarcerated ⁴	1.6	0.1	—	0.1	—	—

¹Percent of children under age 18 with a parent in prison or jail in 2008 (Pew Charitable Trusts 2010).

²Percent of children ages 0–17 expected to have a parent imprisoned at some point during their childhood (Sykes and Pettit 2014).

³Percent of women ages 18 and older with at least one family member incarcerated in state or federal prison in 2005 (Lee et al. 2015).

⁴Average number of family members incarcerated in state or federal prison among women ages 18 and older (Lee et al. 2015).

Correctional Facilities show that nearly 1.5 million minor children in the United States had a parent in state or federal prison in 1999 (Mumola 2000). Estimates that include children of parents housed in local jails find that close to 2.1 million children had a biological parent incarcerated at the turn of the century (Sykes and Pettit 2014). Recent estimates show that at the end of 2015, 2.5 million children had a parent housed in a federal, state, or local correctional facility (Pettit and Sykes 2017). Accordingly, 1 in 14 children can expect to have a parent incarcerated at some point before their 18th birthday (Murphey and Cooper 2015). Nearly 1 in 4 black children can expect to have a parent imprisoned (Wildeman 2009). Estimates of parental exposure to the criminal justice system more generally are even higher: one recent study suggests that nearly half of American children have a parent who has been arrested (Vallas et al. 2015).

Exposure to the criminal justice system is not only deeply concentrated in certain socio-demographic groups but it is also disproportionately distributed within some of America's most disadvantaged neighborhoods (Clear 2007; Sampson and Loeffler 2010). In communities with high levels of incarceration, as many as 15 percent of the adult male population cycles back and forth to prison (Clear 2007). As a result, the criminal justice system is now estimated to affect nearly as many people as the education system or the labor market in poor, urban communities marked by high rates of incarceration (Morenoff and Harding 2014).

Contemporary patterns of inequality in both direct and indirect exposure to the criminal justice system are not simply a reflection of racial and ethnic disparities in crime or victimization. The concentration of incarceration and, more generally, of system involvement is due to shifts in policing, prosecution, and sentencing that disproportionately affect historically disadvantaged groups. (Travis et al. (2014: ch. 4) provide a recent overview of this issue.) Existing patterns of stratification—from racial homogamy in family formation, racial segregation in housing, and racially divided schooling—further concentrate the exposure of people of color to the criminal justice system.

**Effects of Incarceration and Other Forms of
Criminal Justice Contact**

Incarceration and other forms of criminal justice contact have both short- and long-term consequences for a host of measureable outcomes for people who are justice-involved, their families, and their communities. Research has shown that spending time in prison has negative effects on 1) employment, earnings, and wage growth; 2) political engagement; and 3) health and well-being. Other measures of justice involvement also affect these and related outcomes, although the evidence is less definitive. Nonetheless, the criminal justice system has become an important and pervasive axis of stratification in the United States.

Economic Self-Sufficiency

Diminished employment opportunities, bouts of unemployment, and lost wages influence economic security and self-sufficiency for individuals who have been incarcerated as well as for their families and children. Having been incarcerated significantly decreases the likelihood that applicants receive call-backs for potential jobs (Pager 2003, 2007). Similar effects are found for having a felony conviction even in the absence of spending time in prison or jail (Uggen et al. 2014). Incarceration significantly depresses employment after release and is also associated with extended periods of unemployment, especially among low-skilled black men (Apel and Sweeten 2010; Western 2002, 2006). Evidence on the effects of other types of interaction with police and the courts are more mixed, yet recent research shows that even minor contacts with the criminal justice system can have important negative consequences because of inconsistencies between routines of work and demands of the court, including repeated court appearances (Kohler-Hausman 2018).

Incarceration has been shown to depress wages and wage growth even among former inmates who find work upon their release (Apel and Sweeten 2010; Lageson and Uggen 2013; Loeffler 2013; Mueller-Smith 2014; Ramakers et al. 2014; Western 2002, 2006). Even relatively short stints in jail can have long-term implications for wage growth

and wealth (Sykes and Maroto 2016; Western 2006). Incarceration is associated with time out of the labor force, lost work experience, and skill depreciation (Kling 2006; Raphael 2011). However, there are also direct wage penalties associated with spending time in prison that result from the stigmatizing effects of *any* contact with the criminal justice system (Mueller-Smith 2014; Pager 2003, 2007; Western 2006). More than 90 percent of employers in the United States are estimated to obtain background checks on at least some of their potential hires (Jacobs 2015). Employers express much less enthusiasm about hiring a person with a criminal record than hiring a person with a spotty work history or a history of unemployment (Holzer et al. 2006).

The economic consequences of incarceration and other forms of engagement with the criminal justice system extend well beyond people who are justice-involved. Incarceration diminishes contributions to families (Geller et al. 2011). It also increases household financial burdens associated with livelihood, such as childcare expenses (Braman 2004; Grinstead et al. 2001). Family members, especially mothers and partners, bear excess financial burdens—from posting bail, to paying legal fines and fees, to visitation and related costs (Comfort 2007; Harris, Evans, and Beckett 2010, 2011; Harris 2016; Maroto 2015). Financial obligations associated with criminal convictions, transferred to family members, can fuel a cycle of debt and obligation that spans across generations (Harris 2016).

Economic insecurity associated with incarceration critically affects families and children through increased household instability. Having a criminal record affects the ability to secure and sustain housing (Lee, Tyler, and Wright 2010). Children of recently incarcerated fathers are three times more likely to experience homelessness than children without incarcerated fathers. Even after adjusting for many of the pre-existing family and household differences between children with and without incarcerated parents—such as welfare receipt, eviction history, public housing history, alcohol and drug abuse among parents, and family violence—paternal incarceration is found to increase the risk of childhood homelessness by 94 to 97 percent (Wakefield and Wildeman 2013). Parental incarceration pushes even formerly non-poor children into poverty and entrenches their dependence on state and federal assistance programs (Sykes and Pettit 2015).

Politics

Incarceration has widespread consequences for civic engagement. Having a felony record, even in the absence of spending time in prison or jail, can prohibit people from political participation. Forty-eight states prohibit people who are currently imprisoned from voting. Thus, incapacitation alone excludes over a million people each year from the franchise; having a felony record precludes millions more from voting long after they complete their custodial sentence (Manza and Uggen 2008; Uggen, Larson, and Shannon 2016). Whether, and for whom, formerly incarcerated individuals would vote is a matter of some debate (Burch 2011, ; Gerber et al. 2017; Miles 2004; Uggen and Manza 2002; Uggen, Manza, and Thompson 2006).

The Sentencing Project (2010) estimates that 13 percent of black men are disenfranchised from voting as a result of their criminal justice involvement. Although some formerly incarcerated individuals remain eligible to vote, voter turnout rates in this group are exceptionally low (Burch 2012, 2013, Gerber et al. 2017; Weaver and Lerman 2010). Despite claims of growing political participation among young blacks, evidence suggests that the exclusionary effects of mass incarceration depressed voter turnout rates among young black men during the historic 2008 election to the extent that they mirrored the low voter participation rates among this group in the 1980 presidential contest (Pettit 2012). If current rates of incarceration and racial disproportionality persist in the future, 30 percent of black men in the next generation can expect to be disenfranchised at some point in their lifetime, and as many as 40 percent of black men may permanently lose their right to vote in states that disenfranchise ex-offenders (Sentencing Project 2012).

The negative effects of mass incarceration on civic engagement extend well beyond voting. Spending time in prison and other forms of criminal justice contact affect civic engagement, trust in institutions, and cynicism about the legal system itself (Baumgartner et al. 2018; Mueller and Schrage 2014; Weaver and Lerman 2010, 2014). Growth over time in incarceration and racial disproportionality in exposure to surveillance is linked to heightened levels of distrust in the law among African Americans (Mueller and Schrage 2014). Racial

disproportionality in police stops and the outcomes of those stops fuel race differences in perceptions of the police and their legitimacy. African Americans are much more likely than whites to be stopped by police, yet a disproportionate number of cases where whites are stopped do not generate a citation, further reinforcing beliefs in an unjust system designed to subjugate people of color (Baumgartner et al. 2018).

Trust and engagement in the political system is similarly precarious for family members and romantic partners of incarcerated people as it is for those in, or recently released from, punitive confinement (Lee, Porter, and Comfort 2014; White 2018). The criminal justice system is an important institution in the political socialization of people connected to currently or formerly incarcerated individuals, especially as their relationship with the carceral state alienates them from other mainstream socializing institutions (Flanagan 2003). Accordingly, the political and civil behaviors of individuals connected to the criminal justice system may diminish as a result of the general influence that parents and romantic partners have on shaping these outcomes.

Indeed, individuals with an incarcerated parent or romantic partner are less likely to vote, more likely to feel discriminated against in their daily lives, and less likely to participate in community service (Lee, Porter, and Comfort 2014). While family members are not the primary targets for political disenfranchisement, their propensity for engaging in the political process declines as they experience negative interactions with correctional authorities that erode their beliefs in the fairness of the government as a whole. The spillover consequences of mass incarceration on trust in government and on political engagement more broadly are profound. Children who have experienced the incarceration of a parent exhibit significantly more legal cynicism than other children (White 2018). Being stopped by police depresses trust in the law, especially among African Americans (Baumgartner et al. 2018; Tyler, Fagan, and Geller 2014). In neighborhoods where police surveillance is high and interactions with the police are the result of unsolicited contact initiated by the police, policing is often viewed as racially biased or unfair on other grounds (Sunshine and Tyler 2003; Tyler and Huo 2002; Tyler and Wakslak 2004). When positive views of

the police are weakened among individuals within a community, the legitimacy of the police in that area is diminished.

Illegitimate and negative views of the criminal justice system have cascading consequences for inequality within a community, in part by making areas less safe. When individuals experience or perceive unfair treatment from legal authorities, their propensity to cooperate with and follow the law diminishes (Tyler 2003). This process, however, is not unique to individuals. Through social interactions, distrust of the police and negative views of the law more generally become part of the neighborhood milieu (Kirk and Papachristos 2011). Because the police rely on local residents to report crime, to participate in criminal investigations, and to assist in the informal control of crime, the reduction of police legitimacy often puts neighborhoods at risk for growing levels of crime and violence (Carr, Napolitano, and Keating 2007; Kirk et al. 2012; Tyler and Huo).

Health and Well-Being

By and large, incarceration negatively affects health. Incarceration is considered a chronic stressor (Pearlin 1989). It introduces acute shocks to inmates' immune systems during their time spent behind bars and also throughout their lives. These acute shocks accumulate, causing dysfunction to the immune system that can last for long periods and result in early death (Pridemore 2014). Spending time in jail and prison therefore affects health both during and after incarceration, and the health effects of incarceration manifest in both the short and long term. Because the stress related to incarceration persists beyond the confines of correctional facilities, having spent any amount of time behind bars is considered more consequential for health than the length of incarceration itself (Massoglia 2008a; Schnittker and John 2007).

The negative health effects of incarceration are often most dangerous in the short term, as the period immediately following release from prison and jail is associated with a severely heightened risk of death (Binswanger et al. 2007; Krinsky et al. 2009; Lim et al. 2012; Merrall et al. 2010). In the first two weeks after being released from prison, the rate of death among formerly incarcerated individuals is 13

times higher than the rate for the general population (Binswanger et al. 2007). The leading cause of death during this post-release period is overwhelmingly drug overdose, resulting from the combination of exacerbated stress and poor continuity of healthcare and other forms of support for former inmates on the outside (Binswanger et al. 2011).

The heightened risk of death following release from prison and jail is also observed in the longer term, as incarceration harms the health of former inmates in multiple ways long after their formal sentences are served. In terms of physical health, spending time in prison or jail increases the occurrence of chronic health problems (Schnittker and John 2007). Incarceration also adds to susceptibility to infectious diseases and stress-related illness, such as hypertension and heart disease (Massoglia 2008b). Having spent time in prison during young adulthood is also found to deteriorate physical health functioning for people at middle age (Massoglia 2008b). In terms of mental health, the stress associated with imprisonment also puts formerly incarcerated individuals at higher risk for psychological problems and depression (Massoglia 2008a; Schnittker and John 2007).

Measuring the impact of incarceration as a mechanism of health inequality is complicated by the fact that the negative effects of incarceration on health are uniquely absent among black men (Patterson 2010). Black and white men display similarly poor health upon their entry into prisons and jails (Nowotny, Rogers, and Boardman 2017). However, incarceration *lowers* the risk of mortality for black males both during and after their time spent behind bars. The lower mortality among black males could result from increased protection from acute stressors and risks like exposure to violence and drug overdoses. Prison conditions may provide a safer environment than what black males on the outside otherwise encounter. Removing firearm and motor vehicle deaths from the mortality rate of the general population, however, does not fully explain the improved life expectancies of incarcerated black men (Patterson 2010). Lower than expected rates of death among black males in prison are also observed for chronic causes of death, such as cardiovascular disease, cancer, and diabetes (Rosen et al. 2011). Improvements in these cause-specific mortality

rates of black men in prison even extends to the period following the first five years after their release (Rosen et al. 2008).

