

Can Racial Diversity among Judges Affect Sentencing Outcomes?

ALLISON P. HARRIS *Yale University, United States*

How does racial diversity impact institutional outcomes and (in)equality? Discussions about diversity usually focus on how individuals' identities shape their behavior, but diversity is a group-level characteristic. Scholars must, therefore, consider the relationship between group composition and the individual decisions that shape institutional outcomes. Using felony data from a large U.S. court system, I explore the relationship between racial diversity among the judges comprising a court and individual judges' decisions. I find that as the percent of Black judges in a courthouse increases white judges are less likely to render incarceration sentences in cases with Black defendants. Increases in racial diversity decrease the Black–white gap in the probability of incarceration by up to 7 percentage points. However, I find no relationship between judge's racial identities and disparities in their decisions. This study highlights the importance of conceptualizing diversity as a group characteristic and the relationship between institutional context and outcomes.

INTRODUCTION

Most residents of the United States will never meet their congressional or state representatives, but many will have contact with other state and local officials, including those from the institutions comprising the carceral system, at some point. The environment in which these public officials work, from the building to employee policies to their colleagues, must influence how they approach their jobs, which, in turn, affects the lives of the countless individuals with whom they interact. This article examines how the composition of a judge's group of colleagues can influence their sentencing decisions in criminal cases, how this influence may differ based on a judge's own personal characteristics, and what this means for disparities in sentencing and how we think about diversity in state and local institutions.

Millions of people are arrested in the United States every year, and the vast majority of these individuals appear, are convicted, and receive their sentences in lower-level state courts.¹ State trial court judges' sentencing decisions have far-reaching political consequences for the lives of those accused (Lerman and Weaver 2014; Weaver and Lerman 2010; White 2019b) and also for their families and communities (Burch 2013; Walker 2014; Walker and García-Castañón 2017; White 2019a). The majority of defendants are not white; and Black and Latinx people, especially, are

disproportionately incarcerated in the United States (Carson 2018). The citizens who appear most in the largest state criminal courts are those for whom the carceral system may be their primary, if not only, contact with government, influencing their opinions and decisions to participate (Lerman and Weaver 2014). How does the racial composition of the judiciary they stand before affect their fates?

While research on the effects of racial diversity in the judiciary has largely focused on the impact of individual judges' identities on decision making, much less work has investigated the impact of racial diversity as a contextual feature of the bench. I argue that increasing the representation of racial-minority-group members on the bench decreases racial disparities in felony sentencing, not because of these judges' behavior, but because their presence alters their peers' behavior. These shifts in judges' behavior increase the court's likelihood, as a whole, of providing more similar sentences to defendants across racial groups.

Political scientists and criminologists have shown that the context in which a trial judge works can influence their sentencing decisions (Eisenstein, Flemming, and Nardulli 1988; Ulmer and Johnson 2004). And representative bureaucracy literature demonstrates that the level of descriptive or “passive” representation within the government workforce influences how policies are implemented and administered, especially as those policies relate to race and gender (including: Meier 1993; 2019; Meier, Wrinkle, and Polinard 1999; Riccucci and Meyers 2004; Riccucci and Van Ryzin 2017). The resulting changes in the organization's performance may not be due solely to the behavior of minority-group member bureaucrats; majority-group member bureaucrats may change their behavior as well (Hong 2017; Lim 2006).

Recent scholarship examining policing identifies the role of descriptive representation for improving racial balance in criminal legal outcomes, and it shows that decreasing disparities in these outcomes requires a

Allison P. Harris , Assistant Professor, Department of Political Science, Yale University, United States, allison.harris@yale.edu

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¹ Far more defendants are convicted in state courts than federal courts; the Illinois circuit courts hear almost as many felony cases in 1 year as all federal district courts combined, for example (Illinois Courts 2013; U.S. Federal Courts 2013).

focus on institutions, rather than just the potential biases of individual actors (Eckhouse 2019; Kennedy et al. 2017; Sances and You 2017). A significant literature in judicial politics, largely focused on federal courts, examines how individual judges' decisions differ with their racial identities (see, Harris and Sen 2019). However, we know relatively little about how changes in descriptive representation on the bench affect sentencing outcomes for defendants in the nation's busiest courts (lower-level state courts) or how its influence may amount to more than the sum of individual minority-group-member judges' behaviors when it comes to reducing disparities. This article makes the novel contribution that group composition can influence solitary public officials' behavior, and that this influence may be more important than any individual's identity when it comes to reducing disparities in institutional outcomes.

To investigate the relationship between racial diversity among judges and sentencing decisions, I analyze approximately 20 years of felony case data from one of the largest unified court systems in the United States. I find that as the percentage of Black judges in a courthouse increases, white judges are less likely to render incarceration sentences in cases with Black defendants. These shifts in judicial behavior shrink the Black–white gap in the probability of an incarceration sentence by up to 7 percentage points, greatly decreasing disparities in this outcome. I distinguish racial diversity within an institution from descriptive representation and suggest potential pathways through which racial diversity among colleagues may influence judges' decisions. For Black judges, having Black colleagues may alleviate pressures associated with tokenism, whereas white judges might become more aware of the salience of race in sentencing, update their beliefs about racial disparities in sentencing, or face pressure not to appear discriminatory as they gain Black colleagues.

This article makes three important contributions. The first is to our understanding of the factors driving elite behavior as well as how we should measure and evaluate diversity within institutions. Diversity is a group-level characteristic, and studies reducing the evaluation of racial diversity to identifying the difference between non-white and white individuals' behavior risk underestimating or misidentifying the ways diversity can influence group outcomes and individual behavior. Second, identity-based diversity is about more than the different tools that group members bring to the table; and, when it comes to shifts in the level of racial diversity within a group, there is more at stake than the extent to which members feel included. Increases in racial diversity change the context in which group members do their work and, therefore, some of the factors influencing their decisions.

Finally, the findings suggest an important consideration for conceiving state responses to crime. Among the many efforts, including those of a much larger scale, to address the negative impacts of the carceral system, which disproportionately accrue to Black people, are attempts to reduce factors that contribute to mass incarceration, including custodial sentences. The findings

presented here suggest that one way to do this may be to increase Black people's representation and power in trial courts. This is not because we should expect Black judges to behave differently from white judges, for example. Rather, it is because increasing Black judges' representation changes the context within which all judges work and, potentially, the norms and commitments driving their decisions.

THEORETICAL GROUNDING: RACIAL DIVERSITY AMONG JUDGES

There is presently a widespread normative commitment to racial diversity and representation across the United States from private industry to government institutions, including those comprising the carceral system. However, scholarship in this area, which usually focuses on Black and white officials' behavior, often lacks consistent estimates of a relationship between individual government officials' racial identities and their behavior. With respect to judges and police officers, for instance, some studies point to differences in Black and white judges' sentencing behavior (Cohen and Yang 2019; Scherer 2004; Welch, Combs, and Gruhl 1988). Other studies highlight a lack of difference in judicial behavior based on judges' racial identities (Abrams, Bertrand, and Mullainathan 2012; Schanzenbach 2005; Spohn 1990), while others, still, find that Black judges are especially punitive (Steffensmeier and Britt 2001). The findings on the role of police officer race in policing outcomes are similarly mixed (see, Ba et al. 2021; Eckhouse 2018; Legewie and Fagan 2016; Sharp 2014). I argue that increasing the representation of racial-minority-group members in the judiciary decreases disparities in felony sentencing, not because of these judges' behavior, but because their presence alters their peers' behavior.

Analyses of the effect of diversity (of any kind) on institutional outcomes must conceptualize it accurately. Differences in behavior based on personal characteristics is one component of identity-based diversity, but evaluations of this component, alone, cannot capture the full impact of shifts in diversity on institutional outcomes. An individual cannot be “diverse.” Individuals contribute to a group's diversity, but a large group with one or two non-majority-group members is still relatively homogenous, for example. Broadening the conception of what diversity is allows us to better understand how it might influence institutional outcomes. The variety of identities represented in an institution are a contextual feature of the institution, and the context in which individuals work is important for explaining individuals' behavior and institutional outcomes.

