How Prosecutors Exacerbate Racial Disparities

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Abstract

In the United States, the criminal justice system has faced critical examination for persistent racial disparities in case outcomes. This paper narrows its inquiry to a pivotal yet understudied junction: prosecutorial screening. We scrutinize the extent to which prosecutorial discretion during the case review process magnifies racial disparities in criminal justice outcomes. Our analysis delineates how both explicit and implicit biases may influence prosecutorial decisions, considering the expansive latitude afforded to prosecutors in the U.S. legal framework. We also investigate the cyclical nature of these disparities, proposing that they reinforce systemic mistrust in the criminal justice system among racial and ethnic minority groups. This study not only identifies prosecutorial screening as a critical vector of racial disparity but also contributes to the broader discourse on structural biases within the criminal justice system

Introduction

The United States criminal justice system is intended to uphold justice, maintain public safety, and safeguard the rights of all citizens. However, it has been marred by longstanding and pervasive racial disparities that have raised serious concerns about fairness and equality (Nellis 2021). For decades, extensive research has documented the disproportionate impact of the criminal justice system on communities of color, particularly African Americans and Hispanics (Mauer 2022; Tonry 2018; Bowen and Sprott 2017). This section explores the key factors contributing to racial disparities and their ramifications on society.

The first stage of the criminal justice process that exposes racial disparities is the policing and arrest phase. Studies have consistently shown that individuals from minority racial and ethnic backgrounds are disproportionately targeted for police stops, searches, and arrests compared to their White counterparts (Alexander 2010; Fagan and Davies 2000; Gelman, Fagan and Kiss 2007; Owen and Wu 2019). Factors like racial profiling, implicit biases, and over-policing in minority neighborhoods have all been cited as contributing factors to these disparities.

Once individuals enter the criminal justice system, racial disparities continue to manifest during the sentencing and incarceration stages. Numerous studies have found that people of color, especially African Americans, are more likely to receive harsher sentences for similar offenses compared to White individuals (Mitchell 2005; Steffensmeier and Demuth 2000; Doerner and Demuth 2010; Everett and Wojtkiewicz 2002). This phenomenon, known as sentencing disparities, has been attributed to a

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combination of factors, including mandatory minimum sentences², prosecutorial discretion, and racial biases among judges and juries (Fishman 2012; Yang 2014).

Moreover, the overrepresentation of minorities in the prison population is a significant concern. African Americans and Hispanics make up a disproportionate percentage of incarcerated individuals, leading to what is commonly termed as mass incarceration³. This has a devastating impact on communities of color, contributing to the disintegration of families, limited economic opportunities, and perpetuating a cycle of crime and incarceration.

It has been widely discussed that the trial prosecutors in the US carry broad discretionary powers such as which charges to pursue, which individuals get charges with lesser or more severe offense and thereby resulting in a lenient or harsher sentences or the extent of leniency in plea bargains, and thus prone to both implicit and explicit biases that contribute to disparate sentencing (Stuntz 2005; Tonry 2011; Smith and Levinson 2012; Stevenson and Mayson, 2018). However, not sufficient attention is paid to the screening prosecutors who are equally responsible for observed disparities in sentencing and incarceration.

In the U.S criminal justice system, after an individual is arrested on a case and investigations have been conducted, they are screened by the prosecutors who make a decision on whether to pursue or drop charges. If they are screened in, then the case is assigned to the trial prosecutor who then proceeds to file charges for court hearings.

Rehavi and Starr (2014) found that the disparities in initial charges filed by the prosecutors contribute to almost 50% of the disparities in sentencing for the defendants in court. Although this study explored the additional dimension of the degree of the initial charges, the analysis could not capture the broader aspect of the screening decisions, wherein many defendants would be released after being arrested with charges against them being dropped by the prosecutor, as those whose charges were dropped would not be observed in the sentencing dataset.

By accounting for these defendants who are screened out, we estimate a measure of sentencing disparity that more accurately reflects lived experiences. The screening prosecutors could be described as the first gatekeepers. If black individuals are less likely to have their charges dropped, the real sentence length, imputing a 0 for those sent home, would become more disparate between blacks and whites. In this study we focus on examining the relationship between the screening decisions and the racial identity of the individuals being screened while controlling for extraneous factors.

Data and Methodology

² Mandatory minimum sentencing laws require judges to impose a predetermined minimum sentence for certain offenses, regardless of the specific circumstances of the case or the individual's background. These laws were initially introduced as a response to concerns about inconsistent sentencing practices and to target specific types of offenses, such as drug-related crimes. However, they have been criticized for their role in exacerbating sentencing disparities, particularly along racial lines.