The health benefits of incarceration experienced by black men may therefore be attributed to the constitutionally mandated requirement to make healthcare available in jails and prisons that is otherwise largely inaccessible or unused for this segment of the population. As improvements in the mortality rate of incarcerated black men remain uniquely steady for deaths caused by chronic conditions but not for those caused by external injuries, the treatment and services provided to inmates may generate health benefits that extend well beyond the confines of correctional facilities. Nevertheless, racial disproportionality in exposure to incarceration means that aggregate effects of the criminal justice system fuel racial inequality in health. One way to see this is by measuring the years of life lost associated with incarceration.

Public health scholars and epidemiologists often employ demographic life-table techniques to measure the years of life lost to uncover the impact of large-scale events that adversely impact a population. Drucker (2002) applied this method to incarceration rates during the prison boom in New York, a state that implemented its own legislation to increase the length of prison sentences for non-violent drug offenses under the Rockefeller drug laws (RDL). Using data from the New York State Department of Corrections merged with population estimates and vital statistics from the U.S. Census Bureau, Drucker found that RDL-related offenses accounted for over 325,000 person-years of life lost in New York from 1973 to 2002. With a median age of 35 and a life expectancy of 68 years, this figure is equivalent to the years of life lost associated with nearly 10,000 deaths in a population with the same age, racial, and ethnic composition. Drucker (2002) finds that the magnitude of these years of life lost to incarceration for nonviolent drug offenses is similar to the death toll associated with the HIV/AIDS epidemic in New York, especially for young black men. According to Drucker, approximately 242 black men ages 20–45 died in New York City during 2001, accounting for 7,986 years of life lost. In this same population group, the estimated years of life lost due to nonviolent drug incarceration is 8,805, a figure equivalent to 245 deaths.

The health and well-being of partners, children, and communities are also impacted by mass incarceration. For example, people who spend time in jails and prisons face greater risks of sexually transmitted infections and diseases, which may eventually translate to their partners on the outside when they return to society. The concentration of incarceration within communities gravely shapes the disproportionate risk of HIV among black men and women. Through the late 1980s and mid-1990s, the rate of infection was nearly 20 times greater among black women than among white women. After accounting for racial differences in incarceration, however, the infection rate of black women would have been *lower* than that of white women (Johnson and Raphael 2009; Schnittker, Massoglia, and Uggen 2011). Along with potential detriments to their sexual health, individuals with incarcerated romantic partners experience elevated levels of stress as a result of their partner's incarceration, exposing them to greater risks of health problems throughout the life course, such as depression in the short term and heart disease in the long term (Lee and Wildeman 2013; Lee et al. 2014).

Children conceived by recently incarcerated men also suffer negative effects to their health *in utero*, threatening their chance of survival. Wakefield and Wildeman (2013) use data from the Pregnancy Risk Assessment Monitoring System (PRAMS) to investigate the association between infant mortality (death of a newborn before the first birthday) and paternal incarceration. Among children born to women who did not complete high school, infants with an incarcerated father are 75 percent more likely to die within the first year of their lives than those infants whose fathers are not imprisoned. Controlling for risk factors associated with infant mortality, however, the authors find that paternal incarceration increases the odds of infant death by 49 percent. Nevertheless, the risk of paternal incarceration on infant mortality remains similar to other factors that have long received attention in public health and medical research, such as the effect of maternal smoking, which increases the odds of infant mortality by 46 percent.

It is hard to identify the direct effects of incarceration on a variety of outcomes because families of incarcerated parents experience conditions such as lower educational attainment of parents, greater

levels of public assistance utilization, more single-parent households, and greater risks of domestic violence between parents. Nonetheless, incarceration has been shown to negatively impact children's mental and behavioral well-being, as well as their residential stability, which cumulatively relate to enduring physical health disadvantages (Wakefield and Wildeman 2013).

Collective Consequences of Mass Incarceration

Mass incarceration is a historically novel, uniquely American, mechanism of inequality. In the context of existing patterns of stratification in the labor market, family structure, and neighborhoods, high rates of incarceration and high levels of exposure to the criminal justice system more generally, exact damaging consequences that endure over lifetimes. Mass incarceration is thus a key determinant of racial inequality. At the same time, high concentrations of exposure to partners, parents, and community members who are justice-involved reinforces inequality across geographies, groups, and generations. Thus, while spending time in prison or jail can be a remarkably solitary experience, the costs of mass incarceration are not simply collateral consequences for individuals but are borne *collectively*, most notably by African Americans living in acutely disadvantaged communities.

Individuals returning home from prison move to a relatively small number of cities, counties, and even neighborhoods, which concentrates the costs of mass incarceration (Clear 2007; Harding et al. 2013; La Vigne and Parthasarathy 2005; Pew Charitable Trusts 2010; Sampson and Loeffler 2010; Visser and Travis 2011). In a longitudinal study of Michigan prisoners paroled in 2003, Morenoff and Harding (2011) find that half of all returning parolees were concentrated in 12 percent of Michigan's census tracts, and one-quarter of the parolees were concentrated in just 2 percent of the tracts.

Sampson, Raudenbush, and Earls (1997) have developed a composite measure of concentrated disadvantage in which a high score represents a greater degree of disadvantage. The average score in the communities where parolees lived was almost one standard deviation higher than the state-wide average, suggesting that the communities where individuals return from prison have considerably higher levels

of poverty, unemployment, and residential instability. The disadvantaged conditions of neighborhoods to which individuals return home from prison negatively impact labor market outcomes, including employment, wages, and income. In their study of Michigan parolees, Morenoff and Harding (2011) found that, at most, 20 percent of individuals who returned from prison in the previous year earned sufficient income in the formal labor market to meet the basic material needs of a single person.

Given that mass incarceration is characterized by extraordinarily high rates of criminal justice contact among impoverished black men, and that poor blacks largely reside in racially and economically segregated communities, the effects of mass incarceration are further concentrated by race and ethnicity. Fagan and colleagues (2002) found that incarceration disproportionately affects New York's poorest neighborhoods, and that these areas received more intense and punitive policing and surveillance even during periods of general declines in crime. Despite a drastic reduction in the number of those at risk of criminal involvement in those neighborhoods, police persistently monitor these communities, perpetuating disadvantage and harm and leading to "the first genuine prison society of history" (Wacquant 2001). By removing large numbers of young men from concentrated areas, incarceration reduces neighborhood stability (Petersilia 2003). The cycling of men between correctional facilities and communities may even begin to trigger higher crime rates within a neighborhood, a process Clear (2007: 73) describes as "coercive mobility." Contemporary research suggests that high rates of incarceration increase policing and surveillance in local areas in ways that reinforce further punishment.

Other research confirms that prison admissions predominately come from select counties and urban neighborhoods, and that returns from prison are concentrated in many of those very same neighborhoods. Lynch and Sabol (2001) found that a mere 3 percent of the census block groups in Cuyahoga County, Ohio (Cleveland) account for more than 20 percent of the state's prison population, with an expected 350–700 formerly incarcerated individuals returning to those very same block groups each year following release. Lynch and Sabol further found that, in 1984, approximately 50 percent of prison

releases returned to urban counties. By 1996, this figure had increased to 66 percent. For those rearrested after release, the trend was even more dramatic: 42 percent returned to urban counties in 1984 and 75 percent by 1996. For neighborhoods that witness such widespread police surveillance, criminal justice involvement has become an integral component of the collective experience (Weaver and Lerman 2010). Yet, absent perceptible improvements in public safety, heightened surveillance in already disadvantaged neighborhoods leads to repudiation of legal authorities and a reduced willingness to comply with the law (Tyler 2003; Weaver and Lerman 2010).

Mass incarceration produces widespread detrimental outcomes for people who are incarcerated or face other forms of legal punishment, their children and families, and neighborhoods and communities already characterized by crime and disadvantage. Moreover, the legal effects of mass incarceration produce consequences for the nation's representativeness and participation in democracy and society across generations. The greater disadvantages suffered by single parents in raising children are detailed in the literature on the collateral consequences of mass incarceration on children and families. In addition, children with parents involved in the criminal justice system endure worse mental health and behavioral issues. However, studies of these collateral effects have two drawbacks. The first is a strong male bias. They largely focus on the ways mass incarceration perpetuates future inequality by examining how males in the next generation become caught up in the criminal justice system through the repeated cycle of incarceration within their families and communities. Measuring inequality through the perpetuation of crime and punishment, however, largely ignores the experience of daughters of incarcerated parents, since most females never engage in crime to the extent that they face incarceration. The second problem with research on multi-generational impacts is that it does not adequately address how disproportionality in surveillance, policing, prosecution, and sentencing contribute to disproportionality in engagement with legal authorities, quite distinctly from engagement in criminal activities.

While evidence on mass incarceration and its effects are increasingly clear, questions about the implications of new forms of surveillance

and other types of contact with the criminal justice system remain. In the age of big data and hyper-surveillance systems, how are the experiences and consequences of mass incarceration related to other ways in which at-risk groups are identified by criminal justice agencies? Does the linkage of data between criminal and noncriminal justice institutions, like banks and health-care systems, undermine the economic, political, and social engagement of historically disadvantaged and hyper-surveilled groups, especially blacks? Do new data technologies from facial recognition to DNA archiving make some groups uniquely vulnerable to increased scrutiny? How do new forms of noncustodial punishment—from fines and fees to repeated court appearances—influence economic, health, and political outcomes for individuals and communities?

Legal and social institutions in the United States increasingly rely on beliefs of colorblindness (avoidance of racial classification), which ignore the underlying social and political processes that differentiate racial groups above and beyond visual differences. Employing color-blind policies and laws in order to achieve equality between racial and ethnic groups denies the social, cultural, and political phenomena attached to race, maintaining injustices for vulnerable minorities. The American criminal justice system and its effects are not colorblind. A wide range of factors have aligned to shape the laws, policies, and practices currently in place that effectively sustain systematic patterns of incarceration. In turn, those patterns concentrate both the experience of criminal justice contact and its consequences among people of color from a relatively small number of communities. The resulting inequalities stray far from and undermine the stated purposes of most laws aimed at reducing and controlling crime. Future research must more directly consider how contemporary rhetoric surrounding colorblindness influences our collective aspirations for equality, representativeness, and democracy.

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Racial and Class Inequality in US Incarceration

Racial and Class Inequality in US Incarceration in the Early Twenty-First Century

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The relative importance of racial and class inequality in incarceration in the United States has recently become the subject of much debate. In this paper, we seek to give this debate a stronger empirical foundation. First, we update previous research on racial and class inequality in people's likelihood of being imprisoned. Then, we examine racial and class inequality in people's risk of having a family member imprisoned or living in a high-imprisonment neighborhood. We find that racial inequality in prison admissions has fallen in the twenty-first century, while class inequality has surged. However, in recent years, Black people with high levels of education and income were more likely than white people with low levels of education and income to experience the imprisonment of a family member or to live in a neighborhood with a high imprisonment rate. These seemingly contradictory conclusions can be reconciled by the fact that enduring structures of racial domination have made class boundaries among Black people more permeable than they are among white people. Imprisonment in the United States is increasingly reserved for the poor. But because Black Americans are disproportionately connected to the poor through their families and neighborhoods, racial inequality exceeds class inequality in people's indirect experiences with imprisonment.

Prisons in the United States are sites of stark racial and class inequality. Black people, poor people, and less educated people, among others, are incarcerated at disproportionately high rates (Gilmore 2007; Western and Pettit 2010; Wacquant 2010). Racial inequality in incarceration stretches back to the end of Reconstruction (Davis 1998; Muller 2021). It grew rapidly in the first half of the twentieth century, particularly during the first Great Black migration to the North (Muller 2012). During the prison boom in the late-twentieth

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century, racial inequality in incarceration remained consistently high while class inequality widened (Pettit and Western 2004; Western 2006; Pettit et al. 2009).

Recently, the relative importance of racial and class inequality in incarceration has become the subject of a sometimes intense debate. This is partly due to the reception of Michelle Alexander's bestselling book, *The New Jim Crow*. Alexander's (2010) argument in *The New Jim Crow* is broad and multifaceted, but critics took aim at its central metaphor, which they claimed overshadowed rising rates of incarceration among groups other than Black Americans and growing class inequality in incarceration among Black and white Americans alike (Forman Jr 2012; Gottschalk 2015).

However, the empirical basis for this debate has been limited in two important ways. First, our best estimates of class inequality in prison admissions end in 2001 (Western 2006). Given rising class inequality in mortality and other measures of well-being in the intervening years (Case and Deaton 2020, 2021), these estimates may understate the degree of class inequality in imprisonment today. Second, these estimates focus exclusively on racial and class inequality in an individual person's likelihood of going to prison. However, people experience the negative effects of imprisonment not just directly, but also indirectly through their families and neighborhoods. Because Black people are disproportionately connected to poor family members and poor neighborhoods (Pattillo-McCoy 1999; Pattillo 2005; Heflin and Pattillo 2006; Sharkey 2014), racial and class inequality in people's risk of having a family member imprisoned or living in a high-imprisonment neighborhood may differ from racial and class inequality in their risk of being imprisoned themselves.

In this paper, we seek to set this debate on a stronger empirical foundation. Our primary aim is to describe recent patterns in racial and class inequality in US incarceration. First, we extend previous research on racial and class inequality in people's likelihood of being imprisoned through 2015. Then, we report estimates of racial and class inequality in people's risk of having a family member imprisoned or living in a high-imprisonment neighborhood.

