The Effects of Racial Diversity in Citizen Decision-Making Bodies

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Abstract

Many citizen decision-making bodies, from juries to boards, have the potential to represent racial minority views because they must deliberate and decide unanimously. However, little is known about the effects of racial diversity on group decisions. Existing studies use observational data, include too few people of color (POC), or cannot disentangle race and preferences. We study one such body, the civil jury, which can check economic actors whose actions disproportionately affect minoritized populations. We analyze 2,694 citizens randomly assigned to 449 mock juries tasked with deciding punitive damages against corporations. The number of POCs on a jury affects private opinions, even accounting for other group and individual characteristics. However, group decisions are less affected, because POC dissenters carry less influence than White dissenters: POCs can change minds more easily than votes. Deliberation and veto power do not eliminate racial barriers to substantive representation.

Keywords: citizen decision-making, racial diversity, small-group deliberation, influence, jury **Short Title:** The Effects of Racial Diversity in Citizen Decision-Making Bodies

Supplementary material for this article is available in the appendix in the online edition. Replication files are available in the JOP Dataverse (https://dataverse.harvard.edu/dataverse/jop). The empirical analysis has been successfully replicated by the JOP replication analyst. Ours is secondary analysis of data collected by a different group of scholars for a different purpose, but to the best of our knowledge, data collection followed relevant guidelines for human subjects research. Financial support for this research was provided by Princeton University, Brigham Young University, and the Radcliffe Institute at Harvard University.

Introduction

People of color (POCs) are numerically under-represented in citizens' decision-making bodies, including local boards, committees, town meetings, and juries (Hunt 2015; Sommers 2008, 66). If racial and ethnic minorities were present in larger numbers, would group decisions better reflect their preferences?¹ This question is vital to our understanding of race and representation. It builds on the growing attention to racial minority representation in other institutions, including legislatures and judicial panels, and observational studies of racial diversity in public meetings (Collins 2021; Einstein, Glick, and Palmer 2019; Harris and Sen 2019; Kastellec 2013; Nuamah and Ogorzalek 2021; Sahn Forthcoming). However, even the extensive literature on juries has produced almost no causal studies of racial composition effects on member or group decisions (Sommers 2008). Consequently, we know little about the causal effects of racial diversity in citizens' decision-making bodies on either group members or group decisions.

There is reason to expect that racial diversity will affect member views and group outcomes. In many settings, from juries to town meetings, members are expected to use open-minded deliberation and reach consensus (Gastil and Weiser 2010; Hans, Gastil, and Feller 2014; Barabas 2004; Hastie, Penrod, and Pennington 1983; Mansbridge 1983), features that represent optimal conditions for meaningful interracial conversation and minority influence (Cramer 2007). These bodies thus offer a rare opportunity for the racial majority to hear the views of racial minorities, and to act on those views. In that sense, these institutions are ideally positioned to represent the views of people of color.

However, there is also reason to expect that racial diversity might not affect these group decisions. Race is among the strongest status hierarchies in American life (Soss and Weaver 2017).

¹We use the term "people of color" (POCs) instead of Nonwhite because it is more inclusive and better recognizes the agency of racial minorities, rather than defining them as the absence of the majority racial group. Pérez (2021) shows that members of distinct racial and ethnic minority groups share a common identity as people of color and that this identity affects political behavior, especially when made salient by contrast with the behavior and attitudes of Whites. We operationalize POCs as all racial or ethnic categories other than White, though in our sample, POC participants are predominantly Black or Hispanic.

Status minority members may not feel free to voice their views, and when they do, they are not always heard (Young 1985). Status disadvantage often finds its way into even ostensibly egalitarian settings (Karpowitz and Mendelberg 2014). In addition, because people of color are often a small minority of those in the room, they may be too few to shift a group's median preference, an important predictor of group decisions. In fact, the selection of members to powerful bodies such as juries often systematically restricts access to people of color. In sum, whether from flawed deliberation or because of small numbers, racial minorities may face barriers to substantive representation even when they are present.