Culture and norms also influence institutional context, and racial inequality is an enduring feature of American society. White and non-white Americans have different experiences, including their interactions with the state. This is true across a range of settings, including education, social services, and the criminal legal system. Those who are not white also

remain under-represented among institutional officials. While co-racial descriptive representation sometimes results in substantive representation, the actions of individual officials (in legislatures, bureaucracies, or courts) are not enough to address deep-seated inequality. Additionally, attempts to understand the effect of racial diversity among officials on institutional outcomes that focus solely on the behavior of non-majority-group-member officials may fail to capture all the ways that racial diversity can influence institutional outcomes. If, for example, criminal legal officials of different races have different preferences, those preferences may have a weaker influence on their on-the-job behavior than the culture of their institution, which has been shown to influence judicial behavior (Abrams et al. 2022). And institutional culture will be influenced by internal and societal power dynamics that typically favor majority-group member preferences (Legewie and Fagan 2016; Ward, Farrell, and Rousseau 2009).

As members of minority racial groups gain representation in homogenous institutions dominated by majority-racial-group members, the altered context can influence the decision making of individuals from all racial groups. In these instances, we may expect institutional members' decisions to reflect resulting shifts in the institution's power balance and societal norm commitments. Scholars have identified a number of reasons to explain why white governmental officials' (especially, those working in institutions that are products and producers of racial inequalities) decisions might be biased against non-white individuals, including implicit bias and political threat (Greenwald, Oakes, and Hoffman 2003; Legewie and Fagan 2016; Ward, Farrell, and Rousseau 2009). Non-white government officials working in white-dominated institutions may also face pressures to make decisions that are generally more favorable to majority-group members (Allport 1955; Steffensmeier and Britt 2001).

Social psychological studies of the effect of group diversity on group and individual judgment and decision making suggest some pathways through which racial diversity in government institutions might affect individuals' decisions and, therefore, group outcomes. First, the introduction of individuals that increase a group's diversity may change the type of information exchange that occurs, thereby influencing the knowledge and considerations individuals rely on when making decisions (Jehn, Northcraft, and Neale 1999; Sommers 2006). The general process here is that as racial diversity in a group increases, the content of group conversations will include information related to race and racism that leads individuals in the group to more positively evaluate minority-racial-group members, such that future decisions will be more favorable to members of that racial minority group (Sommers 2006). This pathway might similarly influence institution members who are in the majority and the minority racial group. However, there are additional ways that racial diversity within a group can impact individuals' behavior, and these pathways may differ with the race of the individual in question.

Officials who are members of a majority racial group, especially in jobs that require them to make decisions or judgements about others may make decisions that are less biased against minority racial groups as they gain more colleagues who are minority-racial-group members for three reasons. First, seeing and interacting with a more racially diverse set of colleagues may make majority-racial-group institution members desire not to appear discriminatory against out-group members or biased in favor of in-group members in their behavior. Second, it could remind majority-group-member officials of their own desire to avoid prejudiced behavior (Antonio et al. 2004; Hans and Vidmar 1982; Sommers 2006). Third, a racially diverse group of colleagues may change the extent to which race is a salient consideration in their decision making.

Additionally, scholars have found that while inter-group contact can often lead to negative outcomes, including "exclusionary attitudes" and discrimination toward out-group members (Forbes 1997), repeated, long-term, and positive inter-group contact may lead to more positive outcomes, including decreasing out-group prejudice (Allport 1955; Enos 2014; Selvanathan et al. 2018). Officials have repeated contact with their colleagues and these interactions are likely positive, at least when compared with the negative sentiments they are more likely to associate with civilian interactions, whether these interactions are with defendants, new drivers at the Department of Motor Vehicles, or benefits applicants. Overall, we might expect these positive experiences with peer racial-out-group members to improve majority-racial-group member officials' perceptions and treatment of minority-racial-group members.

For non-white institution members, the pressures of tokenism may subside as more minority-racial-group members join an institution and their under-representation within that institution becomes less extreme. When there are low levels of minority-group representation in an institution, minority-group members of the institution may experience tokenism, and feel pressure to conform to the majority-groups' typical behavior (Asch 1956; Steffensmeier and Britt 2001). The pressures associated with tokenism occur due to the scrutiny and visibility that come from being a member of an extreme minority group (Cook and Glass 2015; Kanter 1977; Sommers 2006; Yoder 1991). As the pressures alleviate, minority-racial-group members may feel more able to exhibit behavior that is favorable to members of their racial group, more broadly. They may also prioritize their own or their in-group's well-being over the commitments of a racially homogenous majority-racial-group-member-led institution. However, the shifts in racial diversity in many U.S. institutions may not be large enough to alleviate these pressures, thus preventing any change in minority-racial-group-member officials' behavior as they gain additional minority-racial-group-member colleagues.

I have presented many pathways through which racial diversity in institutions may influence individuals' behavior, but, taken together, they all suggest that this feature of group context will lead majority- and,

potentially, minority-racial-group members to behave in ways that make institutional outcomes less punitive and less disparate. Importantly, all of the presented pathways are interactive in nature. In order for racial diversity to influence decision making in institutions, institution members must be able to see and interact with those colleagues whose presence increases diversity within the institution.

Criminal trial courts are a useful lens through which to study the processes outlined above. First, trial court judges hear and decide cases alone, usually in their own courtrooms. However, they see and interact with colleagues in the hallways, elevators, and parking garages. Some criminal trial courts even assign judges to working groups in which judges can discuss the work of the court and receive communication from upper-level officials. Second, the work judges do is the type we would expect to be susceptible to shifts in institutional context related to race. Judges make judgements, and these are the types of individual decisions where social psychologists have found that individuals are susceptible to group diversity. In fact, many of these findings come from studies of juries, including the role of jury diversity on individual juror's pre-deliberation decisions (Sommers 2006). Additionally, trial court judges make decisions in a relatively high-discretion, high-information environment, the type where the representative bureaucracy literature suggests passive representation may have substantive effects (see discussion in Baumgartner et al. 2021, 862).

I derive the following expectations about the relationship between racial diversity and sentencing in trial courts based on the theory presented above. In general, I expect increases in racial diversity among judges to lead to decreases in punitiveness and decreases in race-based sentencing disparities. Focusing on Black and white judges, due to theoretical relevance and the nature of the data, which I discuss below, I expect increases in Black judicial representation will lead to decreases in the probability of incarceration and sentence length.

As the court becomes more racially diverse, I expect white judges to become more lenient toward Black defendants due to the processes described above. Such a behavioral shift will decrease punitiveness, overall, since the vast majority of criminal defendants are Black. If white judges become more lenient in their sentencing of Black defendants, this will also decrease the Black–white gap in sentencing, bringing Black defendants' sentences closer in line with those of white defendants. It is possible that white judges will adjust their sentencing of white defendants as well, rendering slightly more punitive sentences to these defendants, which would also decrease disparities in sentencing. Black judges may similarly become less likely to incarcerate Black defendants as they gain Black colleagues. However, it is unclear, how many Black colleagues would be necessary in order to alleviate pressures of tokenism Black judges may experience in situations where they are extremely underrepresented. Further, it is also possible that harsher sentences for Black defendants might reflect Black judges' true

preferences, such that gaining Black colleagues might have no effect on or reinforce that preference (see, Forman Jr 2017). Finally, because the theory implies at least some interaction among colleagues, I only expect to find a relationship between racial diversity among judges and judges' sentencing decisions when judges work in the same location as those judges whose presence increases racial diversity on the bench.