Using educational attainment as a proxy for class (Pettit and Western 2004; Western 2006; Western and Pettit 2010), we find that class inequality in imprisonment has surged. Racial inequality in prison admissions, in contrast, remains high but has declined. Falling racial inequality and rising class inequality in imprisonment partly reflect the continuation of late-twentieth-century trends: the prison admission rates of college-educated Black and white people continued to decrease, while the prison admission rate of white people with no college education continued to increase. The exception is the prison admission rate of Black people with no college education, which, after sustained growth, fell precipitously beginning in 2000.

Our analysis shows that in the late-twentieth century, the Black-white disparity in imprisonment was comparable in magnitude to the disparity between people with no college education and people with some. However, in the twenty-first century, the no-college-any-college disparity grew to greatly exceed the Black-white disparity in imprisonment. In 2015, Black people with and without any college education were, respectively, 2.7 and 2.0 times likelier to

be imprisoned than white people with the same education. By contrast, Black and white people with no college education were, respectively, 22 and 28 times likelier to be imprisoned than Black and white people with any college education. In the late 1980s and early 1990s, white people with no college education were admitted to prison at rates comparable to those of college-educated Black people. By 2015, the prison admission rate of white people with no college education had grown to more than ten times that of Black people with any college education.

However, despite recent declines in racial inequality in prison admissions, we find that racial inequality exceeds class inequality in people's likelihood of having a family member imprisoned or living in a high-imprisonment neighborhood. High-education and high-income Black people are just as likely or likelier than low-education and low-income white people, respectively, to experience the imprisonment of a family member or to live in a neighborhood with a high imprisonment rate. Adjusting for household size, Black people with \$100,000 in household income have the same likelihood of having a family member imprisoned as white people with \$9,000 in household income. Black-white gaps in people's likelihood of living in a high-imprisonment neighborhood were larger than gaps between the most and least educated people and between the richest and poorest households.

Our analysis makes two principal contributions. First, we show that racial inequality in prison admissions declined in the early-twenty-first century, while class inequality in prison admissions reached alarming new extremes. Class inequality now exceeds racial inequality in prison admissions by an order of magnitude. Second, we use the concept of class permeability developed by Wright (1997) to explain why, despite this fact, racial inequality exceeds class inequality in family-member and neighborhood imprisonment. Because Black Americans are more likely than comparable white Americans to have poor family members and to live in poor neighborhoods, they are also more likely to experience the imprisonment of a family member and to live in a neighborhood with a high imprisonment rate. Taken together, these findings highlight the importance of precisely identifying how racial and class inequality in incarceration are intertwined.

Racial and Class Inequality in Imprisonment

The explosive growth of incarceration in the United States at the end of the twentieth century has received an extraordinary amount of scholarly attention. But few books have reached as broad an audience as Michelle Alexander's *The New Jim Crow*. Alexander's book centered on how mass incarceration dramatically increased the number of people with criminal records—records that subject them to legal discrimination in housing, employment, education, and public benefits. The book devoted special attention to the War on Drugs, which disproportionately targeted Black people, due in part to the concentration of police in poor, predominantly Black, neighborhoods. Together, the social

and legal consequences of having a criminal record and the overrepresentation of Black people among those with criminal records were two of the central motivations for Alexander's (2010, p. 11) conclusion that "mass incarceration is, metaphorically, the New Jim Crow."

Subsequent critiques of *The New Jim Crow* by James Forman Jr. and Marie Gottschalk argued that the book's central metaphor has important empirical and strategic shortcomings. Forman (2012, p. 21) notes that the analogy "obscures class distinctions within the African American community, and overlooks the effects of mass incarceration on other racial groups." Gottschalk (2015, p. 5) similarly contends that the metaphor overshadows the fact that poor people of other racial groups "have been a booming growth area for the carceral state." Although Forman and Gottschalk acknowledge the deep and brutal history of racial inequality in incarceration and share Alexander's goal of ending mass incarceration, they believe that downplaying mass incarceration's effects on poor people of other racial groups impedes the formation of a "broad political movement necessary to dramatically reduce the number of people in jail or prison" (Gottschalk 2015, p. 3). In short, if these groups are left out of conversations about the harm of incarceration, they will be "less likely to see a campaign against it as speaking to and for them" (Forman Jr 2012, p. 65).

Forman and Gottschalk appeal to the work of Bruce Western, whose influential book, *Punishment and Inequality in America* (2006), showed that the late-twentieth-century rise in incarceration in the United States was typified by widening class inequality and relatively stable racial inequality in prison admissions. Western's (2006, p. 75) analysis, which ends in 2001, has not been updated. Thus, debates about racial and class inequality in incarceration in the early twenty-first century have taken place without an understanding of whether the trends Western identified have reversed, continued, or accelerated.

Recent work by Anne Case and Angus Deaton suggests that there are good reasons to believe that class inequality in incarceration has intensified. Case and Deaton (2020) document a dramatic twenty-first-century increase in the mortality rate of white Americans without a bachelor's degree, driven by deaths from suicide and alcohol and drug use. The mortality crisis among white Americans followed an earlier mortality crisis among Black Americans due to the epidemics of crack cocaine and HIV. Both crises, Case and Deaton (2020) note, were precipitated by large-scale job loss, particularly among low-education workers. To the extent that imprisonment, like mortality, reflects broad-based changes in people's life chances (Wilson 1987; Sen 1998; Autor et al. 2016), trends in imprisonment may track these trends in mortality (Beckett and Brydolf-Horwitz 2020).

Other scholars of have stressed the importance of studying the interaction of racial and class inequality in incarceration. Soss and Weaver (2017, p. 567), for instance, use the phrase *race-class subjugated communities* to draw attention to "the crucial interplay of race and class" in people's exposure to the carceral state. Wacquant (2010, p. 74) coins the term *hyperincarceration* to describe the "triple selectivity" of the United States' prison expansion: "first by class, second by race, and third by place." More generally, research on intersectionality has called on

scholars to study the ways that racial and class inequality are intertwined (Collins 2015), while work on racial capitalism has urged scholars to examine how racial domination is perpetuated by and integral to the dynamics of capitalist development (Robinson 2000 [1983]).

One way of responding to these calls is by studying racial inequality in what Erik Olin Wright (1997) calls class permeability. The concept of class permeability calls attention to the fact that people do not “simply fill locations within class structures. Their lives criss-cross the class structure in a variety of ways” (Wright and Cho 1992, p. 85). Wright (1997, p. 151) defines two kinds of permeability: *static* permeability, which refers to “patterns of social ties between people situated in different locations within a class structure,” and *dynamic* permeability, which refers to “the ways in which biographical trajectories traverse different locations within class structures.” People’s ties to relatives or neighbors in other class locations are examples of static permeability. Intergenerational mobility is an example of dynamic permeability. Wright (1997, p. 150) argues that class permeability is important because it influences people’s willingness to form “political coalitions across specific class boundaries.” He further insists that it forces us to reconsider how we define class. “Rather than asking ‘in what class is person X,’” Wright (1997, p. 277) proposes, “we should ask, ‘what is the location of person X within a network of direct and mediated class relations.’” This second question enables us to see that the class position of a person with financial obligations to poor family members will not be adequately captured by studying their income or education alone (Chiteji and Hamilton 2002; Heflin and Pattillo 2006; O’Brien 2012).

Wright’s analysis underscores that focusing exclusively on an individual person’s class location can obscure how they may be tied to the poor through their families and neighborhoods, even if they are not poor themselves. Given the concentration of imprisonment among the poor, such people are also more likely to have family members who have been imprisoned and to live in neighborhoods with a high imprisonment rate. Although their experience with imprisonment is indirect, they are still harmed by it, as a large body of research and personal testimony makes clear (Wilson 1987; Clear 2007; Comfort 2007; Bobo and Thompson 2010; Harris et al. 2010; Sugie 2012; Wildeman and Muller 2012; Wakefield and Wildeman 2013; Morenoff and Harding 2014; Sykes and Pettit 2014; Lee et al. 2015; Allen 2017; Manduca and Sampson 2019; Chung and Hepburn 2018; Western 2018; Haskins and McCauley 2019; Reich and Prins 2020; Miller 2021). Moreover, because movements opposing mass incarceration have often been led by people with imprisoned family members and neighbors (Gilmore 2007), the composition of these movements will reflect not just class inequality, but class permeability as well.

Wright’s research focuses on cross-national differences in class permeability. But the concept can be usefully applied to differences in the permeability of class boundaries among Black and white Americans. A large body of sociological scholarship suggests that enduring structures of racial domination have made class boundaries among Black people more permeable than they are among white

people. This fact complicates a straightforward comparison of racial and class inequality in incarceration.

Black people in the United States have drastically lower levels of wealth than white people. The Black–white wealth gap originated in slavery and persisted through the systematic exclusion of Black Americans from land- and home-ownership (Miller 2011; Taylor 2019). Because of Black families' historically low levels of wealth, more upper- and middle-class Black people than upper- and middle-class white people are offshoots from poor family trees (Chiteji and Hamilton 2002; Pfeffer and Killewald 2019). Thus, compared to similar white people, upper- and middle-class Black people have a high likelihood of having poor family members both within and across generations. Heflin and Pattillo (2006), for example, show that middle-class Black people are much more likely than middle-class white people to have a poor sibling.

Black Americans also experience higher rates of downward mobility than white Americans. High- and middle-income Black parents are more likely than high- and middle-income white parents to have low-income children, whose risk of imprisonment is far greater than that of the upper- and middle-class (Pfeffer and Killewald 2019; Chetty et al. 2020). Chetty et al. (2020, p. 744–746) show that Black men whose parents had incomes in the top 1 percent of the income distribution had the same incarceration rate as white men whose parents had incomes at the 34th percentile. Upper- and middle-class Black Americans thus should be more likely than comparable white Americans to have imprisoned family members.

The long history of segregation, ghettoization, and housing discrimination in the United States has also meant that upper- and middle-class Black families are more likely than upper- and middle-class white families to live in or near poor neighborhoods (Massey and Denton 1993; Pattillo-McCoy 1999; Pattillo 2005; Wacquant 2012). Although the proportion of upper- and middle-class Black families residing in disadvantaged neighborhoods fell considerably in the late-twentieth century, in 2000, Black households making more than \$100,000 a year lived, on average, in more disadvantaged neighborhoods than white households earning less than \$30,000 a year (Sharkey 2014, pp. 927, 934; see also Reardon et al. 2015). Given the concentration of police and imprisonment in poor, predominantly Black, neighborhoods (Sampson and Loeffler 2010; Wacquant 2010; Morenoff and Harding 2014; Simes 2018), upper- and middle-class Black families should consequently have greater exposure to high-imprisonment neighborhoods than their white counterparts.

In sum, recent increases in class inequality in mortality and other measures of well-being suggest that class inequality in incarceration has likely risen as well. But the fact that class boundaries among Black people are more permeable than they are among white people indicates that racial and class inequality in people's likelihood of being imprisoned may depart from racial and class inequality in their likelihood of having a family member imprisoned or living in a high-imprisonment neighborhood. The concept of class permeability offers a concise term for describing the consequence of a diverse set of causes—Black–white wealth inequality, differences in downward mobility, and residential segregation,

ghettoization, and housing discrimination—that contribute to racial inequality in people’s kinship and residential ties to the poor. Here we use it to describe the interaction of racial and class inequality in incarceration, but the study of racial inequality in class permeability should extend beyond the domain of punishment.

The Present Study

In the following three empirical sections, we examine racial and class inequality in people’s likelihood of being imprisoned, having a family member imprisoned, or living in a high-imprisonment neighborhood. In the first empirical section, we use restricted-access administrative data to extend Western’s (2006) analysis of racial and class inequality in prison admissions through 2015. We focus on prison admissions for two reasons. First, this makes our results comparable to those reported by Western (2006). Second, prison admission rates measure the flow of people into prison in a given year. This makes them a better measure of recent changes in imprisonment than imprisonment rates, which reflect both recent prison admissions and the lagged effect of earlier prison admissions. Although numerous studies, including the annual reports of the Bureau of Justice Statistics, have tracked changes in racial inequality in incarceration in the twenty-first century (Subramanian et al. 2018; Beckett and Brydolf-Horwitz 2020; Sabol et al. 2020), these studies have not conducted parallel analyses of changes in class inequality in prison admissions.

In the second empirical section, we use new survey data to study racial and class inequality in people’s likelihood of having a family member imprisoned. This analysis builds on previous research using survey data (Wildeman and Wakefield 2014; Lee et al. 2015; Bobo and Thompson 2010; Enns et al. 2019) and microsimulation techniques (Chung and Hepburn 2018) to examine people’s connections to incarcerated family members beyond parents. To our knowledge, only two previous studies have reported estimates of racial and class inequality in the incarceration of family members, broadly defined. Bobo and Thompson (2010) estimate the likelihood that Black and white people of different income and education levels had a friend or relative incarcerated. However, their analysis uses survey data from 2001 and 2002, whereas our estimates are based on data collected in 2018. Enns et al. (2019) use the same survey data we use to calculate the proportion of people in different racial and educational groups who had ever had a family member imprisoned. We extend this analysis in two ways. First, we directly estimate Black–white ratios at different educational levels and educational ratios among Black and white people. Second, we study income as well as education.

In the third empirical section, we use administrative data to estimate racial and class inequality in people’s likelihood of living in a high-imprisonment neighborhood. Several studies (Sampson and Loeffler 2010; Simes 2018) have documented the extreme spatial concentration of incarceration. However, we know of no previous research that examines how people’s exposure to

high-imprisonment neighborhoods varies according to both their racial classification and their class location.