We ask how racial diversity affects the preferences and decisions of deliberating groups of citizens. As an important instance of these groups, we focus on jury decisions in civil cases. Juries exercise significant power, and civil juries are a key institution of democratic representation (Hans, Gastil, and Feller 2014; Schwartzberg 2018). As Hans, Gastil, and Feller (2014) put it, "civil trials often have a starkly political dimension, such as when they concern an alleged civil rights violation or weigh punitive damages against a corporation that polluted public lands" (698). Juries' civil judgments redistribute substantial sums from large economic actors, acting as a significant check on business power (Gifford and Jones 2016). Civil awards are so large that they equal approximately 15 percent of states' expenditures (Appendix A).

These awards are matters of particular consequence for minority communities. Blacks and Hispanics are more supportive of punishing corporate harm (Bornstein and Rajki 1994; Diamond, Saks, and Landsman 1998; Unnever, Benson, and Cullen 2008), a tendency that helps explain why they are twice as likely to be excluded from civil juries by the defense as by the plaintiff (Clark et al. 2007). These views of corporate culpability fit within a more general pattern. People of color perceive more risk in their environment and tend to hold more structural attributions for harm (Kahan et al. 2007). Given these differences of opinion, the question becomes how much substantive representation the views of people of color have in these decisions.

We analyze data from a mock-jury experiment that randomly assigned 2,694 jury-eligible citizens to 449 six-member juries (Sunstein et al. 2002). Random assignment eliminates selection confounds and allows us to estimate the causal effect of jury composition. In addition, the data includes individuals' private pre-deliberation and post-deliberation preferences, as well as the jury verdict, allowing us to analyze the influence of both POC and White individuals with various

preferences on both the jury and its individual members. The jurors were tasked with decisions about punitive damages against corporations, judgments that implicate issues such as redistribution, the free market, and corporate responsibility. They therefore shed light on citizens' decisions about matters of public concern. (We address issues of external validity below.)

We find that racial diversity affects individual preferences, even after controlling for other individual and group characteristics. Both White and POC jurors are affected. However, the effect of racial diversity on group *decisions* is inconsistent, partly because dissenting POCs exert markedly less influence than dissenting Whites.

The results speak to descriptive and substantive representation in juries — and elsewhere. Racial diversity can matter: POCs can affect other group members' preferences, and the more POCs, the bigger the effect. However, racial diversity does not readily translate into equal substantive representation. Documenting this dynamic can help us understand how far real deliberative settings fall from what they would be if they were more fully representative. The most readily generalizable real setting is the jury, but the situation plausibly generalizes to other settings where small groups deliberate and decide on matters of public concern — settings that are ubiquitous in American political life.

These findings also contribute to the proliferating literature on deliberative democracy. A key question about deliberation is how well it represents the views of people with disadvantaged social identities. This study highlights both the potential and the limits of deliberation's egalitarian promise. Even consensus rules that promote equal voice in deliberation have limited effects when POCs remain a numerical minority in a group.

To our knowledge, this study offers the first large-scale experimental evidence on how a group's racial composition affects White and POC members' preferences and the group's decision. Despite the central place of participatory and deliberative institutions in democracy, little is known about the causal effect of racial diversity in such institutions. More generally, political scientists have paid little attention to the effect of racial *composition* — as compared to *individual* race — on citizens' group decisions. This study is the first we know of to do so. It is also the first experiment to assess these effects on a large sample of people of color. In addition, we present novel methods of exploring the influence of individuals whose pre-deliberation preferences dissent from the rest of the group. The results suggest that POCs can shift Whites' views, yet the shift is too small to affect

group decisions.

Group Composition, Deliberation, and Juries

For some time, democratic theorists have been in the midst of a "deliberative turn" (Chambers 2003, 307).² As Gutmann and Thompson (2004) write, "No subject has been more discussed in political theory in the last two decades" (vii). Deliberation holds the promise of more rational, cooperative, and egalitarian democratic politics.

Yet theorists have not devoted much attention to social diversity in deliberation, with a few notable exceptions (Deveaux 2018; Fraser 1992; Mansbridge 1999; Sanders 1997; Young 2000). While theorists posit that deliberation must represent social identities equally, they typically do not deeply consider how social diversity in the deliberating group affects that representation (but see Beauvais 2018). When they consider identity diversity, they often conceptualize it as an individual characteristic rather than as an aspect of the group.