While much of the research on racial diversity among judges has focused on how individual judge's racial identities influence their decisions, some studies have conceived of racial diversity more broadly, lending support to the present argument. Studies of three-judge U.S. Courts of Appeals panels show that one judge's characteristics can affect how the other two judges vote and, ultimately, the panel's final decision (Cox and Miles 2008a; 2008b; Kestel 2013). The evidence from federal district courts is weaker. Ward, Farrell, and Rousseau (2009) find that increased Black prosecutorial, though not judicial representation, is associated with decreases in sentencing disparities between Black and white defendants in federal judicial districts while Schanzenbach (2005) finds weak relationships between racial representation in judicial districts and judges' sentencing.

Previous studies in this area represent important advances in the study of the relationship between institutional context and outcomes. However, they do not investigate the process by which shifts in individual judges' decisions lead to these institutional outcomes. Additionally, the analyses that follow use data from a large lower-level state trial court, the type of court where the vast majority of criminal cases are heard in the United States highlighting the potential scope and importance of this relationship.

THE CIRCUIT COURT OF COOK COUNTY, CRIMINAL DIVISION

The data used in this article come from the Circuit Court of Cook County in Illinois, one of the largest unified court systems in the United States. The Circuit is composed of six municipal districts, with the First Municipal District covering the entire city of Chicago. A chief judge presides over the Circuit, which includes nonjudicial offices and the judiciary. The Criminal Division is responsible for hearing most of the county's felony cases.

Criminal Division judges hear cases in three courthouses: the George N. Leighton Criminal Court Building in Chicago and the Skokie and Bridgeview Courthouses in suburban Cook County.² Felonies originating (occurring) in the city of Chicago are heard in the city's Leighton Criminal Building, and felonies originating outside of the city limits are heard by a Criminal Division judge in either Skokie or

² Circuit court judges in Cook County are elected in competitive, partisan elections at the county or sub-circuit level. Judges serve 6-year terms and run in end-of-term nonpartisan retention elections.

Bridgeview. The Criminal Division judges in the suburbs share courthouses with the other judges of their municipal districts who hear many different types of cases. The Division's presiding judge and approximately 30 trial judges have courtrooms in Chicago's Leighton Building, and there are usually six to seven Criminal Division trial judges with courtrooms in the Skokie and Bridgeview courthouses.

The distinction between the Chicago and suburban courthouses highlights a key point of the theoretical argument presented in the previous section. In order for racial diversity among judges to impact individual judges' behavior, judges must see and, potentially, interact with the colleagues whose presence increases racial diversity on the bench. Judges sharing courthouses with judges who hear different, noncriminal, matters or those who work in courthouses alone will not have the opportunity to respond to shifts in racial diversity among their divisional colleagues, nor will defendants standing before those judges experience any related changes in sentencing behaviors.

The theory developed here can help us understand judicial behavior in criminal trial courts serving locations in which members of a minority group are over-represented among potential defendants and under-represented among the judiciary, which is the case in much of the United States. However, the theory is likely most applicable to courts serving relatively large, densely populated areas where many judges have courtrooms in a single courthouse. This is common in counties with large cities like Chicago, including Philadelphia County, PA; Harris County, TX; and Los Angeles County, CA and in counties with medium- and smaller-sized cities like Middlesex County, NJ and Macomb County, MI, for example. Courts in these types of locations handle a significant portion of felony cases in the United States. According to the FBI's Uniformed Crime Reporting over 40% of arrests occur in cities with at least 50 thousand residents, and these figures do not even account for the arrests in those cities' surrounding counties that will be heard in the same court systems (FBI 2019). To provide more convincing evidence of the argument's scope, I conducted analyses of court data from Harris County, TX (included in the Supplementary Material), and the results support those presented below.

DATA

The Cook County, IL, Criminal Division data used for this project include just over 431,000 felony cases heard from 1995 to 2013 in which the defendant was *not* found not guilty (Harris 2023).³ According to the 2013 Annual Report of the Illinois Courts, only 3% of felony

³ The court would not release data for cases where the defendant was found not guilty, so the data technically do not represent the universe of the county's felony cases. The data do include charges (included in cases with multiple charges) with not guilty verdicts. See Supplementary Material for more information on the data and cleaning process.

defendants were found not guilty, suggesting the data used in this analysis capture nearly the universe of felony cases.⁴ Cases missing due to a not guilty verdict are likely not missing at random and could introduce bias into analyses. However, judges only sentence defendants in cases in which the defendant pleads guilty or is convicted.

Each case is identified by a case number, and includes the following information: initiation date; defendant's last name, date of birth, race, and sex; judge's name; description of charge; felony class of the convicted charge; final disposition; length of minimum and maximum sentence; courthouse and number of the courtroom where the case was heard. The defendant in the vast majority of these cases—just under 76%—was Black, while white and Latinx defendants were charged in 11 and 12% of cases, respectively. As shown in Table 1, the defendants in these cases are mostly Black, male, and young, and the defendants in 46% of these cases were sentenced to incarceration for some period.

Felony charges are charges for which the defendant is eligible for at least 1 year of incarceration. Felonies are categorized into classes based on severity, which are then used to guide sentencing decisions. All felony charges—except those in the two most serious felony classes, which were dropped from the data—used in these analyses are eligible for probation in lieu of incarceration.⁵

Overall, incarceration sentences have decreased over time (Figure 1). Additionally, the frequency of incarceration varies with defendant race. Cases with Black defendants end with incarceration sentences far more frequently than those with either Latinx or white defendants, and cases with Latinx defendants end with incarceration sentences slightly more frequently than those with white defendants.

There were a total of 89 Criminal Division judges during this period, with approximately 38 judges serving in the Division each year—six to seven in the suburban courthouses and the rest in Chicago's Leighton Building. Each judge has their own courtroom. As shown in Table 2, each judge's courtroom hears an average of roughly 772 cases per year and Black and non-Black judges hear cases with similar characteristics (Table 3).⁶ Black judges do preside over cases involving more Black defendants and fewer older defendants. However, if Black judges were more lenient than white judges, the main concern with respect to case characteristics would be that this was

⁴ See <https://www.illinoiscourts.gov/reports/annual-report-illinois-courts/>.

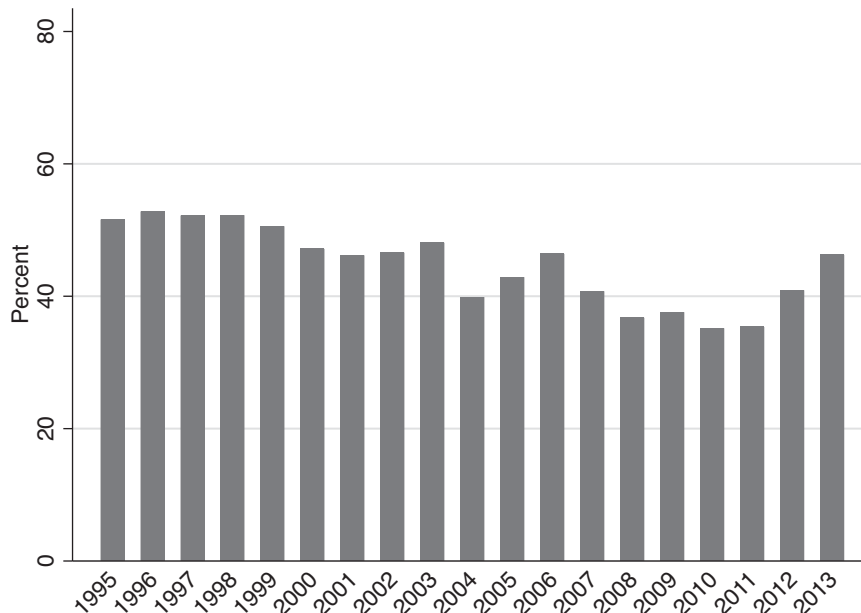
⁵ In Illinois, judges' discretion with respect to sentencing is generally limited within the terms established by the Illinois General Assembly's "Penalties for Crimes in Illinois," the state's sentencing guidelines. See <http://www.ilga.gov/commission/lru/2005PFC.pdf> for details.