Due to the limits of existing data, we cannot measure class directly. This imposes two important restrictions on our analysis. First, we are forced to measure class *gradationally* rather than *relationally*, assigning people a class location based on their “quantitative degree of some attribute (income, status, education, etc.) and not by their location within a determinate relation” (Wright 1985, p. 34). Second, although some scholars view education as a measure of socioeconomic status rather than class (Sørensen 2000; Weeden and Grusky 2005), we follow scholars of punishment in using education as a proxy for class (Pettit and Western 2004; Western 2006; Western and Pettit 2010).

Nonetheless, studying educational inequality in imprisonment has some advantages. Most simply, it makes our analysis of prison admissions comparable to previous research (Western 2006), which also focuses on educational inequality. But it also accords with the work of Case and Deaton (2020), which suggests that a college education is an increasingly salient divide and determinant of life chances in the twenty-first-century United States (see also Therborn 2013). Our data on prison admissions include no information about people’s income, so in the first empirical section, we restrict our focus to educational inequality. In the second and third empirical sections on family-member and neighborhood imprisonment, we report results using income as well as education. Our findings based on these two different measures are very similar.

Inequality in Imprisonment Over Time

To estimate changes in racial and class inequality in imprisonment in the late-twentieth and early-twenty-first centuries, we build on a method pioneered by Western (2006, p. 80). Our principal data source is the National Corrections Reporting Program (NCRP), which is administered by the Bureau of Justice Statistics (BJS). The NCRP relies on the voluntary contributions of state correctional agencies, which submit data to BJS on every person entering prison with a criminal sentence each year. We use these restricted-access data to generate annual prison admission rates from 1984 to 2015 for four groups of people aged 20 to 39, defined by their racial and ethnic identification (Black non-Hispanic or white non-Hispanic) and their educational attainment (no years of college completed or at least one year of college completed). We follow Western (2006) in restricting our analysis to people aged 20 to 39. Online Appendix A reproduces our results for people aged 20 and older.

Although recent research highlights the divide in life chances between those with and without a bachelor’s degree (Case and Deaton 2020), we examine the college–no college divide because the NCRP does not distinguish between prisoners with associate’s and bachelor’s degrees. This has the advantage of making our results comparable to prior research (Western 2006; Pettit et al. 2009; Western and Pettit 2010). For simplicity and to maintain fidelity to the language that defines categories of people in the administrative data we use, we

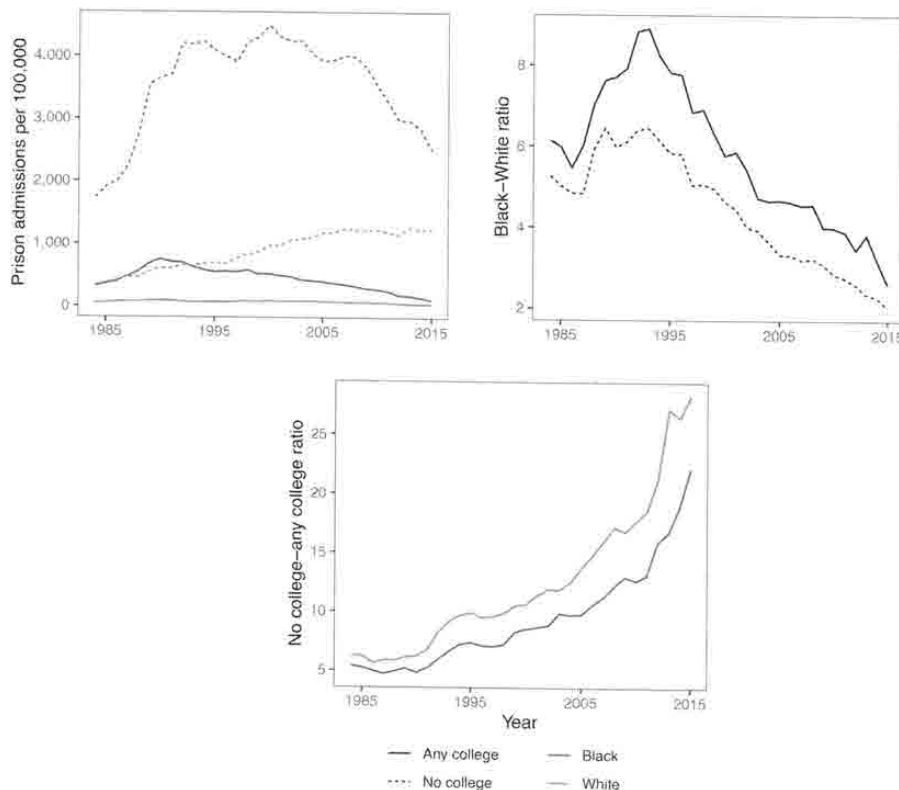
refer to the two racial groups as “Black people” and “white people,” and to the two educational groups as having “no college” and “any college” education.

The states that participate in the NCRP account for vast majority of all state prison admissions over the period of analysis. However, different states report to the NCRP in different years. To generate national estimates, we calculate the proportion of people admitted to state prison observed in the NCRP in each year who belong to each racial–educational group. We then multiply these proportions by BJS (2017) estimates of the total number of people admitted to prison nationally in each year. This yields a national estimate of the number of people in each racial–educational group admitted to prison annually. Finally, we divide these estimates by population counts of each group from the Current Population Survey Merged Outgoing Rotation Groups (MORG) to generate a national prison admission rate for each group. Our approach rests on the assumption that people in each racial–educational group are admitted to prison in roughly the same proportion nationally as they are in the states we use to generate our estimates. This assumption should be kept in mind when interpreting our results.

The number of people with no college education fell considerably over the period we study. Therefore, the relative social and economic position of people with no college education at the end of the period of analysis is not directly comparable to that of people with a similar educational attainment at the beginning of the period. To address this, we standardize the Black and white educational groups to 2015. The adjusted educational groups represent people who would have completed no years of college in 2015 given their observed rank in the education distribution each year, and people who would have completed at least one year of college in 2015 given their observed rank in the education distribution in each year. As a result, our approach compares fixed proportions of the educational attainment distribution across years. Online Appendix B describes our method of adjustment in greater detail and presents unadjusted results that are very similar to the main adjusted results.

The top left panel of figure 1 plots the estimated prison admission rate of the four categories of people we study. Several features of the plot stand out. First, and most noticeably, the prison admission rate of Black people with no college education was much higher than that of the other three categories of people throughout the duration of the period. It rose to a peak of 4,494 people per hundred thousand in 2000. Despite recent changes, Black people with low levels of education continue to be admitted to prison at much higher rates than any other group. Second, the Black no-college admission rate fell substantially from its peak in 2000 to 2,511 per hundred thousand in 2015. The beginning of the twenty-first century thus marked a turning point in the prison admission rate of Black people with low levels of education. Third, as the prison admission rate of Black people with no college education was falling, the prison admission rate of no-college white people was steadily rising. Recent scholarship has begun to document rising incarceration among white Americans (Muller and Schrage 2014; Subramanian et al. 2018; Beckett and Brydolf-Horwitz 2020; Sabol et al. 2020), but, with few exceptions (Oliver 2018), the extent to which

Figure 1. Changes in racial and educational inequality in prison admissions in the United States in the late-twentieth and early-twenty-first centuries. Imprisonment data come from the National Corrections Reporting Program and Bureau of Justice Statistics (2017). Rates are calculated using the Current Population Survey Merged Outgoing Rotation Groups. "Any college" refers to people who completed at least one year of college, and "no college" to those who did not. Racial groups exclude Hispanic people. The analysis is restricted to people aged 20–39. Rates are standardized to the distribution of educational attainment in 2015. See Online Appendix B for details about the adjustment and for unadjusted rates.



this growth has been concentrated among those with little schooling has gone mostly unnoticed. Fourth, whereas the prison admission rate of white people with any college education stayed mostly stable, the rate for college-educated Black people fell from a peak of 755 per hundred thousand in 1990 to 113 per hundred thousand in 2015. Finally, the falling prison admission rate of Black people with any college education and the rising prison admission rate of white people with no college education created a widening gap between high-education Black Americans and low-education white Americans. These groups had similar prison admission rates in the late 1980s and early 1990s, but by 2015, white people with no college education were more than ten times as likely to be admitted to prison as Black people with any college education.

Decreases in the prison admission rate of Black people both with and without any college education and increases in the prison admission rate of white people with no college education combined to produce declining racial disparities in prison admissions in the late-twentieth and early-twenty-first centuries. The top right panel of figure 1 shows that the Black–white ratio in prison admissions among people with any college education fell from a peak of almost nine in 1990 to less than three in 2015. The Black–white ratio for people with no college remained lower than that for college-educated people, falling from a peak of more than six in 1993 to two in 2015. Racial inequality in imprisonment continues to be extremely large, especially given that we are comparing people with the same levels of education. Moreover, some portion of the early-1990s peak in racial disparity in prison admissions likely reflects the drug war (Wright and Rogers 2011, p. 291–292), as suggested by Alexander (2010). But, after spiking in the late 1980s and early 1990s, racial inequality in prison admissions fell markedly through the mid-2010s, and this trend occurred roughly equally across educational groups.

As racial inequality fell, educational inequality skyrocketed. The bottom panel of figure 1 plots the no-college–any-college ratio in prison admissions from 1984 to 2015. In 1984, Black and white people with no college education were, respectively, 5.4 and 6.3 times more likely to be admitted to prison than those with any college education. By 2015, that number more than quadrupled for Black people, reaching 22. The rise among white people was even more dramatic: by 2015, white people with no college education were 28 times more likely to be imprisoned than white people with any college education. Notably, class inequality among Black people was driven by differences in the magnitude of shared declines in imprisonment, whereas class inequality among white people was marked by increases in imprisonment among people with no college education and decreases among people with any college education.

Previous scholarship has documented that in the late-twentieth century, racial and class inequality in imprisonment were both high, but class inequality was increasing while racial inequality was fairly stable (Pettit and Western 2004; Western 2006; Pettit et al. 2009; Western and Pettit 2010). Our analysis shows that in the early-twenty-first century, racial inequality narrowed, while class inequality grew wider. Racial inequality in prison admissions fell among both those who had and had not completed at least one year of college, but the disparities were highest among the more educated. Between 1984 and 2015, class inequality grew more than fourfold among both Black and white Americans.

Inequality in the Imprisonment of a Family Member

The no-college–any-college ratio in prison admissions now greatly exceeds the comparable Black–white ratio. But the fact that upper- and middle-class Black Americans are more likely than comparable white Americans to have poor family

members makes it likely that racial and class inequality in people's risk of having a family member imprisoned will differ from racial and class inequality in their risk of being imprisoned themselves (Heflin and Pattillo 2006; Chetty et al. 2020; Bobo and Thompson 2010). In this section, we examine racial and class inequality in the imprisonment of family members, using education and income as proxies for class.

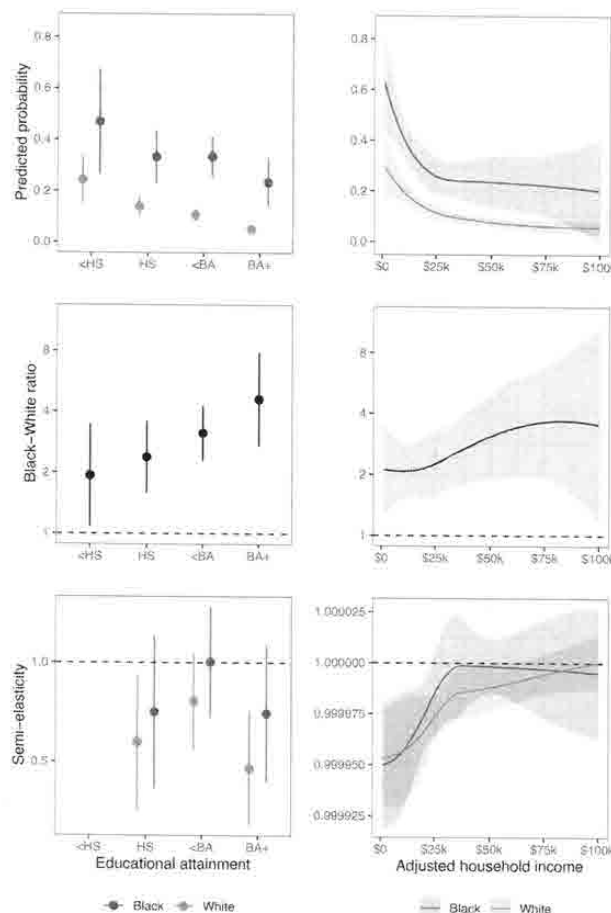
Recently released data from the Family History of Incarceration Survey (FamHIS) (Enns et al. 2019) enable us to measure the proportion of people who had ever had a family member incarcerated as of 2018, when FamHIS was fielded. FamHIS was specifically designed to measure family-member incarceration. The survey included 4,041 respondents and had a 34 percent response rate. All of the results we report are weighted to make them nationally representative of the US household population aged 18 and older in 2018.

We focus on the imprisonment of immediate family members, defined in the survey as parents, siblings, children, current spouses, current romantic partners, or people with whom the respondent had a child. Step, foster, and adoptive family members were included. Rather than ask respondents to identify whether their family member had been incarcerated in a prison or a jail, FamHIS assumed that family members incarcerated for over a year had been imprisoned (Enns et al. 2019). We restrict our focus to family members who had been incarcerated for more than a year to make our results comparable to the analysis of imprisonment in the previous section.