Likewise, empirical studies of deliberation tend to pay little attention to features of the deliberating group, such as its demographic diversity (e.g., Barabas 2004; but see Karpowitz and Mendelberg 2014). When social identity is investigated, it is often analyzed as a characteristic of individual deliberators (e.g., Myers et al. 2020). When scholars of deliberation have examined group diversity, they have largely concluded that it does not matter much to the outcomes of deliberation, though most of these studies examine one particular and unique context — the Deliberative Poll (Farrar et al. 2009; Price and Cappella 2002; Sumaktoyo, Nickerson, and Keane 2017). Furthermore, there are virtually no large studies of the causal effect of racial diversity on groups of citizens discussing matters of common concern (but see Collins 2021; Nuamah and Ogorzalek 2021).

Are the preferences of people with disadvantaged social identities reflected in group decisions? How much influence do those members have on fellow members? These questions are seldom addressed in studies of deliberating citizens' groups.

To study the effects of diverse deliberating groups on citizen deliberators, we turn to the jury, for several reasons. First, juries are a common venue for citizen deliberation. Many Americans

²See also Fishkin (1997), Habermas (1996).

serve on a jury in their lifetime (Gastil and Weiser 2010). Second, juries have a special place in deliberative democracy. The jury is where citizens are expected to express their views, listen openmindedly, and rely on facts and arguments. Third, juries are expected to reach just verdicts, and this expectation assumes the egalitarian representation of the community (Schwartzberg 2018). Fourth, juries often deliberate on matters that are implicitly political, such as the level of social responsibility owed by business, the consideration society owes its vulnerable and dispossessed, or the efficacy of punishment (Hans, Gastil, and Feller 2014). Finally, juries make legally binding decisions with meaningful implications. In other words, they are powerful. Representation on juries thus matters for democratic political representation broadly conceived.

The Effects of Identity Diversity

How might the presence of disadvantaged identity members in a group shift the group's views? First, identity diversity could matter because identity directly shapes the preferences deliberators bring with them. That is, the number of members with a particular identity is a proxy for the number of people who favor or oppose a particular decision at the start of the deliberation. In most juries, the verdict conforms to the majority pre-deliberation preference (Sommers and Ellsworth 2001; Tanford and Penrod 1986). This is the simplest and most direct way that identity composition could affect the group decision.

Second, identity diversity may matter indirectly, by affecting the deliberation. Deliberation is an opportunity to offer reasons or testimonials that change others' preferences. It is a setting where participants may change their minds, or come to a more crystallized preference (Gutmann and Thompson 2004). Identity diversity could affect the arguments or experiences participants voice, and the frequency with which these are emphasized (Myers 2017; Cappella, Price, and Nir 2002). The more often a particular view is voiced, the more likely that view is to persuade participants (Mendelberg 2002). In this mechanism, identity diversity matters by changing the balance of persuasive arguments and the substance of the discourse. In sum, through either mechanism—the weight of prior preferences or the substance of discussion—racial diversity could change jurors' views and ultimately the jury verdict.

However, racial diversity may not live up to its egalitarian promise, because racial status differences may get in the way. Racial descriptive representation does not always lead to substantive representation (Haynie 2001). As York and Cornwell (2006) put it, "Influence in groups flows to persons in historically advantaged status categories" (457).³

One way racial status may limit the effect of diversity is through self-silencing. People of color may stay silent or express views other than their own when in conversation with Whites. According to Davis (1997), the accumulated life experience of many African Americans living in a racially hierarchical society may lead them to "conceal their true political beliefs and place self-imposed limits on their freedom of expression" when interacting with White strangers (309). For example, Black survey respondents report opinions closer to the average White opinion when interviewed by White interviewers, especially face-to-face, where race is visible and salient (White and Laird 2020). Evidence for these dynamics can also be found in some jury research. In a study of actual jury participation in Arizona, the site of our own study, jurors of color spoke less than White jurors (Rose and Diamond 2008). In addition, in post-trial interviews, White Arizona jurors reported greater satisfaction with their jury experience (Antonio and Hans 2001).