⁶ Felony class is measured ordinally from least to most serious and includes three misdemeanor classes since defendants can be convicted of a different (usually less serious) offense than the original charge. A value of "1" corresponds to a Class C misdemeanor and "7" corresponds to Class 1 felony. The mean value of "5" corresponds with a Class 2 felony, which involves 3–7 years in prison or up to 4 years of probation instead.

TABLE 1. Case Characteristics across Locations

| | Bridgeview | Chicago | Skokie | Total |
|-------------------|-------------------|------------------|------------------|------------------|
| Black defendant | 0.895 (0.306) | 0.790 (0.408) | 0.516 (0.500) | 0.762 (0.426) |
| Female defendant | 0.0858 (0.280) | 0.142 (0.349) | 0.133 (0.340) | 0.136 (0.343) |
| Defendant over 30 | 0.386 (0.487) | 0.430 (0.495) | 0.479 (0.500) | 0.433 (0.495) |
| Offense class | 4.855 (1.138) | 5.113 (1.146) | 4.891 (1.128) | 5.060 (1.147) |
| Incarceration | 0.465 (0.499) | 0.469 (0.499) | 0.416 (0.493) | 0.461 (0.499) |
| No. of obs. | 38,119 | 331,836 | 57,687 | 431,715 |

Note: Mean values with standard deviations in parentheses.

FIGURE 1. Criminal Division Annual Incarceration Rate

because Black judges received cases more likely to qualify for a lenient sentence, which does not appear to be the case. The minimum cases per judge per year in Chicago and Bridgeview was only one, likely because, over the course of the study period, some courtrooms no longer heard felony cases.⁷

I used judges' names to merge the case data with biographical information from local legal organizations, Chicago Appleseed and Chicago Council of Lawyers. I also conducted Internet searches to identify judges' race and gender when necessary and possible. The vast majority of judges, for whom I could identify race and gender, are white (79%) and male (79%).

However, the racial composition of the Criminal Division bench has fluctuated over time.

I measure racial diversity on the bench as the percent of Black judges in the Criminal Division each year.⁸ Throughout this period, only approximately 3% of judges could be identified as having a racial or ethnic identity other than Black or white. The percent of judges on the bench who are Black each year, shown in Figure 2, increased sharply after 1996, after which it decreased and then steadily rose from 2000 to 2004. Black judges' representation in the Division decreased again in 2005, then experienced mild fluctuations throughout the rest of the study period. Both Black

⁷ This might occur because a courtroom was used for other purposes, including diversionary programs, for example.

⁸ Similar analyses to those presented below included a monthly measure (see Supplementary Material) and produced similar results.

TABLE 2. Cases per Judge per Year

| | Mean | Median | Min. | Max. |
|------------|----------|--------|--------|----------|
| Bridgeview | 1,800.82 | 1,645 | 1.00 | 3,198.00 |
| Chicago | 1,257.71 | 1,158 | 1.00 | 3,396.00 |
| Skokie | 1,496.39 | 1,556 | 605.00 | 2,373.00 |
| Total | 1,338.32 | 1,224 | 1.00 | 3,396.00 |

TABLE 3. Case Characteristics by Judge Race

| | Non-Black judges | Black judges | Total |
|------------------|------------------|------------------|------------------|
| Black defendant | 0.774 (0.418) | 0.799 (0.401) | 0.779 (0.415) |
| Female defendant | 0.136 (0.342) | 0.135 (0.341) | 0.135 (0.342) |
| Defendant age | 30.31 (10.74) | 30.08 (10.74) | 30.26 (10.74) |
| Offense class | 5.056 (1.144) | 5.084 (1.156) | 5.061 (1.147) |
| No. of obs. | 66,426 | 289,894 | 356,320 |

Note: Mean values with standard deviations in parentheses.

and white judges sentence Black defendants to incarceration more frequently than white defendants, and white judges are somewhat more punitive than Black judges, overall. Black judges issue incarceration sentences in 45% of cases with Black defendants and 32% of cases with white defendants, and white judges issue incarceration sentences in 50% of cases with Black defendants and 34% of cases with white defendants.

JUDICIAL DIVERSITY AND SENTENCING

This section describes the empirical approach to evaluating the relationship between judges' colleagues' characteristics and judges' sentencing decisions. I use the data described above to estimate the following linear probability and ordinary least squares regression models:

$$\begin{aligned} \text{Sentence} = & \beta_0 + \beta_1(\% \text{Black judges}) \\ & + \beta_2(\text{Black defendant}) + \beta_4 Z + \zeta + \varepsilon, \end{aligned} \quad (1)$$

$$\begin{aligned} \text{Sentence}_{ij} = & \beta_0 + \beta_1(\% \text{Black judges}_{ij}) \\ & + \beta_2(\text{Black defendant}_{ij}) + \beta_4 Z_{ij} + W_j + \zeta + \varepsilon, \end{aligned} \quad (2)$$

$$\begin{aligned} \text{Sentence}_{ij} = & \beta_0 + \beta_1(\% \text{Black judges}_{ij}) \\ & + \beta_2(\text{Black defendant}_{ij}) \\ & + \beta_3(\% \text{Black judges}_{ij} \times \text{Black defendant}_{ij}) \\ & + \beta_4 Z_{ij} + W_j + \zeta + \varepsilon, \end{aligned} \quad (3)$$

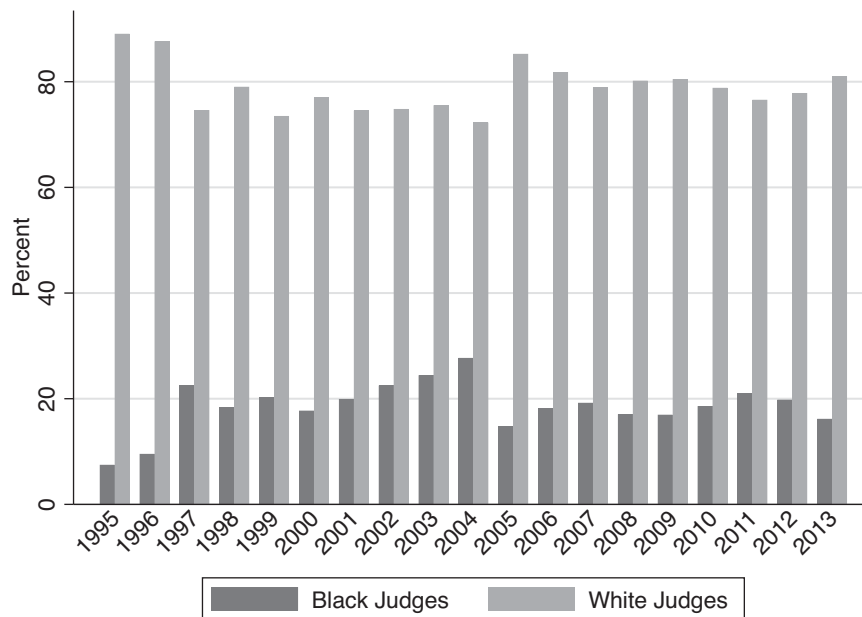
where i and j represent a case and a judge, respectively. The dependent variable in most of the models is dichotomous, taking a value of 1 if a defendant in a case is incarcerated to prison or jail and 0 otherwise. In a few of the models, the dependent variable is sentence length, measured in days. The main independent variable is the percent of Criminal Division judges who are Black each year, measured either across all three courthouses comprising the Division, or just in Chicago's Leighton Building. Each model also accounts for the race of the defendant and includes an indicator for whether the defendant in a case is Black (1, 0). Equation 1 is a pooled model, whereas Equation 2 and Equation 3 include judge-level fixed effects (W_j) to account for unobserved factors affecting an individual judge's decisions and the likelihood that their decisions across cases may be related. All models include standard errors clustered at the judge level to account for correlation between an individual judge's decisions and a time trend (ζ) to address broader trends that may impact the court's work.⁹

The percent of Criminal Division judges who are Black, shown in Figure 2, increased through 2004 after which it decreased then leveled off. It is important to note that while defendants' cases are randomly assigned to judges in Chicago's Leighton Courthouse (though not in the suburban courthouses), racial diversity on the bench is not randomly assigned across cases. However, the random assignment of defendants' cases to judges should ensure that case assignment is not systematically related to defendant characteristics or any individual judge's sensitivity to the level of racial diversity among their colleagues.