Information about FamHIS respondents' household income, educational attainment, and racial and ethnic identification comes from the AmeriSpeak panel, which is administered by NORC at the University of Chicago. Using detailed responses about educational attainment, we sort respondents into four educational groups: people without a high school diploma; people with a high school diploma but no college education; people with some college education but no bachelor's degree, including those with associate's degrees; and people with a bachelor's degree or higher. Respondents were asked to report their household income by choosing one of 18 income bins ranging from "less than \$5,000" to "\$200,000 or more." We assign them the middle value of the income range they report, with values of \$250,000 for the highest bin. We then divide this figure by the square root of the number of people in the respondent's household to adjust their household income by the size of their household (see, Johnson et al. 2005, p. 13). As in the previous section, we refer to people who identified as "white non-Hispanic" and "Black non-Hispanic" as "white people" and "Black people," respectively.

The left column of figure 2 reports estimates from a nonparametric model estimating the probability of family-member imprisonment among each racial and educational group. Black people's likelihood of experiencing the imprisonment of a family member remained higher than that of white people across the education distribution. The middle left panel shows that Black-white disparities in family-member imprisonment were greatest at the highest education levels.

Figure 2. The probability that Black and white non-Hispanic people ever had an immediate family member imprisoned, by educational attainment and income. Imprisonment is defined as incarceration for at least one year. Data ($N = 4,041$) come from the Family History of Incarceration Survey (Enns et al. 2019) and are representative of the US household population in 2018. Household income is adjusted to account for variation in household size. Ratios in the middle and bottom panels are displayed on a logarithmic scale for comparison. The left and right columns present estimates of separate nonparametric series regression models that measure class using data on education and income, respectively. Lines and points are estimates; bands and line ranges are 95 percent confidence intervals around the estimates, estimated using heteroskedasticity-consistent standard errors. The third row plots proportional changes in family-member imprisonment associated with unit changes in education or income. In ascending order, the educational attainment categories represent no high school diploma or equivalent; high school diploma or equivalent, no college; some college or associate's degree; and bachelor's degree or higher.



This finding parallels the fact that racial inequality in prison admissions is higher among the college educated, as shown in the top right panel of figure 1.

But an important difference between imprisonment and family-member imprisonment is also apparent. The top left panel of figure 1 illustrates that in the 2010s, white people with no college education were much more likely than Black people with any college education to be imprisoned. In contrast, the top left panel of figure 2 shows that white people with a high school diploma or less experienced the imprisonment of a family member at rates that were comparable to or lower than those of Black people with bachelor's degrees or more. Indeed, if we divide respondents into those with no college education and those with any college education, to mirror the analysis in the previous section, we find that racial disparities were greater than educational disparities in people's risk of having a family member imprisoned. The probability of family-member imprisonment was .29 among college-educated Black people and .16 among white people with no college education. Racial disparities, both among people with any college education (3.87:1) and among people with none (2.29:1), were larger than educational disparities among both white people (2.18:1) and Black people (1.29:1).

The bottom left panel of figure 2 shows the proportional change in the probability of having a family member imprisoned associated with moving up one educational category. The two most important educational transitions for both groups were receiving a high school diploma and a bachelor's degree, both of which were associated with reductions in the likelihood of experiencing the imprisonment of a family member. But the difference across these education levels was largest for white people.

The upper right panel of figure 2 shows that people's likelihood of having a family member imprisoned declined as their household income increased. But the relationship between income and family-member imprisonment was different for each group. The poorest Black people had an extremely high likelihood of having a family member imprisoned, and incomes at the poverty line were associated with much lower probabilities of family-member imprisonment. Above poverty levels, however, Black people's risk of family-member imprisonment varied little by household income, never falling below one in five. Black people with \$100,000 in adjusted household income had the same risk of having a family member imprisoned as white people with \$9,000 in adjusted household income. The declining returns to income for Black people can be seen most clearly in the bottom right panel of figure 2, which plots the proportional change in the likelihood of having a family member imprisoned for each additional dollar in adjusted household income. For Black people, proportional decreases in family-member imprisonment became statistically insignificant at adjusted household incomes above \$24,000, just below the 2018 poverty line for a family of four. For white people, in contrast, increased income was associated with statistically significant decreases in the risk of family-member imprisonment up to adjusted household income levels of \$55,000.

Despite recent changes in racial and class inequality in people's risk of being imprisoned, racial inequality exceeds class inequality in people's risk of having a family member imprisoned. Both Black and white people's likelihood of having a family member imprisoned fell with increases in educational attainment and

household income, but for Black people the returns to income tapered off near the poverty line whereas for white people they continued into middle incomes. High-education and high-income Black people experienced the imprisonment of a family member at similar rates to low-education and low-income white people. This is in contrast to low-education white people's dramatically higher prison admission rate.

Inequality in Neighborhood Imprisonment

Previous sociological scholarship has shown that Black Americans are not only more likely than comparable white Americans to have poor family members—they are also more likely to live in poor neighborhoods (Pattillo-McCoy 1999; Pattillo 2005; Sharkey 2014). Because incarceration is highly concentrated in poor neighborhoods (Sampson and Loeffler 2010; Morenoff and Harding 2014; Simes 2018), racial and class inequality in neighborhood imprisonment should therefore differ from racial and class inequality in prison admissions. In this section, we examine racial and class inequality in people's likelihood of living in a neighborhood with a high imprisonment rate, again using education and income as proxies for class.

To estimate racial and class inequality in people's exposure to high-imprisonment neighborhoods, we use census tracts as a proxy for neighborhoods. We calculate census-tract imprisonment rates using data from the Justice Atlas of Sentencing and Corrections (Justice Mapping Center 2010). The Justice Atlas uses prisoners' pre-commitment residential address to calculate census tract-level counts of state prison admissions in 2008 for twenty states: Alaska, Arkansas, Georgia, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Nebraska, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Texas, and West Virginia. Admissions were originally geocoded to 2000 census tracts, so we use the Longitudinal Tract Database (Logan et al. 2014) to convert the counts to 2010 geographies. We then calculate the prison admission rate of each tract by dividing the admissions count by the total tract population aged 15 to 64, estimated using 5-year 2010 American Community Survey (ACS) data (Manson et al. 2019). We restrict the age range of the denominator to reflect the population generally at risk of imprisonment. Next, we divide tracts into four types based on their level of imprisonment: low imprisonment (the bottom half of all tracts), moderate imprisonment (the 50th to 75th percentiles), high imprisonment (the 75th to 95th percentiles), and very high imprisonment (the top five percent).

We then use ACS data to measure the distribution of the population across census tracts. To examine educational inequality, we calculate the number of people aged 25 years and older living in each tract, by racial identification and educational attainment. To examine income inequality, we calculate the number of households of each income quintile in each census tract, separately by the racial identification of householders. We calculate income quintiles using

the entire US household population. Finally, we calculate the share of each racial-education and racial-income group that resides in each type of census tract (low, moderate, high, and very high imprisonment).

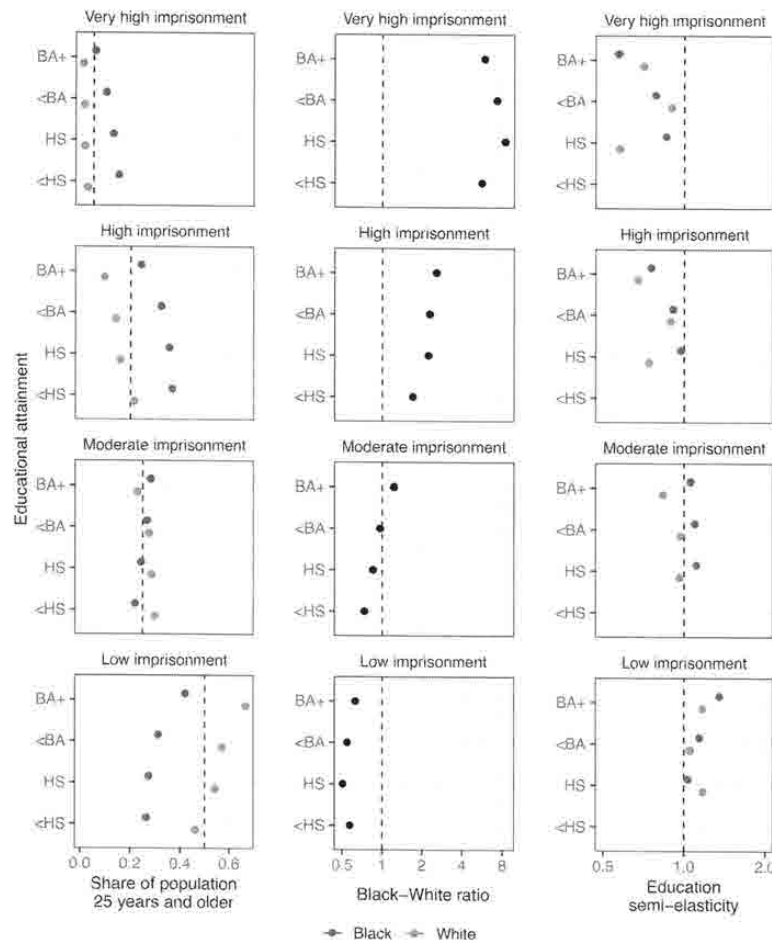
The left column of figure 3 plots the share of people 25 years and older residing in low-, moderate-, high-, and very high-imprisonment neighborhoods, separately for each racial-educational group. The plot is complex, so it is worth pausing to explain it. The lowermost blue point in the top left panel, for example, indicates that 15 percent of Black people with less than a high school degree lived in the five percent of census tracts with the highest imprisonment rates. As we move up the distribution of educational attainment, we see that a smaller share of each education group resides in neighborhoods with the highest imprisonment rates. The bottom left panel of figure 3 shows that the opposite is true of the lowest imprisonment neighborhoods. In each panel, we draw a dashed line to indicate the proportion of all neighborhoods belonging to each of the four levels of neighborhood imprisonment. Assuming that tracts contain roughly equal numbers of residents, a racially and educationally equal distribution of the population across neighborhood types would result in all the points aligning on the dashed lines.

Our analysis of educational inequality in prison admissions showed that low-education white people are admitted to prison at drastically higher rates than high-education Black people. However, the left column of figure 3 shows that the highest-education Black people had more than twice the likelihood of living in a very high-imprisonment neighborhood than the lowest-education white people. Black people with a bachelor's degree or more were also more likely than white people who did not complete high school to live in high-imprisonment neighborhoods and less likely than the lowest education white people to live in low-imprisonment neighborhoods.

If we divide respondents into those with no college and any college education to mirror the analysis in the first empirical section, we find that, on average, white people with and without a college education lived in neighborhoods with imprisonment rates of 166 and 213 per 100,000, respectively, whereas Black people with and without a college education lived in neighborhoods with imprisonment rates of 402 and 534 per 100,000, respectively. Educational disparities, both among white people (1.29:1) and among Black people (1.33:1) were smaller than racial disparities among people with any college education (2.42:1) and people with none (2.50:1).

The center column of figure 3 plots the Black-white ratio of the likelihood of residence in each neighborhood type, by educational attainment. Racial inequality in people's likelihood of living in a very high-imprisonment neighborhood was the most severe: Black people of all levels of education resided in these neighborhoods at least five times the rate of comparable white people. Educational inequality in people's risk of residing in a neighborhood with a very high imprisonment rate, in contrast, was about half as large: Black and white people without a high school diploma were, respectively, 2.6 and 2.7 times more likely to live in very high-imprisonment neighborhoods than those with bachelor's degrees. The right column of figure 3 shows the ratio of the likelihood

Figure 3. The share of the US population 25 years and older in 2006–2010 residing in neighborhoods with different levels of imprisonment, by educational attainment and racial identification. Points are estimates and line ranges are 95 percent confidence intervals around the estimates; most line ranges are not visible because the confidence intervals are very small. Ratios in the middle and right panels are displayed on a logarithmic scale for comparison. Neighborhoods are measured as census tracts ($N = 37,988$). The Black racial category includes Hispanic people. Neighborhood imprisonment rates are calculated using geocoded prison admissions data from The Justice Atlas of Sentencing and Corrections (Justice Mapping Center 2010), and residence shares are calculated using 5-year 2010 American Community Survey (ACS) data (Manson et al. 2019). Measured uncertainty results from ACS sampling error. “Low” imprisonment neighborhoods are neighborhoods with imprisonment rates in the bottom 50 percent; “moderate,” “high,” and “very high” imprisonment neighborhoods are, respectively, neighborhoods falling between the 50th and 75th, 75th and 95th, and 95th and 100th percentiles.



of residence in each neighborhood type for each educational group compared to the group immediately below.

Figure 4 mirrors figure 3, evaluating income inequality rather than educational inequality in people's likelihood of living in neighborhoods with high and low rates of imprisonment. The patterns reported in the two figures are very similar. The richest Black households were more likely to live in high- and very high-imprisonment neighborhoods than the poorest white households. Black and white people in the first income quintile were, respectively, 3.8 and 3.9 times likelier than their counterparts in the fifth income quintile to live in very high-imprisonment neighborhoods, whereas Black households of all income quintiles were between 5.6 and 6.8 times likelier to reside in these neighborhoods than comparable white households.