This self-censorship occurs especially when the identity majority directs silencing actions at the identity minority, and this behavior occurs more often in groups with few minority members (Karpowitz and Mendelberg 2014). Being in a numerical minority can further decrease the status and authority of members with a disadvantaged social identity, reducing their influence on the group decision (Karpowitz and Mendelberg 2014). Because the status of a social identity group is shaped by its relative numbers in a setting, identity minorities may speak less often and less freely in groups where they compose a small proportion; when they do speak, their arguments and contributions may carry less authority (Stoddard, Karpowitz, and Preece 2021). Consistent with this expectation, in race dialogue groups, Whites are more open to the viewpoints of people of color when their group includes a large number of POCs, and racial minorities tend to speak more and express a distinctive point of view more frequently in such groups (Cramer 2007).

Existing work thus yields conflicting expectations: racial diversity may or may not affect the deliberating group. Racial diversity may change individual views and group decisions. Alternatively, racial status differences may get in the way.

³See also the extensive social psychology literature on minority influence, such as Maass, Clark, and Haberkorn (1982).

Race in Jury Decisions

While the literature on juries is voluminous, there are almost no causally identified studies of jury racial composition. We engage with that literature in Appendix A. As we elaborate there, criminal convictions do sometimes vary with the racial majority on the jury, with each ethno-racial group favoring co-racial parties. These findings offer suggestive evidence that jury composition may matter. However, our detailed review of the jury literature finds, as other jury researchers have concluded, that there is almost no causally identified and statistically reliable research on the effects of racial *diversity* — the racial balance in the jury — on jurors' preferences or jury verdicts (Devine et al. 2001; Sommers 2008, 673).

What findings do exist are plagued by a number of difficulties. First, data on jurors tends to come from small and unrepresentative samples and often employs post-trial surveys that suffer from various potential biases: missing data on race, selective attrition, and selectively misreported or mis-remembered juror preferences. Of particular note is the dearth of POC jurors in these samples (e.g., Pennington and Dolliver 2021).

Second, studies that correlate jury racial composition with verdicts are hampered by their inability to exogenously vary jury composition. As the largest recent study of POC jurors we know of concluded, "we ... were limited in how we could draw inferences about the jury group composition, since we did not systematically vary it as an experimental condition" (Shaw et al. 2021, 225). Even experimental studies of juries rarely randomize racial composition, because they randomize other aspects of the jury situation. In the absence of randomization, it is impossible to draw causal conclusions about the effects of group composition because it is unclear if the apparent effect of jury racial composition is instead due to the race of the defendant, the race of the victim, the salience of racial issues in the case, or other juror, jury, or case characteristics. Put simply, there is little evidence about the causal impact of jury composition on how or what juries decide or on the post-deliberation views of individual jurors.

Evidence on the effect of jury composition on POC jurors is even more limited. Some studies that focus on racial composition do so by by randomizing the presence of White versus POC confederates (e.g., Peter-Hagene 2019). This is a very helpful strategy, as it allows causal estimates of composition effects on White jurors, but the focus on the reactions of White jurors makes a study

of POC jurors and their behavior impossible. To our knowledge, only one study randomizes jury racial composition and examines the resulting decisions on both White and POC jurors. Examining mock jury decisions in an assault case with a Black defendant, Sommers (2006) varied jury composition from 6 White jurors to 4 White and 2 Black jurors. The racially diverse juries spent more time in discussion, considered more evidence and did so more accurately, and were more likely to engage racial issues. Their White members were more likely to believe in the innocence of the defendant. However, that study is limited to criminal cases and included few POC jurors (30 out of 200 participants); while this composition is in line with national demographics, it does not yield sufficient power for a statistical analysis of the study's POC jurors. Thus, existing experimental research offers some reason to expect racial diversity to affect deliberation and juror views, but the evidence is quite limited.

Studies of real juries cannot randomize, of course. These studies are extremely useful (and necessary), but as with other methods, they have disadvantages. If they study juries (rather than jurors), they cannot distinguish racial composition from the many other important covariates in observational studies, such as evidence strength, or defendant race. For example, Taylor and Hosch (2004) examined Hispanic composition effects on actual jury verdicts and sentencing of Hispanic or Anglo defendants, controlling for evidence strength (model n = 277). This study has a large n and full information on composition and jury outcomes, but lacks data on individual juror outcome preferences (and thus on POC jurors' views or behaviors). Devine et al. (2016), who extensively studied racial composition on real juries, emphasize the difficulty posed by the high correlation between racial and gender compositions and other predictors. They conclude by noting "the nonexperimental nature of this study precludes any strong inferences ... [and] statistical power was relatively low because of the loss of cases from missing data" (679).