Z is a set of defendant, case, and judge characteristics. These include defendant race (binary indicators for Latinx and "other race" in addition to Black), age (in years), and gender (a binary indicator for whether the defendant is recorded as "female" in court records). It accounts for the seriousness of the conviction class, measured ordinally from least to most serious of seven classes (three misdemeanor classes and four felony classes). Z also includes binary indicators for whether a judge is up for retention at the time they hear a case and, in some of the pooled models includes, binary indicators for whether a judge is a Democrat, judge gender, judge race, and whether the judge was on the bench the previous year (to account for turnover among the judges).

Equation 1 tests the expectation that increases in Black judicial representation should decrease judges' punitiveness in criminal sentencing. β_1 represents the change in the probability that a case will end with an incarceration sentence when Black judicial representation increases by 1 percentage point. Negative values on β_1 mean that as Black judges gain more representation

⁹ The data are unbalanced due to each judge hearing multiple cases per year. A year trend, judge-level fixed effects, and clustered standard errors are, therefore, used to address the relationship between the decisions in any judge's overall caseload, judges' response to racial diversity among colleagues, and shifting trends in court processes, crime, and sentencing, more broadly.

FIGURE 2. Percent of Criminal Division Judges Who Are Black and White

on the court, sentencing becomes more lenient. Equation 2 is similar to Equation 1, but it incorporates judge-level fixed effects (W_j). Equation 3 evaluates whether judges' responses to racial diversity within their group of colleagues varies with defendant race. This model interacts the indicator for when the defendant in a case is Black with the main independent variable, such that β_1 represents the change in the probability of an incarceration sentence (or the change in sentence length) associated with a 1-percentage point increase in Black judicial representation in cases with white defendants while β_3 represents the additional impact on sentencing for cases with Black defendants.

RESULTS

Results from analyses using Equation 1 to evaluate the relationship between racial diversity among judges and whether or not a case ends with incarceration are included in Table 4. The second row of the column shows the increase in the probability of an incarceration sentence if a case has a Black defendant, compared to a white defendant. Across all courthouses, the probability of incarceration in cases with Black defendants is roughly 10–15 percentage points higher than cases with white defendants. This large difference is consistent with research on sentencing disparities; even research finding that such disparities have decreased over time report disparities within this range (King and Light 2019; Nellis 2021).

The main independent variable—the percent of judges who are Black—is measured at the Division level, and is the percent of judges who are Black across all courthouses hearing felony cases in Cook County.

These are pooled linear probability models that do not include judge fixed effects and include cases heard by judges of all races. The results in the first column come from an analysis of data from all of the courthouses where Criminal Division judges hear felony cases in Cook County, and the results in the second, third, and fourth columns are from analyses of Bridgeview, Skokie, or Chicago cases, respectively.

Whether judges adjust their sentencing as their colleagues become more racially diverse because they become more aware of the salience of race, positively update their opinions of Black defendants, or because they desire to render decisions that do not appear discriminatory to a more diverse set of colleagues, judges must have the opportunity to see and interact with those colleagues who add to the bench's diversity in order for it to affect their behavior. Criminal Division judges hearing cases in the suburban courthouses do not see their colleagues in Chicago (where the vast majority of cases are heard) on a regular basis. Rather, they see the other judges—handling other legal matters—with whom they share a municipal courthouse. Criminal Division judges in Bridgeview and Skokie are colleagues with the Criminal Division judges in Chicago in name only, and all but one of the Black Criminal Division judges throughout the entire study period have had courtrooms in Chicago's Leighton Building. We should, therefore, not expect judges in the suburban courthouses to be sensitive to shifts in Black judicial representation in the Criminal Division. The second and third columns of Table 4 provide support for this expectation—the coefficient for the measure of racial diversity is not statistically significant in the analyses of data from either of the suburban courthouses. The fourth column of Table 4 reports the

TABLE 4. Racial Diversity and Incarceration across Courthouses

| | Incarcerate | Incarcerate | Incarcerate | Incarcerate |
|--------------------|------------------------|------------------------|------------------------|------------------------|
| | 1 | 2 | 3 | 4 |
| Percent Bl. judges | -0.00173 (0.00135) | -0.00137 (0.00489) | 0.00820 (0.00687) | -0.00273* (0.00109) |
| Black defendant | 0.144* (0.00983) | 0.0957* (0.0183) | 0.136* (0.0269) | 0.148* (0.00974) |
| Latino def. | 0.00312 (0.00782) | -0.0713 (0.0412) | 0.0464 (0.0359) | -0.00228 (0.00695) |
| Oth. race def. | -0.0987* (0.0197) | -0.0109 (0.0647) | -0.134* (0.0201) | -0.0979* (0.0230) |
| Defendant age | 0.00290* (0.000231) | 0.00221* (0.000560) | 0.00192+ (0.000974) | 0.00308* (0.000251) |
| Female defendant | -0.111* (0.00686) | -0.119* (0.0145) | -0.0654* (0.0221) | -0.114* (0.00660) |
| Offense class | 0.0149* (0.00413) | 0.0484+ (0.0207) | 0.0375* (0.00778) | 0.00976* (0.00412) |
| Ret. election | 0.00895 (0.0168) | 0.0167 (0.0509) | -0.112+ (0.0484) | 0.0204 (0.0165) |
| Year trend | -0.00726* (0.00166) | -0.00828 (0.00550) | -0.0213* (0.00654) | -0.00608* (0.00163) |
| Constant | 0.300* (0.0277) | 0.215+ (0.0928) | 0.220 (0.150) | 0.324* (0.0278) |
| No. of obs. | 382,887 | 33,571 | 27,836 | 320,982 |
| R ² | 0.0303 | 0.0336 | 0.0880 | 0.0295 |
| Courthouse | All courthouses | Bridgeview | Skokie | Chicago |

Note: Judge-level clustered standard errors in parentheses.

Outcome is incarceration sentence (1,0).

+ $p < 0.10$, * $p < 0.05$.

results from a model analyzing just cases heard in the Chicago courthouse. The coefficient on the measure of racial diversity among judges is statistically significant—a 1-percentage point increase in Black judicial representation leads to a 0.3-percentage point decrease in the probability of an incarceration sentence.

The results included in Table 5 come from analyses of just those cases heard in Chicago's Leighton Building. For these models, and all that follow, the percent of judges who are Black is calculated just among Criminal Division judges who hear cases in Chicago's Leighton Building—colleagues working in the same location. The results in the first column are from a pooled linear probability model, whereas the results in the second and third columns are from Equations 2 and 3, incorporating judge-level fixed effects.¹⁰ Importantly, the model in the first column includes measures for judge race and ethnicity, gender, and partisan affiliation, and whether a judge was a member of the Criminal Division in the previous year (to account for judge turnover).

Case assignment to a Black judge (rather than a white judge) is associated with a 5-percentage point decrease in the probability of an incarceration sentence, and case assignment to a returning Criminal Division judge

(rather than a new judge) is associated with a 6-percentage point increase in the probability of an incarceration sentence. These measures are not included in the other columns, because those models include judge fixed effects to account for important characteristics across judges that may relate to their sentencing decisions, feelings about race, and responses to racial diversity among colleagues, including party identification and previous legal experience, for example.