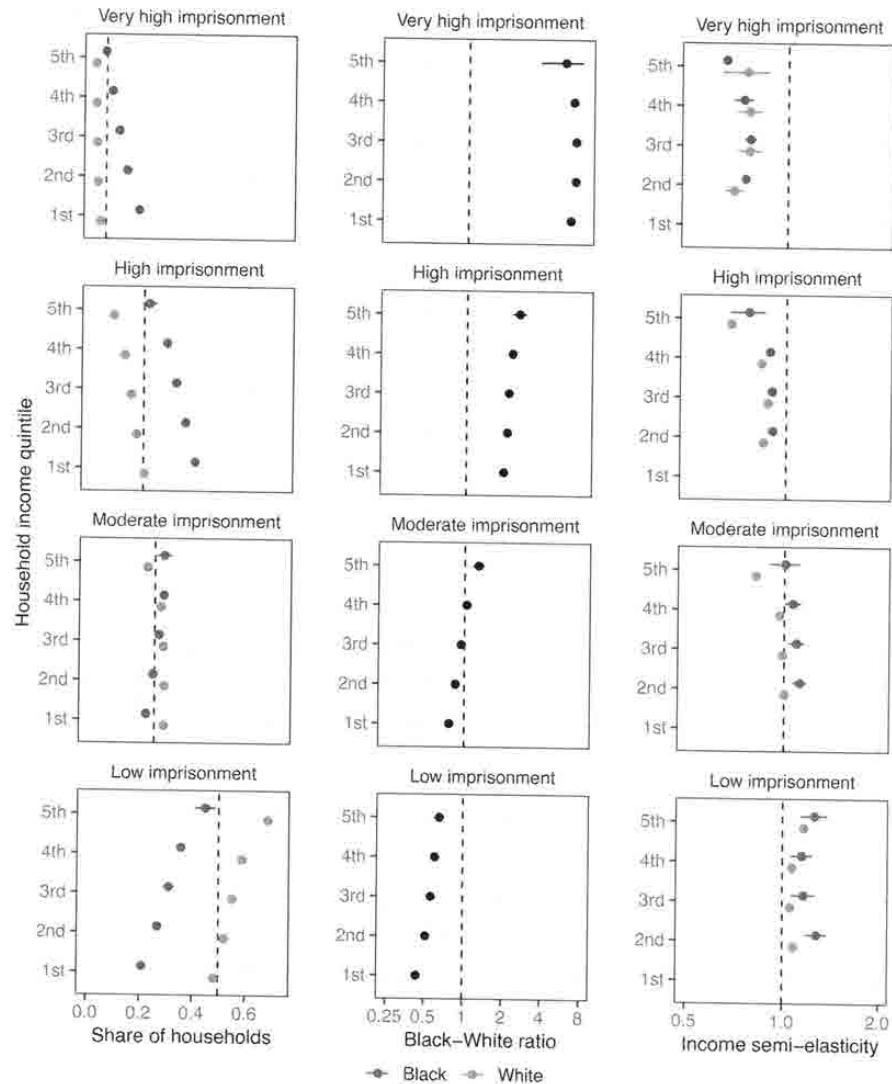
As with the experience of having a family member imprisoned, racial inequality was greater than class inequality in the experience of living in a neighborhood with a high imprisonment rate. Across all educational categories and income quintiles, racial gaps in people's likelihood of living in a very high-imprisonment neighborhood were larger than gaps between the most and least educated people and between the richest and poorest households. Although in 2008 the prison admission rate of Black people with any college education was much lower than that of white people with no college education, college-educated Black people were more likely than white people with no college education to live in neighborhoods with high or very high rates of imprisonment.

Limitations

Our analysis has several important limitations. The first concerns imperfections in the data we use to calculate racial and class inequality in neighborhood imprisonment rates. These data are limited in two relevant ways. First, the Justice Atlas measures neighborhood imprisonment with some error. State corrections agencies may have failed to report some admissions, and 5 to 25 percent of reported admissions had missing or unusable address information. Second, the Justice Atlas comprises a nonrepresentative sample of states. These limitations may bias our estimates or make them ungeneralizable. Online Appendix C discusses these limitations in detail, and presents results using an alternative source of incarceration data (Chetty et al. 2018) that are consistent with the main results.

A second limitation is that the way we measure inequality in family-member imprisonment differs from the way we measure inequality in prison admissions and neighborhood prison admissions. As noted above, the prison admission rate is a flow that changes every year. In contrast, whether a person has ever had a family member imprisoned reflects recent prison admissions and prison admissions that took place many years ago. However, two sources of evidence suggest that the divergence of our findings about racial and class inequality in prison admissions, neighborhood prison admissions, and family-member imprisonment is not an artifact of measurement. First, our findings about

Figure 4. The share of US households in 2006–2010 residing in neighborhoods with different levels of imprisonment, by household income quintile and the racial identification of householders. Points are estimates and line ranges are 95 percent confidence intervals around the estimates; most line ranges are not visible because the confidence intervals are very small. Household residence shares are calculated using 5-year 2010 American Community Survey data (Manson et al. 2019). See the caption of Figure 3 for additional details.



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family-member imprisonment closely mirror our findings about neighborhood imprisonment, which are based on a flow measure. Second, as we show in Online

Appendix C, using a stock measure of neighborhood imprisonment yields similar results to the main analysis.

A third limitation is that our analysis centers exclusively on Black-white and class inequality in imprisonment. Future research should examine additional forms of contact with police, courts, jails, and prisons (Hepburn et al. 2019) and additional dimensions of inequality. Recent research on jails indicates that the decline in racial inequality in imprisonment that we document has not been offset by increasing Black jail incarceration rates: the white jail incarceration rate steadily increased between 1990 and 2013, particularly in rural areas and small cities, whereas the Black jail incarceration rate recently began to fall (Subramanian et al. 2018). Racial inequality in federal sentencing has also markedly declined (Light 2021). How the trends we describe differ across rural and urban America (Eason et al. 2017; Oliver 2018; Beckett and Beach 2020; Gottschalk 2020), across other racial groups, and across other educational divides are important subjects for future investigation. Scholars should also study changes in gender inequality in incarceration (Sabol et al. 2020).

The most important limitation of our analysis, however, is that there is a historical dimension of racial inequality in incarceration that it does not capture. Black Americans have faced brutal and unequal treatment by police and courts at least since the end of Reconstruction: from the convict lease system (Du Bois 1901; Lichtenstein 1996; Davis 1998; Haley 2016; Muller 2018) through southern chain gangs (Lichtenstein 1996; Haley 2016) and racist policing in the North (Muhammad 2010; Muller 2012; Hinton 2016). This history has left many Black people—both poor and not—distrustful of and estranged from police and courts (Du Bois 1901; Muller and Schrage 2014; Bell 2017). It has also given rise to a pernicious ideological association between “blackness and criminality” that negatively affects Black people irrespective of their class (Davis 1998; Wacquant 2001; Muhammad 2010). Even if racial inequality in incarceration were completely eliminated, it is likely that these historical effects would linger.

Conclusion

Michelle Alexander’s *The New Jim Crow* (2010) drew widespread public attention to how mass incarceration and its attendant social and legal consequences have relegated vast numbers of people—particularly Black people—to a kind of second-class citizenship. It also sparked a debate about the relative importance of racial and class inequality in imprisonment. However, this debate has rested on an out-of-date and incomplete empirical foundation. In this paper, we have sought to strengthen that foundation.

We find that the rise in class inequality in prison admissions documented by Western (2006) and emphasized by Forman Jr (2012) and Gottschalk (2015) has intensified. Beginning in the twenty-first century, the prison admission rate of Black people with no college education began to decrease alongside that of college-educated Black people. Meanwhile, the prison admission rate of white

people with no college education steadily grew. This led to significant decreases in racial inequality in imprisonment and dramatic increases in educational inequality in imprisonment. In the late-twentieth century, the no-college–any-college disparity in prison admissions was comparable in magnitude to the Black–white disparity. By 2015, it was roughly ten times higher.

However, in recent years, racial inequality exceeded class inequality in people's likelihood of having a family member imprisoned or living in a high-imprisonment neighborhood. Although white people with no college education were more than ten times as likely as college-educated Black people to be admitted to prison in 2015, they were roughly half as likely to have a family member imprisoned. The average white person with no college education also lived in a neighborhood with an imprisonment rate about half as large as that of the average college-educated Black person.

Taken together, these findings offer theoretical, empirical, and political lessons. First, the concept of class permeability can help us to make sense of ongoing debates about the scale and salience of racial and class inequality in incarceration. Imprisonment in the United States is increasingly reserved for the poor. But because Black people are disproportionately connected to the poor through their families and neighborhoods, racial inequality has remained larger than class inequality in family-member and neighborhood imprisonment. Class inequality now exceeds racial inequality in prison admissions by much more than racial inequality exceeds class inequality in family-member and neighborhood imprisonment. But many more people are affected by having a family member imprisoned or by living in a neighborhood with a high imprisonment rate than are imprisoned themselves. This helps to explain why, despite the declining scale of racial inequality in prison admissions, incarceration remains such a salient part of the lives of many Black people in the United States.

The concept of class permeability also offers a concrete framework for studying the entanglement of racial and class inequality in domains beyond incarceration. By attending to the ways that racial and class inequality jointly affect not just people's individual circumstances, but also the structure of their social ties, we can better understand why patterns of inequality in people's direct experience sometimes diverge from patterns of inequality in their indirect experience. Future research should extend the study of racial inequality in class permeability to domains like mortality and wealth (O'Brien 2012; Umberson et al. 2017).

Second, although our primary objective has been to describe rather than to explain patterns in racial and class inequality in imprisonment, the trends we document should help to direct future research into their causes. Our findings underscore that understanding inequality in incarceration in the twenty-first century entails identifying mechanisms that generate class inequality, mechanisms that generate racial inequality, and how those mechanisms interrelate. The rise in class inequality in prison admissions among both Black and white people points to causes that have successively affected low-income and low-education members of both racial groups, such as under- and unemployment and the epidemics of crack cocaine and opioids (Wilson 1987; Autor et al. 2016; Case and Deaton

2020, 2021; Gottschalk 2020). Large racial inequality in family-member and neighborhood imprisonment suggests that persistent wealth gaps, differences in downward mobility, and residential segregation, ghettoization, and housing discrimination have contributed not only to racial inequality in imprisonment, but also to Black–white differences in class permeability (Massey and Denton 1993; Pattillo 2005; Wacquant 2012; Pfeffer and Killewald 2019; Chetty et al. 2020). Future research should also study the causes of the dramatic decline in imprisonment among Black people with no college education. Beckett and Brydolf-Horwitz (2020) suggest that the deescalation of the drug war in cities, where Black people disproportionately reside, may be one reason for falling racial inequality in imprisonment.

Finally, studying both class inequality and class permeability can inform our understanding of the composition of movements opposing mass incarceration. Imprisonment is increasingly concentrated among America's poor—both Black and white—but its indirect effects are disproportionately felt by Black people, both poor and not. These facts are an indictment of the United States' political economy, weak social policy, and enduring structures of racial domination. But they also may provide a material basis for broad coalitions aimed at ending our reliance on incarceration and fighting the poverty and inequality that sustain it (Gilmore 2007; Forman Jr 2012; Gottschalk 2015; Taylor 2016; Terry and Lee 2017).

Supplementary Material

Supplementary material is available at *Social Forces* online, <http://sf.oxfordjournals.org/>.

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REVIEW

Assessing mass incarceration's effects on families

Hedwig Lee^{1*} and Christopher Wildeman^{2,3*}

In this Review, we assess how mass incarceration, a monumental American policy experiment, has affected families over the past five decades. We reach four conclusions. First, family member incarceration is now common for American families. Second, individuals who will eventually have a family member incarcerated are worse off than those who never will, even before the incarceration takes place. Third, family member incarceration has negative effects on families above and beyond these preexisting disadvantages. And finally, policy interventions that address the precursors to family member incarceration and seek to minimize family member incarceration would best enhance family well-being. If the goal is to help all American families thrive, then the importance of simultaneous changes in social and criminal justice policy cannot be overstated.

In a little more than a year, in 2023, mass incarceration reaches a major milestone: its 50th birthday (1). The degree to which mass incarceration has transformed the lives of American men—and especially African American men with little education living in poor neighborhoods—during this time can hardly be overstated. For African American men who did not finish high school and are approaching midlife, incarceration at some point in their lives is a modal outcome, with upward of 70% having been to prison (2). Incarceration is also consequential, and a large literature catalogs the myriad damages that men face after release as a result of doing time (3); and this is to say nothing of what they experience while they are confined to a cell. As such, most contemporary research on the direct effects of incarceration on individuals underestimates the toll that mass incarceration has taken in terms of human suffering.

In this Review, we explore how incarceration affects not the men for whom this event has become so common but their families. We see this shift in focus as important for four reasons. First, the family members of the incarcerated have rarely (if ever) been involved in the crimes that their incarcerated family members have committed and, as a result, are the collateral damage of the criminal justice system in a very real and tangible way. Second, many of them did not choose to have a criminally active or justice-involved family member, making the harms caused by the incarceration of a family member all the more problematic. Third, and as we have argued before, the indirect consequences of mass incarceration, experienced by family members, are likely more sizable than those for the men who experience incarceration (4, 5). Finally, the interests of individuals who experience incarceration and

their families may, simply put, be misaligned in some instances, a possibility that complicates policy in ways that merely looking at the average effects of family member incarceration on individuals and families may not allow us to see.