³ According to the latest report from the Sentencing Project, the incarceration rate in the US is about 5 times higher for Black defendants and 1.3 times higher for Latinx defendants compared to White defendants. For added perspective, Black and Latinx communities only constitute around 14% and 19% of the total US population. For more details refer: https://www.sentencingproject.org/app/uploads/2022/08/The-Color-of-Justice-Racial-and-Ethnic-Disparity-in-State-Prisons.pdf

The U.S. data consists of over 200,000 screenings, collected from 1988-1999, by the New Orleans Parish District Attorney's Office. Its prosecuting attorneys are responsible for enforcing state criminal laws to protect and serve the citizens of New Orleans and surrounding areas. In January 1988, the Orleans Parish District Attorney established and instituted an office-wide computerized system to collect data on every case processed through the office. The system collects data about each criminal case that enters the prosecutor's office at every step of the process, and for the purposes of this study, the race and the ethnicity of the defendant, arrest charge, screening category and screening decision along with variables related to the screener.

We use multiple dependent variables to study the plausible effect of racial bias in the process of screening in defendants - The screening decision and the length of sentence received after trial. The former is a binary variable while the latter is a continuous variable. We also define a variable named real sentence which essentially refers to the length of the sentence variable but includes the value of zero for those defendants that are screened out. Note that in both the definitions of sentence variables, the acquitals are considered as zero for the value of sentence length.

As a first step in causal inference, we aim to establish that the defendants are randomly assigned to the screening prosecutors. Table 1 displays the results of our randomization checks. We construct a leave-out severity IV variable for each screener based on their screening decisions residualized on arrest year. This variable describes the habitual inclination of the prosecutor to pursue charges (screen in) on the defendants, based on all their screening decisions excluding the current decision. We then test if this variable is explained by the defendant characteristics while controlling for screening block (which is based on the case type) and arrest date. The relatively large joint-significance value indicates that the allocation of defendants to screeners can be considered conditionally random.

We use the following specifications to test for racial bias in screening decisions:

$$Y_{id} = \beta_1 *Black_d + Controls_d + \alpha_i + \mu_t + \varepsilon_{idt}$$

where $Black_d$ is a dummy variable for whether the defendant's race was Black or not. $Controls_d$ includes all the defendant related controls (such as age, criminal history, state of birth, residence etc.) along with the randomization strata, that is, Screening Block⁴ by Arrest Date; α_j indicates screener fixed effects and μ_t refers to time fixed effects; Y_{jd} is the dependent variable and is one of the following three: (1) a binary variable indicating whether the arrestee was screened in or out (2) the sentence length for those who were screened in and tried in court (counted as 0 for those acquitted after the hearing) (3) real sentence length which includes arrestees who were screened out as well (they would be counted as having 0 sentence length just like the defendants who were tried and acquitted by the court).⁵ The sentencing dependent variables (2) and (3) are log transformed and then used as dependent variables in the regression equation for a clearer interpretation of the regression effects as the sentencing trends follow log normal distribution.

⁴ The defendants are allocated to 4 different screening blocks based on the nature of their profile and criminal charge: (1) Regular (2) Traffic (3) Juvenile (4) Career Criminal.

⁵ The sentence length variables exclude those cases where the defendants received death sentences or life sentences since they would be treated as outliers

The application of the fixed effects ensures that the observed effect β_I of the defendant race on the probability of being screened in (or length of sentence received). Y_{jd} is not influenced by a particular type of screeners or time period. We can thus achieve more rigorous analysis by observing the within-screener variation on a given arrest date. More specifically, since defendants are allocated to specific screening blocks based on the nature of the charge, we include Screening Block X Arrest Date fixed effects.

A primary concern for the analysis is random allocation of cases to screening prosecutors. We need to establish that the observed effect of sentencing disparities does not arise from prosecutor selection bias where stricter prosecutors are more likely to be assigned Black defendants. As seen from Table 1, the allocation of cases (identified by defendant characteristics) were found to be random with respect to screener severity, which is an instrument for the sentencing habit of the screening prosecutor.

Results

As discussed in the previous section we measure racial bias on 2 dimensions: screening decision, sentence awarded to those defendants who have been screened in. This gives us a clearer picture of both the immediate and downstream impact of the decisions made by the screening prosecutors in the criminal justice system.

Table 2 tabulates the results of this analysis. We see from column (1) that the Black defendants are about 3% more likely to be charged and sent to trial by screening prosecutors compared to the White defendants; Column (2) indicates that among those screened in and sent to trial, the Black defendants receive about 27% longer sentences on average compared to that of the White defendants. This indicates that the screeners, not only are screening in more Black defendants, but also screening in black defendants who are more likely to receive harsher sentencing compared to the White defendants that were screened in.