Another challenge of studying real juries is that the widespread use of peremptory challenges means people of color are often struck from juries, especially where their presence may change the outcome (Eisenberg 2017; Fukurai and Krooth 2003). This means the number of POC jurors is not only low, but also likely correlated with important aspects of the case, including the case's subject matter and the salience of race. These selection effects make random assignment of juror to

⁴See also Williams and Burek (2008); Anwar, Bayer, and Hjalmarsson (2012).

jury — and of jury to case — all the more important for understanding the causal effects of group composition.

The literature on race and juries typically focuses on violent crime, yet a group's racial composition may be equally important in civil matters. Racial inequalities in business ownership and wealth have direct implications for views of corporate power and malfeasance. As Conley (1999) put it, "In contemporary America, race and property are intimately linked and form the nexus for the persistence of black-white inequality" (5). Unequal rates of business and stock ownership are primary components of the racial wealth gap (Herring and Henderson 2016). It stands to reason, then, that White Americans will hold more business-friendly views and emphasize the personal responsibility of those harmed by profit-seeking. In addition, many people of color live in neighborhoods bearing a disproportionate burden of industrial activity and corporate waste sites (Bolin, Grineski, and Collins 2005, 157). This reality helps explain why people of color tend to perceive more risk from structural sources, and favor regulating those sources, even when accounting for party identification, conservative self-identification, and other demographics (Kahan et al. 2007). The continuing disadvantages POC Americans face lead them to hold less individualistic and more egalitarian views that undergird a wide range of policy attitudes (Kahan et al. 2007, 492 and Table 2).

These views extend to civil suits. As one attorney put it, "Expressing their perceptions of justice through awards in serious personal injury cases is one of the few opportunities that most people of color have to ... send a message to corporations and other powerful social players" (quoted in Gifford and Jones 2016, 589). Of particular relevance for this study, race predicts support for punishing and regulating corporate harm more strongly and consistently than income (Unnever, Benson, and Cullen 2008). Indeed, political actors behave as if racial composition in these cases matters: efforts to reduce juries' ability to punish corporations are undertaken most often in states whose major cities have a high percentage of African Americans (Gifford and Jones 2016). Even at the same level of income, occupation, and education, African Americans have much lower wealth (Conley 1999). Race is highly correlated with home ownership, net asset values, generational inheritance, access to public services, and geographic isolation (Darity and Mullen 2020; Bolin, Grineski, and Collins 2005). These factors are not well measured by income or education, yet substantially shape economic opportunity (Herring and Henderson 2016). As Hamilton and Darity

(2017) summarize, "Race is a stronger predictor of wealth than class itself" (60).⁵

Because POC jurors are more likely to prefer corporate punishment, their presence may affect juror views and jury verdicts. This influence could occur either because POC jurors set a more punitive jury median before deliberation, or because they persuade their fellow jurors of the need for stiffer corporate punishment. Either way, racial diversity may affect jury decisions. On the other hand, racial diversity may fail to produce meaningful influence. At their population percentage, POC jurors may be too few to affect the median. And even if their voices change the conversation, and shift some White jurors' preferences, that shift may not suffice to change votes and, ultimately, verdicts. Since people of color are often few in number, they face the hurdles of a numerical minority. Moreover, the disadvantage they face may go beyond small numbers, especially when racial or ethnic membership is easily discernible: as a status minority facing ongoing bias and perceived lower authority, POCs may carry less influence than dissenting White jurors with the same preferences.

The Data

To estimate the causal effects of racial diversity on juror and jury outcomes, we need data with five features missing from existing studies. First, we need a large number of juries, in order to estimate jury-level effects. Second, we require adequate variation on juror race and jury-level racial composition. Third, jurors should be randomly assigned to juries, to create exogenous variation in racial composition. Fourth, we need real-time, unbiased measures of juror preferences both before and immediately after the group's deliberation, to avoid bias from recall or attrition. Fifth, we need to measure the group's verdict. Our data meets each of these requirements.