In considering these effects, we proceed in three phases. In the first, we present new data showing how common family member incarceration is, how much more common it is for recent cohorts, and how unequally distributed it is. In the second, we highlight how poorly, on average, families were faring even before experiencing the incarceration of a family member. We do so to make clear that what many of these families need even prior to (or, better still, instead of) having a family member incarcerated is expanded social services and economic supports. In the third stage, we present recent evidence regarding the effects of family member incarceration. Here, we highlight not only how family member incarceration appears to do more harm than good but also that there are some situations in which family member incarceration may have some benefits for family life. We conclude with a discussion of limitations of existing research, the need for better data in this area, and some preliminary policy suggestions.

Crushingly common, shockingly unequally distributed

Until mass incarceration came into being in the early 1970s, prison and jail incarceration were so uncommon that while they were tragic outcomes for individuals and those tied to them, their broader social importance would have simply paled in comparison to other institutional contacts. This could hardly be less the case now. In Fig. 1, we use the Family History of Incarceration Survey (FamHIS), which we designed in collaboration with a number of our colleagues and have described elsewhere (6), to show the percentage of adults (by race or ethnicity) from three large birth cohorts (ages 18–39, 40–59, and 60+) who have ever experienced immediate family member (defined as biological, step, or foster parents, siblings, or children, or current romantic part-

ners or anyone the respondent ever had a child with) incarceration generally and the incarceration of a parent, sibling, or child specifically. The confidence intervals for these estimates are quite large and often overlap; nonetheless, we see these data as appropriate for highlighting the level of family member incarceration before the onset of mass incarceration and how that level has changed as mass incarceration has grown to maturity.

Figure 1 highlights the penetration of American life by family member prison and jail incarceration in three ways. First, as the left-most panel shows, immediate family member incarceration is common regardless of age, with nearly one-half of the youngest cohort (ages 18–39) (48.2%) and over two-fifths of the oldest cohort (ages 60+) (40.8%) having experienced this event. Second, although this may seem counterintuitive initially given that only younger cohorts would have been exposed to mass incarceration for most of their lives, as the “Parent” and “Child” panels indicate, the similar risk of family member incarceration for these different cohorts is largely driven by the fact that very few 18- to 39-year-olds have children who are old enough to have experienced incarceration, essentially yielding the risk of experiencing this type of family member incarceration nil for them. Finally, although immediate family member incarceration is ubiquitous across racial or ethnic groups and birth cohorts, this event is especially common for non-Hispanic Black Americans, with the lowest cohort risk hovering just under three-fifths (59.4%).

Deep disadvantage often precedes family member incarceration

Stratification in the risk of family member incarceration across a host of facets of American inequality—race or ethnicity, level of educational attainment, and neighborhood context, to name just three—as well as additional factors such as a history of mental health problems, addiction disorders, and prior criminal justice contact, is pronounced (2, 7–10). Figure 2 uses data from the Fragile Families and Child Wellbeing Study to show how families that will experience parental incarceration (paternal only, maternal only, or both) in the coming years differ from those that will not on a range of factors that reflect both existing disadvantages families are exposed to and existing disadvantages that can possibly be amplified by family member incarceration.

Figure 2 shows that, across a range of indicators, both mothers and fathers are disproportionately struggling prior to incarceration in ways that are likely consequential both for their immediate family unit and for their kin networks. These families are often in dire need, whether it is in ways that are tied solely to material resources and opportunities or

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more broadly to the poor mental and behavioral health that so often springs from these disadvantages. And as the rich ethnographic literature in this area shows, moreover, the risks that families that eventually have contact with prisons and jails faced in advance extend far beyond those that we are able to highlight with the data we had in hand for Fig. 2 (11, 12). As such, these are families that do often need some form of state intervention even before the incarceration of a loved one.

(Usually) doing more harm than good

For mass incarceration to exacerbate inequality among families, it must be unequally distributed and do harm. If family member incarceration merely reflects existing disadvantage, it is unlikely to exacerbate inequality much, if at all. But this is not the case; across a range of indicators, we find that family member incarceration has negative effects on family well-being above and beyond existing disadvantages prior to incarceration. Because our Review must be brief, we focus on how the incarceration of men shapes family and community life. Debates about the effects of the incarceration of women on families and communities remain strident (13–16), and although rates of female incarceration are increasing, men continue to make up the largest

segment of the incarcerated population (i.e., 93.2% of individuals in prison are men) (17).

Qualitative research highlights how difficult it is to exhaustively document how incarceration shapes the structure and function of families (11, 12). Yet there are at least three things we can say about how incarceration shapes this broader family system. First, there are strong signs that incarceration affects family structure. Currently incarcerated men marry at extremely low rates, and rates of union dissolution among currently and formerly incarcerated men are markedly higher than those of other men (18). Second, there are strong indications that the incarceration of a father lowers paternal prosocial family engagement (19) (although this effect is obviously limited to men involved in family life before incarceration in some way), increases maternal harsh parenting (20), and increases maternal depression (27), all of which indicate decreased quality of family life. Third, there is simply no getting around the fact that paternal incarceration increases the economic hardship that families face (22, 23) and that mothers are unable to offset these hardships solely through their own earnings (24). Put simply, despite the many nuances of family life (11, 12), there are strong signs that men's incarceration, on average, disrupts men's involvement in families and leaves those families in greater financial

need than they were before. Of course, there may be moderating circumstances—the effects may differ if the father was struggling with mental health or addiction issues or engaging in domestic violence—but the averages suggest that family life is more often impoverished than not as a result of incarceration.

These broader effects then reverberate to individual family members. There is probably no area of greater consensus in the field than regarding the effects of paternal incarceration on children's behavioral and mental health problems. Although no one dataset is ideally suited to consider these effects, and obstacles to causal inference remain, research using a range of datasets ties paternal incarceration to greater behavioral and mental health problems in children (25–27). Although there is evidence for both externalizing and internalizing behavioral problems, evidence regarding externalizing and physically aggressive behaviors tends to be the strongest; it also tends to suggest that male children are more affected in this domain than female children.

These behavioral and mental health indicators are tightly linked with school readiness, and, as a result, it is perhaps unsurprising that children with incarcerated fathers are less prepared to enter school than their peers (28). Yet children of incarcerated fathers face

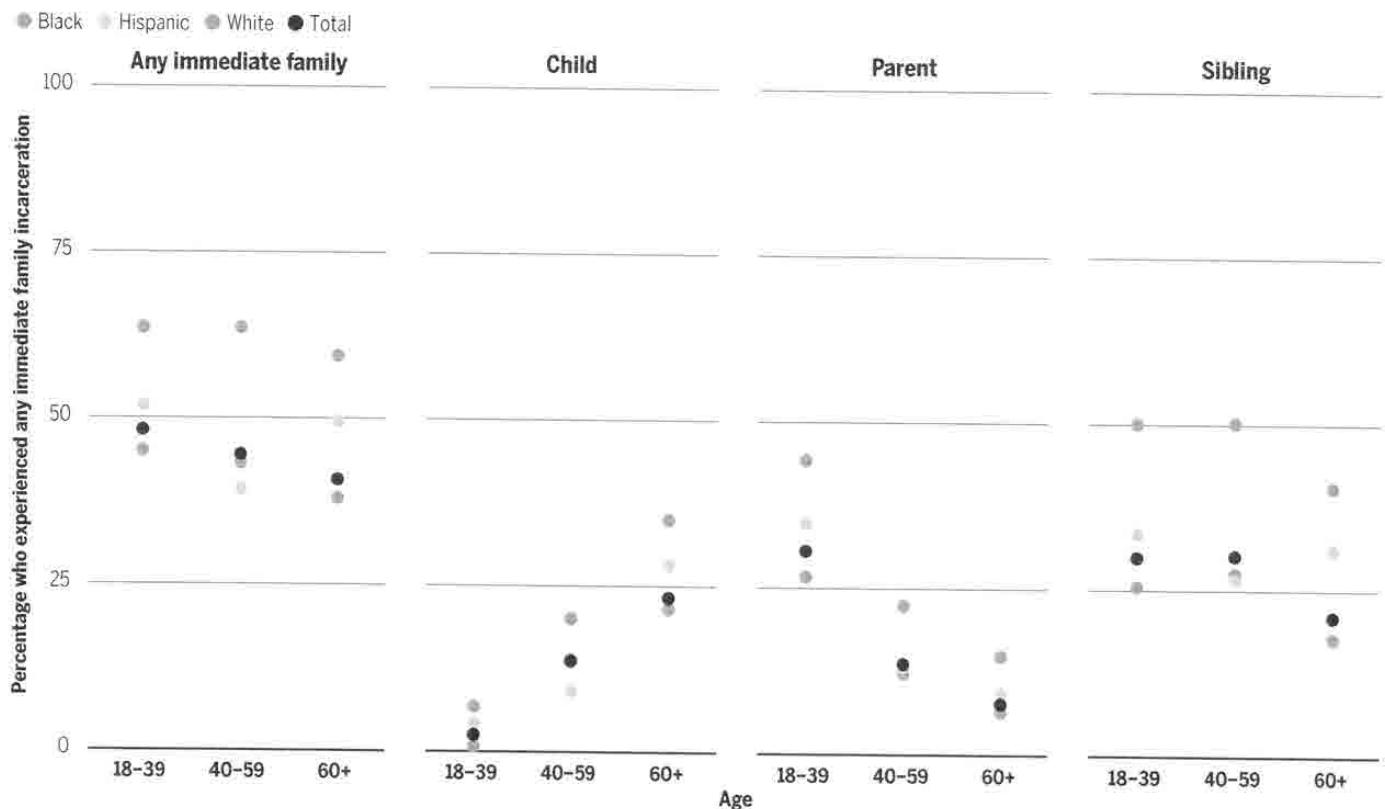


Fig. 1. The prevalence of immediate family member incarceration in the US population. Percentage of respondents who have ever had any immediate family members or a child, parent, or sibling, specifically, incarcerated by age (18–39, 40–59, and 60+ years old) and race or ethnicity (non-Hispanic Black, Hispanic, non-Hispanic white), per the 2018 Family History of Incarceration Survey (FamHIS). To download the FamHIS data, see <https://ropercenter.cornell.edu/ipoll/study/31115615>. For further information and the FamHIS data, see (6).

even more impediments to thriving in educational institutions after they set foot in the classroom. Having been incarcerated promotes withdrawal from educational institutions on the part of their parents (29). In conjunction with the stigma attached to paternal incarceration in the eyes of teachers (30), this leaves children of incarcerated fathers in triple jeopardy in schools—unprepared, with disengaged parents, and carrying the stigma of paternal incarceration. Given the strikes against them, it is no great surprise that children with incarcerated fathers are more likely to be held back in school (31), have lower cognitive functioning in middle childhood than their peers (32), and perform more poorly on a range of indicators of school success in high school (33).

While most disciplines have been intrigued by the broader social effects of mass incarceration on children that we just covered, criminologists have been laser-focused on the intergenerational transmission of crime and criminal justice contact (34). The associational evidence on the intergenerational transmission of physical aggression in childhood (35), delinquency and criminal behavior in adolescence and early adulthood (36, 37), and criminal justice system contact is quite strong (38, 39). Yet in this area, some of the measurement issues faced throughout the field are even more pressing. Current data generally measure either parental crime or parental criminal justice contact but rarely both (34), leaving it very much open for debate whether paternal incarceration is causally linked to children's criminal activity and criminal justice contact.

Yet men's incarceration does not affect just children. An emerging vein of research shows how harmful family member incarceration is to the women who are left behind to manage the fallout (40). Maybe the best example of these findings has to do with the effects of a son's incarceration on mothers. Qualitative research in poor communities has long documented the strain that a son's prison or jail incarceration places on mothers (41), with recent quantitative research also highlighting how a son's incarceration could increase the parenting burdens placed on grandparents (42). The results from two recent analyses are sobering: Mothers who had a child, almost always a son, incarcerated struggle mightily when it comes to a range of indicators of health, including but not limited to self-rated health, depression, and health limitations (43, 44).