Column (3) of Table 2 combines the results from columns (1) and (2) to measure the real sentence received by the defendants by their race. 'Real sentence' is a measure that includes defendants who were screened out (where the charges were dropped by the prosecutor) and therefore were considered as having received zero sentence length (similar to those defendants that were screened in and acquitted by the court), This measure can be interpreted as the average sentence likely to be received by a defendant once arrested and thus offers insight into the downstream impact of the screening process in the criminal justice system. Interpreting the results, we see that the Black defendants upon being arrested, receive about 46% longer sentences compared to the White defendants on average. Therefore, the screening process increases the sentencing gap from 27% to 46% for the Black defendants.

Figure 1 examines the impact of prosecutor screening on racial disparities in sentencing outcomes by comparing average sentences with "real sentences" that account for both screened-in and screened-out defendants. The analysis reveals a crucial aspect of the screening process: when considering the full pool of defendants (including those that were screened out), the disparity in sentencing between Black and White individuals actually increases. This pattern aligns with the findings presented in Table 2, Column

(3), and demonstrates that prosecutor screening does not simply reflect existing disparities; it actively amplifies them.

Figure 2 further illustrates the relationship between race, screening decisions, and sentencing outcomes. Consistent with the findings presented in Table 2, the figure demonstrates a clear disparity in both the likelihood of being screened in for prosecution and the severity of sentences received for Black and White defendants. Notably, White defendants are significantly less likely to be screened in than Black defendants. Moreover, among those who are screened in, White defendants receive considerably shorter sentences on average than Black defendants (visual representation needed). This pattern reinforces the quantitative evidence presented in Table 2, highlighting the pronounced racial bias present within the prosecutor screening process and its compounding effect on sentencing disparities.

Of particular interest is the observation that Black screeners appear to be harsher in their decision-making, further exacerbating the disparity in screening outcomes between Black and White defendants. This finding suggests the potential role of implicit egoism, a phenomenon where Black prosecutors may exhibit increased punitiveness towards Black defendants due to unconscious biases and self-preservation instincts (Greenwald and Banaji 1995). The phenomenon is consistent with the work of legal academic and former public defender James Forman Jr. (2017), who explores the paradox of high incarceration rates among African Americans in predominantly black jurisdictions. Forman Jr. delves into the perspective of black leaders who, concerned about the potential erosion of civil rights achievements by increasing crime rates, advocated for stricter legal measures. He portrays these leaders as viewing certain offenders not just as lawbreakers, but as threats to the African American community's progress, warranting severe legal responses to safeguard the community.

Conclusion

Our study provides robust evidence that prosecutor screening plays a significant role in fostering and amplifying racial disparities within the criminal justice system. By analyzing a comprehensive dataset of screening decisions and subsequent sentences, we demonstrate that Black defendants are disproportionately screened in for prosecution and receive harsher sentences compared to their White counterparts. This pattern persists even after controlling for a variety of potentially confounding factors, suggesting that implicit and explicit biases are likely contributing to these disparities in the screening process.

Our findings have several important implications. First, they highlight the need for greater transparency and accountability in prosecutor screening practices. The current system grants prosecutors significant discretion, which can lead to biased and discriminatory outcomes. Implementing measures such as standardized screening criteria and independent review of screening decisions could help to mitigate bias and ensure fairer treatment of all defendants.

Second, our results underscore the importance of addressing implicit bias among prosecutors. Training programs and interventions designed to raise awareness of bias and promote fair decision-making can play a crucial role in reducing disparities in the criminal justice system.

Third, our study calls for a broader examination of the systemic factors that contribute to racial disparities in the criminal justice system. While several studies focus on the role of judges and disparities in sentencing that contribute to racial discrimination in the criminal justice system, less attention has been paid to the prosecutors who play an equally if not more influential role due to their discretionary powers.

In conclusion, this research sheds light on a previously understudied aspect of racial disparities within the criminal justice system. By highlighting the role of biased decision-making by the screening prosecutors, our findings provide a valuable foundation for developing and implementing effective interventions to combat racial bias and promote a fair and just criminal justice system for all.