To use random assignment, we must employ mock juries rather than actual juries. The mock jury design is well established in the social science literature on juries. This design trades off some external validity for strong causal inference. To strengthen the study's ecological validity, we study only jury-eligible citizens, realistic legal cases, a public setting for face-to-face deliberation,

⁵Self-reported income is plagued by measurement error (Angel et al. 2019; Hariri and Lassen 2017). This may be another reason why income is less correlated with corporate punishment than race. ⁶See Appendix Table A1 for a summary of the cases.

and instructions similar to those in a real trial.

Our dataset comes from Schkade, Kahneman, and Sunstein, who sought to investigate the phenomenon of large awards by civil juries (Sunstein et al. 2002). Using a survey research firm, they recruited jury-eligible citizens in Arizona and randomly assigned each juror to one six-member jury. While the sample was not randomly selected, it is diverse and largely resembles the population on race and other demographics (see Appendix A.3 for further information on sample recruitment and Appendix D for summary statistics). For ease of interpretation, we restrict our analyses to the 449 juries with full demographic information.⁷

Participants were asked to privately consider and then deliberate and reach a decision about one of 15 randomly assigned cases involving an individual plaintiff suing a corporate defendant (see Table A1 for a summary of the cases). For example, one case involved a secretary exposed by her company to a computer that emitted harmful radiation; another involved a man injured in an accident caused by his motorcycle's defective brakes. The 15 cases were chosen in order to vary the level of harm done by the corporation. Roughly equal numbers of juries considered each case. The variety of cases allows us to generalize beyond a particular legal issue, and results are robust to case, as we explain below. Details of the case were presented in writing and by video (Appendix B includes excerpts from a sample case). Plaintiff race was not identified, and other plaintiff characteristics were not provided or were balanced across cases. For each case, jurors were told that the corporation had already been found guilty and paid compensatory damages. Their task was to decide how much the corporation should be punished, using two measures: 1) the severity of the punishment on a 0-8 ratings scale ranging from "None" to "Extremely Severe"; and 2) a dollar amount, if any. The original investigators found that verdicts were more consistent across juries with the rating scale, which is capped because it is ordinal, than dollars (Sunstein et al. 2002).⁸ Despite the differences the original investigators discuss between the dollar and ratings

⁷See Appendix D for a discussion of missingness. A robustness check with the dropped juries (available from the authors) shows essentially identical findings.

⁸The original experimenters aimed to study whether juries delivered more consistent outcomes when using the 0-8 scale (as opposed to a dollar amount) and whether deliberation helped produce moderation. They found repeated evidence that dollar awards were indeed more erratic than scale decisions (Kahneman, Schkade, and Sunstein 1998). They also found deliberation to

scales, these scaling properties are not central to our analysis, and we find consistent results across the two measures in all key analyses. We therefore combine them after converting dollars to the same 0-8 ordinal scale (details below).

Each jury was tasked with *both* decisions in random order, and allotted 30 minutes to deliberate each, for a total of one hour. This is a roughly similar length to the average actual civil case deliberation (Brunell, Dave, and Morgan 2009). The time was not strictly enforced, further approximating actual juries. Deliberation transcripts suggest the case was thoroughly discussed. Thus, this design significantly improves on the external validity in standard experiments.

Figure 1. Experimental Procedure

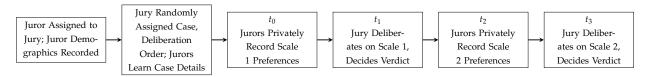


Figure 1 summarizes the study procedure. Jurors were first randomly assigned to juries and then self-reported their demographic information. The juries were then randomly assigned a legal case and a verdict task order. Next they learned the details of their case via written descriptions and a recording. After this (at time t_0), they privately recorded their preferences on the randomly

produce a "severity shift" — juries' post-deliberation outcomes tended to be more punitive than the median juror's pre-deliberation preferences, particularly when debating in dollars (Sunstein et al. 2002). However, despite collecting demographic data on all participants, they never probed the effects of race on these deliberations, either at the individual or jury level.

⁹Brunell, Dave, and Morgan (2009) report a median deliberation time for 6-person civil juries of about 80 minutes; because the real deliberations they measure include determining both guilt and, if applicable, damages, we see the 30 minute period for deciding on damages alone as reasonably similar.