In Fig. 3, we highlight the core findings from one of these studies, which considers maternal physical limitations (44), a core predictor of mortality, indicator of general health, and factor shaping other domains of thriving (45). As Fig. 3 shows, even before experiencing a son's incarceration, women who would eventually experience a son's incarceration were in worse health than their peers, with 16% ex-

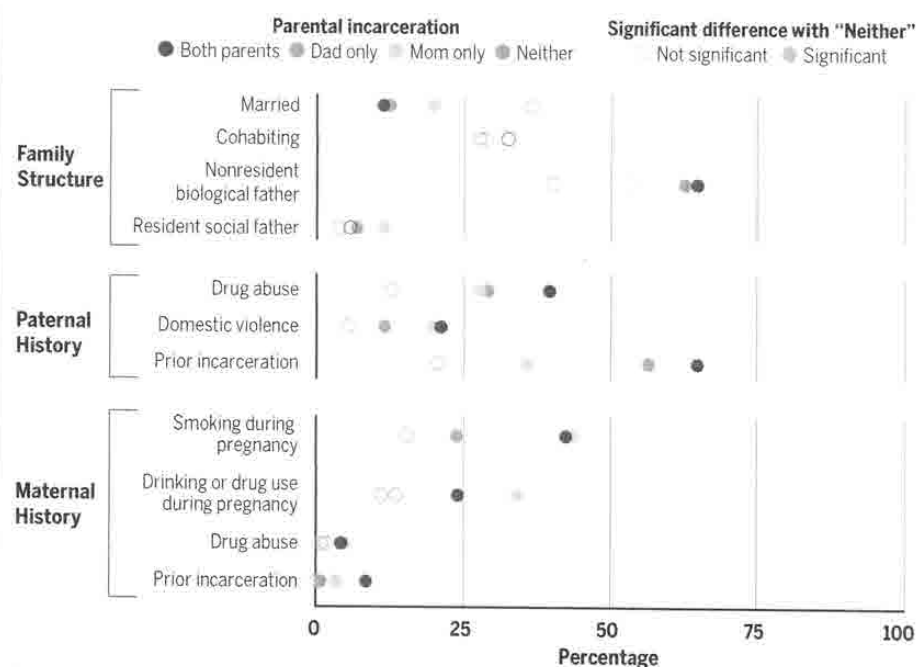


Fig. 2. Differences between families that will eventually experience parental incarceration and those that will not. Family structure and paternal or maternal mental and behavioral health and prior prison or jail incarceration among families with 1-year-old children who will not experience paternal or maternal incarceration, will experience only paternal incarceration, will experience only maternal incarceration, or will experience both paternal and maternal incarceration in the next two survey waves of the Fragile Families and Child Wellbeing Study. The figure is based on data from table 3 in (16).

periencing one or more physical limitations compared with only 12% of other mothers. By the end of the study, however, after some mothers had experienced a son's incarceration and others had not, this gap grew to a whopping 20% (46% compared with 26%). Within-person estimates, which provide a stronger basis for causal claims, indicate that having a son incarcerated increases mothers' risk of having a physical limitation fully five percentage points.

Taken together, these studies suggest that family member incarceration may send generational ripples both down (to their children) and up (to their mothers). Because of the heavily unequally distributed risks of family member incarceration by race and class (6, 10), these results indicate very real likely consequences of mass incarceration for family and health inequality.

Although negative effects of incarceration on families abound, there are also reasons to expect that some families benefit from incarceration—at least in the short-term—if the individual who experienced incarceration was struggling with addiction or mental health problems or endangering the safety of his family members through abuse or neglect (8). At least for some outcomes, the negative effects of paternal incarceration are concentrated in families where the father was not reported to engage in domestic violence (35). Ethnographic research on the perverse benefits of incarceration for families provides nuance to this flat

statistical relationship by showing that in many cases, families that benefitted, or merely breathed a brief sigh of relief, when a family member was incarcerated do so not because the family member was actually incarcerated but because they were simply out of the picture briefly. As such, even when families might appear to benefit from incarceration, it is more appropriate to think not of incarceration as beneficial but of incarceration as beneficial in a society largely bereft of high-quality (in- and outpatient) services for addiction, mental health problems, and myriad other troubles.

Relatedly, we lack data to accurately assess the relationship between offense type and impacts on the family. In other words, the data we have leave us in the dark regarding whether the removal of individuals convicted of "low-level" offenses (e.g., drug possession) is detrimental to families or whether the removal of individuals convicted of "high-level" offenses (e.g., armed robbery) is beneficial to families (46). These are relationships that are often assumed but remain untested in the construction of policies aimed at creating alternative sentencing practices for caregivers.

Before moving on, it is worth thinking through how the spatial concentration of family member incarceration and its negative effects have the potential to ripple through entire neighborhoods. Because of historical and contemporary forms of structural racism, racially segregated neighborhoods with limited social and economic

resources and myriad environmental hazards and exposures are the same neighborhoods that are overpoliced and from which men of color are disproportionately imprisoned (47–49). If communities have a critical mass of families struggling because of family member incarceration while also not feeling protected by the same criminal legal system that is meant to protect them and/or not supported by the social service system that is meant to help them with their structurally induced stressors, how are those neighborhoods and the families that reside in them to function? Measuring the spillovers of mass incarceration to communities through families is immensely difficult, but it is hard to believe that such effects do not exist.

The COVID-19 pandemic provides a distinctive example of how family member incarceration affects communities, especially the most vulnerable ones. A growing body of research suggests that prisons and jails have served as vectors for COVID-19 spread. Conditions of confinement including, but not limited to, lack of proper ventilation, inability to properly social distance, and insufficient access to sanitation items lead to the rampant spread of COVID-19 among those in prison and jail (50). Individuals working or visiting prisons, often family members (prior to the halting of visitation), exposed to COVID-19 then spread this risk outside of prison to family and community members. And while decarceration has been used as a short-term policy to reduce COVID-19 spread in many areas, COVID-19 risk can still be spread to families that are unable to quarantine from family members returning from jail or prison owing to a combination of limited space at home and a lack of resources for alternative accommodations.

When decarceration has not been used to minimize the risk of COVID-19 infection, some of the other core strategies—greater use of solitary confinement, enhanced restriction of movement for incarcerated individuals to the point of resembling solitary confinement, and complete cessation of in-person visitation—show just how grim conditions of confinement must become in correctional facilities in order to minimize the spread of infections both between incarcerated persons and between incarcerated persons and their communities. Put more directly, for prisons and jails to not spread infections both internally and externally, they tend to become even more brutalizing institutions, with repercussive effects on incarcerated individuals and families alike.

Concluding thoughts

In this Review, on the occasion of mass incarceration's 50th birthday, we have assessed how it has treated American families. Our assessment is that mass incarceration has largely negative consequences for families, which, because of how common family member incarceration is and how unequally distributed it is, has likely led to greater inequality between families in the United States.

Although we have tried to present a straightforward summary of the effects of incarceration on families, the reality is that this entire literature is grasping in the dark with the data available. None of the data currently

max facilities, and long-term solitary confinement, all of which cost the public great sums of money and either hold individuals in captivity for far longer than makes sense from a sociological or criminological perspective (in the case of long sentences) or returns them to the community, if ever, worse than when they left it (in the case of supermax facilities and long-term solitary confinement). The COVID-19 pandemic also laid bare the inhumanity of solitary confinement, when individuals who tested positive for COVID-19, many sick before and sicker still from the virus, were put in solitary confinement, a place where being in more than a few days leads to psychological trauma (52). So although our instincts as scientists suggest caution, there are some areas where causal effects are clear.

Yet unconvincing as the causal evidence is in some areas and convincing as it is in others, a hyper-focus on causal identification limits scientific advancement in two core ways. First, as we discussed earlier, a large body of ethnographic research has helped us to understand the many nuanced ways in which family member incarceration affects the well-being of family members. We must use insights derived from diverse methodological approaches to inform policies and practices that can protect and promote the health of those incarcerated and the loved ones and communities to which they are connected. In short, the methodological pluralism that breeds insight for both good science and good policy relegates the causal hammer to being just one of the many tools in our methodological belt. Second, both family member incarceration (the “treatment” in the studies we

consider) and little to no positive intervention into family life or broader community supports (the “control” in virtually all studies we consider) are suboptimal. Incarcerating someone is costly, saves less in terms of crime reduction than it once did (53), and, at least according to much of the research we have reviewed, does harm to families. But doing nothing for an individual struggling with some combination of chronic unemployment, poor mental health, alcohol or drug addiction, or poor social relationships and interactions is also bad for families. As a result, we should think of establishing causal effects of incarceration not relative to no positive interventions but instead relative to interventions that simultaneously seek to enhance the quality of family life and to minimize the risks of further criminal activity.

In closing this Review, we aim to do three things. First and, from a research perspective,

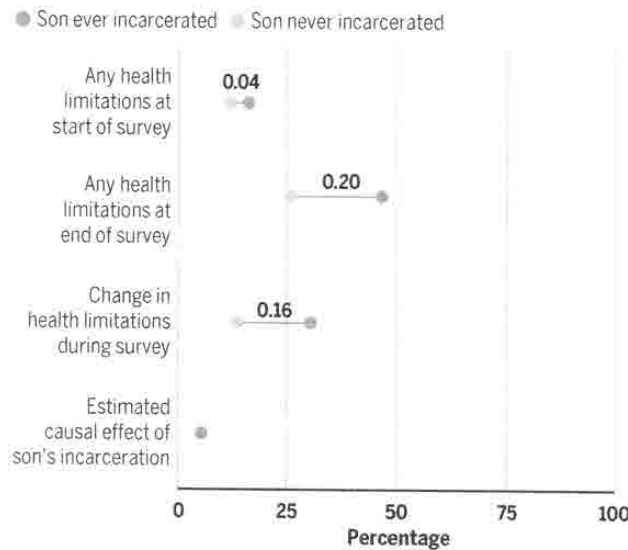


Fig. 3. The effects of a son's incarceration on maternal health

limitations. Maternal health limitations, changes in health limitations by son's incarceration, and the causal effect of a son's incarceration on maternal health limitations, based on data from the 1979 National Longitudinal Survey of Youth. The figure uses data from tables 1 and 2 in (44).

used can provide a strong causal test that is also substantively informative. The few studies that purport to provide strong causal tests in the United States context raise at least as many questions as they answer, and it would be at best foolhardy to design any policies around them (51). Before we move on to our final conclusions, we will spend a moment addressing what we think we do and do not know about causal relationships in this field, as well as what our current perspectives might miss.

Maybe most importantly, data limitations notwithstanding, there are areas of research where the causal effects of incarceration on individuals, families, and society are clear, and we need to start actively considering interventions, alternatives, and in some cases elimination of certain criminal justice policies and practices. Important examples include the inefficiency and costliness of long prison sentences, super-

most importantly, to plead for new data collection efforts focused exclusively, or at least primarily, on understanding how families come to experience incarceration, how they weather the time a family member is apart and reacclimating to family life, and how they fare as a result of this experience. In a perfect world, such a data collection would include both excellent measurement and a series of informative comparison groups such as families where a family member was found guilty of a crime and sentenced to something other than incarceration or where a family member never came to the attention of the criminal legal system but was given wraparound services to attend to struggles that could both imperil families and eventually lead to contact with the criminal legal system. Absent a major investment, we are, to be frank, at a loss in this area. We can consider a couple more outcomes or a couple of different types of criminal legal system contact, but we cannot provide much beyond that. This literature will very rapidly stall out absent investment.

Second, and on a more policy-focused note, it is worth considering, on the basis of what we gleaned in this Review, what family-friendly criminal justice interventions would look like. They would have at least three features: (i) They would focus more on diversion in combination with high-quality services in order to be as family-friendly as possible. By "diversion" we mean any interaction with an actor in the criminal legal system (e.g., a police officer, a prosecutor, a judge) that could have led to an arrest, jail incarceration, or prison incarceration but instead led to some lower-level sanction that did not involve confinement (e.g., a ticket, community service, treatment for addiction or other underlying mental health conditions, or some other approved program). Such policies have the benefit of not putting families in a situation where the choices are essentially either incarceration or chaos. (ii) When prison or jail incarceration is needed—and we fully acknowledge that some may bristle at the idea that it is ever needed—family-friendly policies would move beyond considering how to facilitate visitation and how to provide mentors for children to broad social interventions that treat the whole family. Research on the family lives of women with incarcerated partners, for instance, are replete with stories of how women struggle to juggle the number of demands on their time. Why not, instead of focusing on something women left to foot the criminal justice bill have not asked for, focus on something they have—time and money. High-quality childcare centers at free or no charge offer a mechanism through which the harms of incarceration for families could be lessened; more extensive economic supports, especially universal basic income, offer another mechanism for diminishing the effects of family member incarceration. (iii) There is broad consensus among criminol-

ogists that the time immediately before and after release is a sensitive one—that old habits, frustrations due to the difficulties of reentry, and frayed family ties may lead to recidivism. Moreover, economic stressors may be magnified when families already in economically precarious situations must now support returning family members who themselves struggle to find jobs and reintegrate. In some cases, rules and regulations may preclude family members with prior convictions from living in their family homes (53). In other cases, housing security is so tenuous that family members may be one flush away from eviction (22, 54). Yet researchers and policy-makers generally do little to intervene on the behalf of families during this critical juncture, and truly family-friendly policies would seek to do just that.

Third, in a country that overincarcerates—and disproportionately so among poor Black, Latinx, and Native American communities—we must also seriously consider alternatives to incarceration, which we know was implicit in our first two points but bears mentioning on its own. We need state and county systems to partner with researchers to determine which types of changes (diversion, in-facility programs, postincarceration programs, etc.) best offset the costs of incarceration, with emphasis placed on costs borne by individuals, families, and communities. Moreover, alternative sentencing practices cannot be relegated to those convicted of nonviolent offenses. There is, to be as blunt as possible, no way to drastically shrink the imprisonment rate without cutting sentences for individuals convicted of violent crimes and convicted multiple times (55). Those sentences are simply so long that they keep our total imprisonment rate astronomically high, maintaining America's exceptionalism in mass incarceration. A focus on alternative sentencing practices solely for those who have committed a nonviolent offense ignores that there is little to no research suggesting that those who are convicted of different offenses vary in their importance to their families. The little research that exists suggests that that is hardly the case (56).

On the eve of its 50th birthday, let us do something revolutionary for mass incarceration: Let us invest in data that allows us to fully understand its effects on families and consider and implement both criminal justice and broader social policies and practices that prevent any future damage. Fifty years of harm is more than American families can be expected to endure.

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Assessing mass incarceration's effects on families

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