The second column of Table 5 shows no relationship between racial diversity among judges and sentencing when incorporating judge fixed effects. However, the third column of Table 5 considers whether defendants' race may moderate this relationship, as the theory suggests, with the inclusion of an interaction term between the percent of judges in the courthouse who are Black and an indicator for whether the defendant in a case is Black. Therefore, the coefficient on the main term represents the relationship between racial diversity on the bench and sentencing in cases with white defendants and the coefficient on the interaction term represents the additional impact of racial diversity on sentencing in cases with Black defendants (regardless of the race of the judge). The coefficient on the main term for the percent of judges in the courthouse who are Black is not statistically significant (column 3 of Table 5), suggesting that there is not a relationship between racial diversity among judges and incarceration sentences in cases with white defendants. However, the coefficient on the

¹⁰ There are fewer observations in column 1 due to inclusion of additional covariates and related list-wise deletion.

TABLE 5. Racial Diversity, Incarceration, and Sentence Length in Chicago

| | Incarcerate | Incarcerate | Incarcerate | Sen. length (days) | Sen. length (days) |
|--------------------------------------|------------------------|------------------------|------------------------|--------------------|--------------------|
| | 1 | 2 | 3 | 4 | 5 |
| Percent Bl. judges | -0.00517* (0.00167) | -0.00161 (0.00116) | 0.00185 (0.00139) | -11.42* (3.357) | -7.362 (10.37) |
| Black defendant | 0.144* (0.00926) | 0.141* (0.0101) | 0.216* (0.0173) | -45.70 (49.83) | 42.61 (200.5) |
| Latino def. | -0.00959 (0.00930) | -0.00222 (0.00672) | -0.00156 (0.00660) | -62.78 (51.08) | -62.01 (52.30) |
| Oth. race def. | -0.104* (0.0284) | -0.0959* (0.0215) | -0.0857* (0.0214) | -192.9* (62.61) | -180.9* (76.64) |
| Defendant age | 0.00356* (0.000376) | 0.00301* (0.000247) | 0.00303* (0.000246) | 5.667* (0.450) | 5.691* (0.447) |
| Female defendant | -0.117* (0.00924) | -0.115* (0.00639) | -0.116* (0.00640) | -182.2* (12.32) | -182.4* (12.17) |
| Black judge | -0.0537* (0.0211) | | | | |
| Latinx judge | 0.0120 (0.0225) | | | | |
| Female judge | 0.0102 (0.0304) | | | | |
| Dem. judge | 0.0164 (0.0210) | | | | |
| C.D. judge in prev. year | 0.0568* (0.0162) | | | | |
| Offense class | 0.00780 (0.00505) | 0.0108* (0.00382) | 0.0107* (0.00382) | 219.1* (8.269) | 219.0* (8.310) |
| Ret. election | -0.00310 (0.0158) | -0.00243 (0.0109) | -0.00196 (0.0109) | 70.54 (44.63) | 71.11 (44.81) |
| Year trend | -0.00684* (0.00186) | -0.00647* (0.00172) | -0.00647* (0.00172) | -10.51* (3.316) | -10.51* (3.312) |
| Black defendant × percent Bl. judges | | | -0.00442* (0.00120) | | -5.204 (9.490) |
| Constant | 0.344* (0.0434) | 0.310* (0.0264) | 0.251* (0.0279) | -217.8* (103.2) | -286.7 (216.4) |
| No. of obs. | 179,380 | 320,982 | 320,982 | 321,836 | 321,836 |
| R ² | 0.0340 | 0.0258 | 0.0261 | 0.0128 | 0.0128 |
| Judge FE | No | Yes | Yes | Yes | Yes |
| Courthouse | Chicago | Chicago | Chicago | Chicago | Chicago |

Note: Judge-level clustered standard errors in parentheses.

Outcome is incarceration sentence (1,0) or sentence length in days.

+ $p < 0.10$, * $p < 0.05$.

interaction term is statistically significant, suggesting that Black judicial representation is related to sentencing in cases with Black defendants. More specifically, a 1-percentage point increase in the percent of Black judges on the bench is associated with a 0.26 percentage-point decrease in the probability of incarceration in cases with Black defendants.

Racial diversity among judges does not change how judges sentence in cases with white defendants, but it decreases punitiveness in cases with Black defendants, thereby decreasing the Black–white gap in the probability of an incarceration sentence. For example, if the number of Black judges in the Leighton Building were to increase from 3 (10% of the 30 judges with courtrooms in Leighton in a given year) to 6 (20% of the judges), the difference in the probability of an incarceration sentence between

Black and white defendants would decrease from 17 percentage points to 13 percentage points. This decrease in inequality is due to the probability of incarceration in cases with Black defendants decreasing from 52% to 49% and a 1-percentage point increase (though not statistically significant) in the probability of incarceration in cases with white defendants. This may seem like a small decrease, but roughly 8,667 people were convicted of felonies in Cook County, IL, in 2020. If 75% of those defendants were Black (1-percentage point less than in the data used for this study), that would suggest a potential decrease in the number of incarcerations from 3,380 to 3,185, meaning 195 additional people would have their freedom. If each of those 195 people would have been sentenced to 2 years in prison (the average sentence length in the data), that would

TABLE 6. Racial Diversity, Incarceration, and Judge Race in Chicago

| | Incarcerate | Incarcerate | Incarcerate | Incarcerate | Incarcerate | Incarcerate |
|---|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Percent Bl. judges | -0.00333* (0.00150) | -0.00230 (0.00146) | 0.00175 (0.00178) | -0.00395 (0.00237) | -0.00280 (0.00299) | -0.000754 (0.00362) |
| Black defendant | 0.147* (0.0133) | 0.138* (0.0136) | 0.226* (0.0216) | 0.127* (0.0155) | 0.129* (0.0167) | 0.176* (0.0426) |
| Latino def. | -0.00276 (0.00899) | -0.00392 (0.00858) | -0.00292 (0.00836) | -0.0165 (0.0162) | -0.00754 (0.0165) | -0.00757 (0.0165) |
| Oth. race def. | -0.103* (0.0299) | -0.105* (0.0271) | -0.0938* (0.0271) | -0.0848* (0.0313) | -0.0837* (0.0378) | -0.0800* (0.0357) |
| Defendant age | 0.00290* (0.000323) | 0.00284* (0.000324) | 0.00286 (0.000322) | 0.00379* (0.000506) | 0.00370* (0.000507) | 0.00371* (0.000501) |
| Female defendant | -0.109* (0.00800) | -0.110* (0.00769) | -0.110* (0.00771) | -0.132* (0.0159) | -0.130* (0.0160) | -0.130* (0.0159) |
| Offense class | 0.00822+ (0.00474) | 0.00963* (0.00450) | 0.00953* (0.00450) | 0.0162+ (0.00897) | 0.0160+ (0.00897) | 0.0159+ (0.00894) |
| Ret. election | 0.0300 (0.0212) | 0.000674 (0.0132) | 0.00138 (0.0130) | -0.00872 (0.0272) | -0.0153 (0.0243) | -0.0152 (0.0242) |
| Year trend | -0.00537* (0.00220) | -0.00598 (0.00198) | -0.00599* (0.00197) | -0.00935* (0.00243) | -0.0132* (0.00219) | -0.0132* (0.00219) |
| Black defendant × percent Bl. judges | | | -0.00521* (0.00159) | | | -0.00264 (0.00272) |
| Constant | 0.335* (0.0342) | 0.327* (0.0323) | 0.259* (0.0337) | 0.318* (0.0530) | 0.334* (0.0727) | 0.297* (0.0806) |
| Judge FE | No | Yes | Yes | No | Yes | Yes |
| Courthouse | Chicago | Chicago | Chicago | Chicago | Chicago | Chicago |
| Judge race | White | White | White | Black | Black | Black |
| No. of obs. | 212,211 | 212,211 | 212,211 | 60,200 | 60,200 | 60,200 |
| R ² | 0.0282 | 0.0249 | 0.0253 | 0.0354 | 0.0340 | 0.0341 |

Note: Judge-level clustered standard errors in parentheses.