¹⁰Balance checks are in Appendix C. The original investigators slightly re-balanced gender composition to avoid a gender skew, resulting in fewer juries with 0 or 1 women or men than would be expected randomly. Thus, our capacity to detect the effects of gender composition is constrained by the limited variation in that variable. However, the distributions of other demographics conforms to a randomly drawn distribution.

assigned scale (rating or dollars), then deliberated and reached (if possible) a unanimous verdict on that scale (t_1). Then, at time t_2 , they privately recorded their preferences for the other scale, after which they deliberated and reached a verdict on that scale (t_3). We thus have data for two rounds of jury decision-making (t_1 and t_3), with half the juries deliberating about dollars first and half deliberating about ratings first.¹¹ The key useful feature of the design for our study is the random assignment of jurors to juries. This allows us to estimate the effect of racial composition.

Analysis

We construct outcome variables at the individual (juror) and group (jury) level. To measure jurors' post-deliberation preferences, we use the rating or dollars each individual privately assigned to their case after one round of deliberation, at t_2 (no individual preferences were collected after the second round). To make ratings and dollars comparable before combining them, we transformed the dollar variable into an ordinal scale ranging from 0 to 8 based on the individual-level distribution of preferences.¹² We then transform these variables to a 0-1 scale for ease of interpretation. At the jury level, we measure the verdict after each round of deliberation (t_1 and t_3). Because some juries were not able to reach a unanimous verdict and were thus "hung," we also created an indicator of whether or not the jury reached a verdict for each round and model that outcome too.

Our predictor of interest is racial diversity. To measure it, we count the number of White jurors in each jury. Our sample lacks sufficient variation to distinguish between racial minority groups. We therefore categorize individual race as POC or White. The large majority of our POC jurors are Hispanic or Black.¹³ While their experiences are far from identical, in the site of our

 $^{^{11}}$ Robustness checks in which we separate by task and round are available in the appendix.

¹²This also adjusts for the extreme right-ward skew of dollars (Appendix F). Results are similar with logged raw dollars (see, for example, Appendix Tables A4, A5, and A11). We cannot use raw dollars because of extreme outliers.

¹³Specifically, the sample is 86% White, 6% Hispanic, 3% Black, 2% Native American, 1% multiracial, 1% Asian American/Pacific Islander, and 1% another race. We operationalize POCs as all racial or ethnic categories other than White.

study, as in many large cities, these communities each tend to be racialized. For example, they are much more likely to work and live in segregated, low-income occupations and under-served neighborhoods and are targeted for harsh policing. As Massey (2009) notes, since the 1970s, Hispanics in places such as Arizona have been "increasingly subject to processes of racialization" (12). Though power limitations prevent us from conducting analyses that differentiate between POC jurors' racial groups, robustness checks available in Appendix J show the presence of Hispanic jurors alone has similar (though less precisely-estimated) effects to the presence of POC jurors altogether. Approximately one-third of our juries are all-White, about half include one POC juror, and the remaining 20 percent have two or more POCs (see Appendix Figure A3).

In what follows, we estimate two types of models, one at the individual juror level, and one at the jury level. In juror analyses, we control for the juror's race, pre-deliberation preference, gender, age, education, and income. We estimate these models with and without controls for median pre-deliberation jury preferences. In juror and jury analyses, we control for the jury's other demographic characteristics by counting the number of jurors in each demographic category, then transforming those counts into a set of dichotomous indicators, as we do for racial composition. ¹⁴ Using these dichotomous indicators, rather than continuous measures, avoids imposing a linear functional form on the effect of these demographics, and allows more direct comparisons of their effects with the effect of the binary individual race variable.

For juror level models, we focus on the number of White jurors surrounding the focal juror. In these models, the omitted category is 3 or fewer Whites (excluding the focal juror). In jury models, we simply count the total number of White jurors (because there is no focal juror), and the baseline is 4 or fewer Whites. In both types of models, the baseline is juries with the most people of color, pooling across sparse categories.¹⁵ Thus, the coefficients test the difference from the most racially

¹⁴Age, income, and education are recoded into three approximately evenly-populated categories: Young, Middle, or Oldest; Low, Middle, or High Income; HS or Less, Some College, or College Grad. Details in Appendix D. See Appendix E for correlations between the various jury-level demographic characteristics.