References:

- 1. Nellis, A. (2021). The Color of Justice: Racial and Ethnic Disparity in State Prisons. The Sentencing Project.
- 2. Mauer, M. (2022). Race and Corrections: The Continuing Crisis of Mass Incarceration. The Sentencing Project.
- 3. Tonry, M. (2018). Why mass incarceration matters: The persistence of racial disparities and their consequences. Oxford University Press.
- 4. Bowen, J., & Sprott, J. B. (2017). Racial disparities in sentencing: A review of the literature. Crime and Delinquency, 63(1), 1-32.
- 5. Alexander, M. (2010). The new Jim Crow: Mass incarceration in the age of colorblindness. The New Press.
- 6. Fagan, J., & Davies, G. (2000). Street stops and broken windows: Terry, Race, and Disorder in New York City. New York University Law Review, 75, 374-449.
- 7. Gelman, A., Fagan, J., & Kiss, A. (2007). An analysis of the New York City Police Department's "stop and frisk" policy in the context of claims of racial bias. Journal of Quantitative Criminology, 23(4), 305-330.
- 8. Owens, M., & Wu, R. (2019). Implicit racial bias in police officers' decision-making. Annual Review of Criminology, 2, 25-46.
- 9. Mitchell, O. (2005). A Meta-Analysis of Race and Sentencing Research: Explaining the Inconsistencies. *Journal of Quantitative Criminology*, 21, 439-466.
- 10. Steffensmeier, D., & Demuth, S. (2000). Ethnicity and Sentencing Outcomes in U.S. Federal Courts: Who is Punished More Harshly? *American Sociological Review*, 65, 705 729.
- 11. Doerner, J.K., & Demuth, S. (2010). The Independent and Joint Effects of Race/Ethnicity, Gender, and Age on Sentencing Outcomes in U.S. Federal Courts. *Justice Quarterly*, 27, 1 27.
- 12. Everett, R.S., & Wojtkiewicz, R.A. (2002). Difference, Disparity, and Race/Ethnic Bias in Federal Sentencing. *Journal of Quantitative Criminology*, *18*, 189-211.
- 13. Stuntz, W. J. (2005). The pathologies of political criminal justice. University of Chicago Law Review, 72(1), 187-234.
- 14. Tonry, M. (2011). Prosecutorial discretion and the problem of unequal justice. Crime and Justice, 39(1), 1-110.
- 15. Smith, R.J., & Levinson, J.D. (2012). The Impact of Implicit Racial Bias on the Exercise of Prosecutorial Discretion. *Seattle University Law Review*, *35*, 795.

- Stevenson, Megan and Mayson, Sandra Gabriel, The Scale of Misdemeanor Justice (March 21, 2018).
 98 Boston University Law Review 731, 2018, Available at SSRN: https://ssrn.com/abstract=3146057
- 17. Rehavi, M. Marit and Starr, Sonja B., Racial Disparity in Federal Criminal Charging and Its Sentencing Consequences (May 7, 2012). U of Michigan Law & Econ, Empirical Legal Studies Center Paper No. 12-002, Available at SSRN: https://ssrn.com/abstract=1985377 or https://dx.doi.org/10.2139/ssrn.1985377
- 18. Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. Psychological Review, 102(1), 4-27
- 19. Jr, James Forman, Locking up our own: Crime and punishment in Black America, Farrar, Straus and Giroux, 2017.

Tables and Figures:

Table 1: Randomization Check

	(1)	(2)	
	Screener Leaveout Severity IV	Screener Leaveout Severity IV	
Female Defendant	0.00153	0.000710	
	(0.000999)	(0.000941)	
Black Defendant	0.000495	0.000361	
	(0.00113)	(0.00113)	
Defendant age	0.0470	0.0421	
	(0.0307)	(0.0288)	
Defendant age squared.	-0.0670+	-0.0605	
	(0.0402)	(0.0377)	
Additional Defendant Controls	No	Yes	
Arrest Date x Screening Block FE	Yes	Yes	
Arrest Charge FE	Yes	Yes	
Joint significance	0.359	0.456	
N	234280	234280	
Adj. R-squared	0.557	0.557	

Table 1 is a randomization check for allocation of defendants to screening prosecutors. The dependent variable "Screener Leave-out severity IV" refers to the screener's tendency to pursue charges on the defendant computed based on residualized mean of "screened-in decisions" per screener excluding the current case. "Black Defendant" is a dummy variable indicating whether the defendant's race is Black or not. "Defendant other race" is a binary variable indicating whether the defendant belonged to any other non-white race. "Additional Defendant controls" include height and weight quintiles of the defendants. Arrest Date x Screening Block FE refers to arrest date by screening block fixed effects. The standard errors are clustered at the screening prosecutor level. +, *, ** and *** indicate significance at the 10%, 5%, 1% and 0.01% levels, respectively.