Outcome is incarceration sentence (1,0).

+ $p < 0.10$, * $p < 0.05$.

also reduce the state's incarceration spending by over 13 million dollars.¹¹

The last two columns in Table 5 present results from models considering the relationship between racial diversity among judges and sentence length, measured in days. In the fourth column, the coefficient on the percent of judges in the courthouse who are Black is statistically significant and suggests that a 1-percentage point increase in Black judicial representation leads to an 11-day decrease in sentence length. The coefficients on the indicators for Black and Latinx defendants are not statistically significant, and the final column in Table 5 shows that defendant race does not moderate the relationship between racial diversity among judges and judges' sentencing decisions.¹²

¹¹ According to information available at <https://www.illinoiscourts.gov> and <https://www.vera.org/publications/price-of-prisons-2015-state-spending-trends>.

¹² The coefficient on the indicator for defendants of other races is statistically significant and substantively large across the models. The defendants in these cases were mostly identified as Asian and also included defendants who were identified as Indigenous and Middle Eastern in the data. Only 0.34% of cases had a defendant who is included in this category.

The results in Table 6 incorporate the role of judges' racial identities into the analyses, illustrating how this characteristic shapes the relationship between racial diversity among judges and sentencing decisions. The first three columns present results from analyses of just those cases heard by white judges, and the last three columns include results from analyses of cases heard by Black judges. The dependent variable in all of these models is the dichotomous measure indicating whether the defendant in a case was sentenced to incarceration. The coefficient on the measure of Black judicial representation in the first column shows that white judges render fewer incarceration sentences as they gain Black colleagues. The coefficient in the second column is a smaller and not statistically significant. However, the model in the third column includes an interaction term between the measure of racial diversity among judges and whether the defendant in a case is Black. The coefficient on the percent of Black judges in column 3 of Table 6 is not statistically significant, suggesting that white judges do not alter their sentencing in cases with white defendants as they gain more Black colleagues. The coefficient on the interaction term, on the other hand, is statistically significant, suggesting that, for white judges, a

TABLE 7. Predicted Probability of Incarceration by Defendant Race for Cases Heard by White Judges

| % Black judges | Black def. | | White def. | |
|----------------|------------|----------------|------------|----------------|
| | Prob. inc. | 95% CI | Prob. inc. | 95% CI |
| 8.000 | 0.527 | [0.501, 0.552] | 0.342 | [0.310, 0.375] |
| 15.000 | 0.502 | [0.496, 0.509] | 0.354 | [0.335, 0.374] |
| 20.500 | 0.483 | [0.470, 0.497] | 0.364 | [0.337, 0.390] |
| 22.500 | 0.476 | [0.457, 0.496] | 0.368 | [0.336, 0.399] |

Note: Probabilities at max., min., and IQR of % of Black judges.

1-percentage point increase in Black judicial representation leads to a 0.35-percentage point decrease in the probability of incarceration in cases with Black defendants.

Table 7 includes predicted probabilities of incarceration for Black and white defendants derived from the interaction between racial diversity among judges and defendant race (with other variables held at their means) reported in column 3 of Table 6. The probability of incarceration decreases significantly for Black defendants as white judges gain Black colleagues, whereas the probability of incarceration in cases with white defendants remains unchanged. When Black judges represent 8% of the judges in the Leighton building (the lowest level of Black judicial representation in the time period), the probability of an incarceration sentence in cases with Black defendants heard by white judges is 53%. When Black judicial representation is at its highest, 22.5%, the probability of incarceration in cases with Black defendants heard by white judges is 48%. These results for white judges are consistent with a theory where white judges feel pressure to behave more equitably as they gain Black colleagues, a theory in which race becomes more salient to white judges as they gain Black colleagues, or a theory in which white judges update their beliefs about Black defendants as they gain Black colleagues.

The results in Table 6 do not suggest that Black judges change their behavior as they gain Black colleagues. However, these results may also be consistent with a theory where higher levels of racial diversity among colleagues are required for racial-minority-group members to alter their behavior in response to greater representation within their group of colleagues. Judges' responses to Black judicial representation in their sentencing decisions are distinct from the role of time in decreasing judges' general punitiveness (see Supplementary Material), and they are also distinct from any direct effect of a judge's race on their sentencing decisions. In fact, unlike racial diversity among judges, judges' racial identities, alone, do not appear to impact racial disparities in sentencing (see Supplementary Material). The following subsection attempts to provide additional clarity with respect to the mechanisms underlying the relationship between racial diversity among judges and sentencing.

Considering Mechanisms

The results presented so far provide evidence of a relationship between racial diversity among judges and trial judges' sentencing decisions. The results in Table 4 also provide support for one of the expectations derived from the theory—the relationship between racial diversity among judges and sentencing decisions is only present among judges who work in the same location as their colleagues whose presence increases racial diversity on the bench. This subsection sheds further light on the mechanisms that may underly this relationship.

I previously identified three general pathways through which racial diversity among colleagues might affect white judges' sentencing decisions: pressure not to appear discriminatory; an increased awareness of the salience of race in sentencing; and updated beliefs about race and racial out-group members. A variety of interactions within the courthouse and among judges might support one or more of these pathways.

If fear of exhibiting behavior that appears to be discriminatory drives white judges' increased leniency as they gain Black colleagues, we might expect to see shifts in sentencing behavior among white judges most likely to feel concern that Black colleagues might observe, and potentially judge, their behavior. For example, white judges who gain Black colleagues as floor mates might be especially sensitive to increases in racial diversity within their group of colleagues, since courthouse floor mates may be colleagues that judges' see often but with whom they might otherwise not choose to spend time. Results from analyses incorporating judges' courtroom locations (included in the Supplementary Material), suggests that these sorts of interactions do not drive the relationship between racial diversity among judges and sentencing uncovered above, and, therefore, do not provide support for fear of appearing discriminatory as a mechanism. However, other types of interactions might allow for this mechanism or others to drive the relationship between racial diversity among judges' and sentencing decisions.

Trial judges typically have their own courtrooms (as is the case in Cook County, IL) where they hear and sentence cases on their own, apart from their colleagues. There are many formal and informal ways

that judges can interact outside of their courtrooms. Some of the formal, potentially required, interactions include judicial team assignments and trainings. Some courts assign trial judges to teams of senior and junior judges. These teams may review information from presiding judges and discuss the business of the court. This is an environment where white judges may feel pressure to exhibit behavior in their courtrooms that will not appear to be discriminatory to an increasingly racially diverse team. However, it is also an environment where discussions of sentencing disparities, for example, might increase the salience of race in white judges' sentencing decisions. Trial judges are also often required to attend trainings on the latest trends and practices with respect to sentencing as well as workshops on bias and disparities. While attending such meetings with an increasingly diverse group of colleagues may lead white judges to feel pressure to alter their sentencing behavior, these meetings might also be environments where white judges learn more about the role of race and racism in sentencing, specifically, or the criminal legal system, more generally. Finally, judges may see and interact with each other in the courthouse, as they come and go and throughout the day. They may seek each others' counsel. They may even interact outside of work. All of these personal interactions, when they occur between Black and white judges, especially over long periods of time, could lead white judges to have more positive opinions about racial out-group members, in general, which could impact sentencing decisions. These type of interactions could also, depending on the content of conversations that occur, lead to an increased salience of race in white judges' sentencing decisions.

Interviews with trial judges would be especially useful for identifying the mechanisms driving the relationship between racial diversity among judges and judges' sentencing decisions. Analyses of such data can shed light on judicial interactions that allow colleague group composition to influence decision making, including: whether judges see their colleagues often, formally or informally; the subject matter covered and agendas at the required meetings and trainings judges attend with their colleagues; and the types of conversations judges have with their colleagues, whether they discuss the cases they hear or other topics related to those cases.