Table 2: Racial Bias in Screener Decisions

	(1)	(2)	(3)
	Accept Case	Log Sentence in Days	Log Real Sentence in Days
Black Defendant	0.0294***	0.237***	0.381***
Diack Determant	(0.00688)	(0.0371)	(0.0341)
Additional Defendant Controls	Yes	Yes	Yes
SADA tenure controls	Yes	Yes	Yes
SADA FE	Yes	Yes	Yes
Arrest Date x Screening Block FE	Yes	Yes	Yes
Arrest Charge FE	Yes	Yes	Yes
N	219547	65297	219086
Adj. R-squared	0.282	0.460	0.190

Table 2 is the main specification as described in eq(1). The Additional defendant controls include the defendant's gender, criminal history, age, squared value of age, whether they were born out of state and whether living out of state. SADA tenure controls refers to the screening prosecutor's tenure and squared value of tenure. The specification also controls for screener, arrest date by screening block and arrest charge fixed effects. Column(1) uses the screening decision as the dependent variable."Accept Case" is a binary variable with value of 1 if they were screened in and 0 if screened out by the prosecutor. Column (2) uses the length of sentence, for those defendants that were screened in by the prosecutor tried in court, as the dependent variable (acquittals are considered having sentence length of 0 days). Column (3) uses the "real sentence" i.e includes those defendants that were screened out, considered as having been awarded a sentence of 0 days (same as for acquittals). The standard errors are clustered at the screening prosecutor level. +, *, ** and *** indicate significance at the 10%, 5%, 1% and 0.01% levels, respectively.

Figure 1: Screening increases racial gap in sentencing:

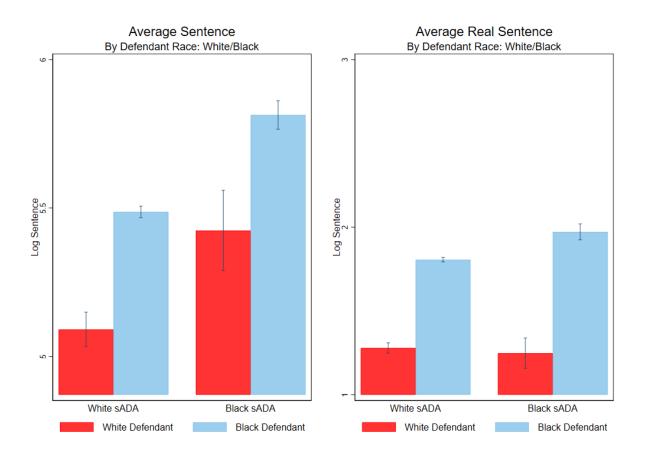


Figure 1 shows how the disparity in sentencing outcomes for the defendants changes when accounting for screening decisions. The y-axis is the log transformed sentence length in days. The x-axis refers to the cohort of defendants classified by their race and the race of their respective screeners.

Figure 2: White cases are fewer and are leniently sentenced

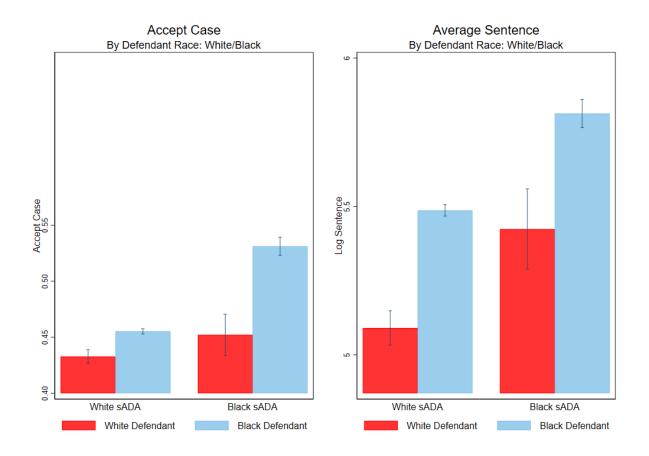


Figure 2 shows the disparity in screening decisions based on defendant race and how it is further compounded by disparate sentencing outcomes in the court. The y-axis is the log transformed sentence length in days. The x-axis refers to the cohort of defendants classified by their race and the race of their respective screeners.

The other one is a tad weaker. Some phrases don't need to be in quote and defined (in my opinion probably also Eric's). There are some prosecutor papers more recent that haven't been cited — starr rehavi. Emma Harrington has a few papers. Her coauthor Natalia Emmanuel (I think that one, maybe another). Egan stevenson misdemeanor prosecutor paper.

6:31

Then there should be a smart contrast with those papers, what's the contribution. I assume screening is still novel rather than "charging 1 vs 2" decision of the others. Screening is charge 1 vs drop. But confirm because misdemeanor prosecution might be close. // also they probably aren't looking at disparities (yet)?