In fact, preliminary interviews with current and former trial court judges from multiple locations highlight several ways that judges meaningfully interact with one another. Judges spoke of informal conversations in the courthouse, required trainings on sentencing, and asking their colleagues' thoughts on how they had decided previous cases. Judges also noted that shifts in the composition of their group of colleagues altered the courthouse environment. For the most part, the types of interactions mentioned in these interviews involved conversations with colleagues, which could mean regular conversations lead to a general updating of beliefs among white judges or that the content of the conversations is important, potentially increasing the salience of race in sentencing or highlighting disparities, for

example. Future interviews might also shed light on whether and how gaining Black colleagues impacts Black judges' sentencing decisions. There are too few non-white judges in most courthouses to allow for meaningful quantitative analyses of their decisions, and there are many ways that Black judges might conceive of their role as judge, representative, and co-racial-group member with many of the defendants in their courtrooms.

Experimental data can further identify whether interacting with colleagues from a different racial group, alone, or the content of the conversations during those interactions influences white judges' sentencing decisions. Randomly assigning respondents to racially diverse or racially homogenous group activities before they engage in independent sentencing exercises would generate data with which researchers might disentangle the importance of group composition from relevant conversation content, identifying whether both are required in order for racial diversity among judges to affect judges' sentencing decisions. Researchers might also evaluate the effect of group composition on the nature of interactions that occur during the group activity, identifying whether the themes brought up in conversation, for example, vary with group composition.

DISCUSSION AND CONCLUSION

Diversity with respect to background, ideology, gender, and race can greatly alter any environment, and the analyses presented above show that there is much at stake when considering racial diversity among trial court judges. First, the impact of such diversity extends beyond the behavior of any one judge whose identity might make the bench more racially diverse. Second, racial diversity among members of the judiciary has the potential to do more than instill a sense of institutional legitimacy among those most likely to appear in criminal courts as defendants (Scherer and Curry 2010); it may have the ability to impact the lives and freedom of individuals who interact with the institution directly and reduce incarceration. The results show that increasing the number of judges who look like the majority of defendants could increase the likelihood that defendants of different races receive more similar sentences and reduce incarceration. Finally, these findings have important implications for the struggle to address mass incarceration, disparate outcomes for non-white people throughout the carceral system, and demands for and implications of diversity (along multiple dimensions) within institutions.

This article moves beyond previous scholarship evaluating the relationship between racial diversity among judges and judicial decision making by providing an individual judge-level analysis of this relationship, understanding that each judge's response will be different and conditioned by their own identity. Though the analyses cannot definitively determine the mechanisms, they do provide some support that positive,

repeated contact with Black colleagues and/or the increased salience of racism in the criminal legal system drives white judges' responses to increases in racial diversity among their colleagues.

If social pressure to exhibit behavior that is acceptable to an increasingly diverse group drives white judges' behavior, then we might expect them to sentence less disparately only, or especially, when that diversity is most noticeable—when Black judges' have courtrooms nearby. In this situation, white judges may have no choice but to see Black colleagues frequently in the hallway, for example, and, therefore, be reminded that these colleagues are nearby and potentially observing them. The results of a floormate analysis (included in the Supplementary Material) do not suggest that this is the case. Rather, white judges appear to become more punitive toward Black defendants when they have many Black floormates.

Results from the main analyses, however, support the idea that judges respond to racial diversity among colleagues at the courthouse level, suggesting that shifts in the racial identities represented in the judiciary alter the context in which judges work and how they approach their jobs. For white judges, this could be because, over time, as they are exposed to more Black colleagues and have the opportunity to interact with them, they either update their personally held beliefs about race or the role of racism in the criminal legal system becomes more salient to them. However, further disentangling the nuances of this relationship requires additional research. Observations of court operations could be especially helpful to identify how and where judges interact. It is possible that some interactions that cannot be measured with the type of data used here might create the type of social pressure that would lead white judges to alter their sentencing behavior. For example, on some courts, judges are assigned to teams in which they discuss the court's work and receive communication from the presiding judge. Interviews with judges and court staff may also illuminate how judges interact with their colleagues, the types of relationships they develop, and how those interactions and relationships influence their work.

This article presents evidence from analyses of state trial court data. State trial court judges handle the vast majority of felony cases in the United States, and the factors most likely to contribute to the observed relationship between racial diversity among judges and sentencing are, by no means, unique to Cook County, IL. The theory and potential mechanisms underlying the relationship suggest that a similar relationship between racial (or ethnic) diversity among judges and disparity reduction in criminal sentencing could emerge in settings where there are large racial disparities in sentencing, and members of the racial group most frequently incarcerated are relatively underrepresented among the judiciary. These conditions are met in many places throughout the United States, and analyses of data from Harris County, TX (included in the Supplementary Material) yield similar results to those reported here.

Black people are more frequently incarcerated than white people in every state in the United States.¹³ The judiciary remains mostly white in every state except for Hawaii and also the District of Columbia. The Black–white incarceration disparity will obviously vary within a state, as will Black judicial representation. However, counties where this disparity is greatest and where Black judges are more likely to have and seek seats are those where populations are usually most racially diverse. These might be counties that are more urban rather than rural, for example, and that tend to be more densely populated and have higher crime rates. Such a description applies to very many urban (and suburban) areas in the United States.

Throughout this article, I have focused on the Black–white sentencing disparity and on Black and white judges, which deserve close attention considering Black Americans' increased likelihood of contact with all segments of the criminal legal system, and Black Americans' general lack of representation on the judiciary. But future research might consider the relationship between Latinx judicial representation and sentencing outcomes for Latinx defendants, especially in settings where there are disparities in sentencing between Latinx and white individuals, Latinx judges remain in the minority, and Latinx judges are likely to have and seek seats on the bench.

The Latinx–white incarceration disparity is not as stark as the Black–white disparity, but Latinx individuals are still more frequently incarcerated than white individuals throughout the United States. This is true in New Mexico, Arizona, and Colorado, three states which also have significant representation of non-white people on the Bench.¹⁴ These are prime examples of states with criminal courts that might produce results similar to those presented here, but for the sentencing of Latinx defendants.

Beyond what they suggest about judicial decision making and criminal legal outcomes, a major contribution of the findings is how they inform our conception of racial diversity in institutions. This article reinforces the importance of acknowledging that diversity is a group-level characteristic, a definitionally and analytically important distinction. An individual cannot be “diverse,” and reducing evaluations of racial diversity to comparisons of non-white and white individuals' behavior reinforces the belief that white individuals' behavior represents an accepted baseline while failing to capture all the ways racial diversity might influence institutional outcomes. In fact, this article shows that, in trial courts, racial diversity is most influential on white judges' behavior. These findings suggest a new focus for efforts to increase racial diversity in institutions, which have typically

¹³ According to 2016 data from The Sentencing Project and the U.S. Bureau of Justice Statistics: <https://www.sentencingproject.org/criminal-justice-facts/>.

¹⁴ According to data from The Sentencing Project: <https://www.sentencingproject.org/criminal-justice-facts/> and data from the American Constitution Society: <https://www.acslaw.org/analysis/reports/gavel-gap/>.

focused on inclusion and representation—the potential to shift institutional power balances and alter behavior among majority-group members.

SUPPLEMENTARY MATERIAL

To view supplementary material for this article, please visit <https://doi.org/10.1017/S0003055423000552>.

DATA AVAILABILITY STATEMENT

Research documentation and data that support the findings of this study are openly available at the American Political Science Review: <https://doi.org/10.7910/DVN/YO5J2S>. Limitations on data availability are discussed in the Supplementary Material.

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CONFLICT OF INTERESTS

The author declares no ethical issues or conflicts of interests in this research.

ETHICAL STANDARDS

The author declares the human subjects research in this article was deemed exempt from review by the Yale University IRB.

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