¹⁵The omitted categories for other predictors also use the fewest high-status jurors: few men, few older jurors, few high-income jurors, and few college graduates. The choice of high- or low-privilege indicators or baselines makes little difference.

diverse juries.¹⁶

In sum, to estimate the effects of racial diversity, we first explore how it affects individual preferences, controlling for many other individual and group characteristics. Second, we examine how racial composition affects verdicts. Finally, we compare the influence of POC and White dissenters.

Models of Juror and Jury Outcomes

First, we must verify the premise underlying the expectation of racial diversity effects: that race shapes the preferences individuals bring to the deliberation. To that end, we regress each juror's pre-deliberation preference on the juror's race and other individual demographics. We use OLS and cluster standard errors by jury. As seen in Table 1 Column 1, POC jurors indeed prefer higher punitive damages. This individual race effect is larger than any other demographic variable, including gender, age, education, and income level.¹⁷ That the effect of being a POC as opposed to White juror is much larger than that of being high as opposed to low income is especially notable given the redistributive dimension of civil suits against corporations. This pattern of results justifies our focus on race and racial diversity in this setting.

Next, we must verify that jury racial composition does not predict the preferences of jurors before any deliberation has occurred. This placebo test ensures that any effects of racial composition on post-deliberation preferences are caused by the exchange between the jurors, not from unob-

¹⁶Though our analyses control for a variety of group demographics, our focus is on racial composition. We make this choice for several reasons. First, race is often easier to recognize, whereas other characteristics, such as income or education, may never be disclosed to other members. For this reason, group members are likely to be aware of racial diversity within the group. While gender is also often noticeable and theoretically relevant (Karpowitz and Mendelberg 2014), the investigators constrained variation in gender composition, which hampers our ability to identify gender effects, but improves our ability to identify racial effects. Second, as noted, previous research gives strong reason to expect racial differences in attitudes toward holding corporations accountable. See Appendix A for a review of research on other features of group composition.

¹⁷Except for the few who did not report their income (N=44), which we do not interpret as an effect of income, but of willingness to report one's income.

Table 1. Predictors of Pre-Deliberation Individual Punitiveness

	Dependent variable:			
	Pre-Deliberation Preferences (t_0)			
	(1)		(2)	
Juror Characteristics				
POC	0.069 ***	(0.015)	0.071 ***	(0.015)
Female	0.018	(0.011)	0.021	(0.012)
Young	0.035 *	(0.015)	0.036 *	(0.015)
Older	-0.018	(0.014)	-0.018	(0.014)
High School Grad	-0.001	(0.014)	0.001	(0.014)
College Grad	-0.009	(0.012)	-0.007	(0.012)
Low Income	0.004	(0.014)	0.002	(0.014)
High Income	-0.024	(0.013)	-0.024	(0.013)
Missing Income	-0.107*	(0.043)	-0.119**	(0.043)
Jury Characteristics				
4 Whites			0.004	(0.017)
5 Whites			-0.019	(0.017)
2 Men			-0.017	(0.014)
3+ Men			-0.012	(0.017)
1 Older			-0.020	(0.013)
2 Older			-0.008	(0.015)
3+ Older			-0.044	(0.025)
1 College Grad			-0.044*	(0.021)
2 College Grad			-0.031	(0.020)
3 College Grad			-0.053*	(0.022)
4+ College Grad			0.004	(0.028)
1 High Income			0.014	(0.018)
2 High Income			0.009	(0.018)
3+ High Income			0.006	(0.020)
Constant	0.511 ***	(0.023)	0.566 ***	(0.036)
Legal Case Fixed Effects?	Yes		Yes	
Observations	2,673		2,673	
\mathbb{R}^2	0.274		0.281	
Adjusted R ²	0.268		0.271	

Note: Estimates are from OLS regression models with standard errors clustered by jury. Outcome rescaled to range from 0 to 1. The omitted categories for juror education and income are "some college" and "middle income." p < 0.05; ***p < 0.01; ***p < 0.001, two-tailed.

served confounders. As Column 2 of Table 1 shows, racial composition indeed has no effect where it should not.¹⁸ Prior to group interaction, then, people of color tended to prefer more punitive

¹⁸In addition, only 2 of the other 12 demographic composition variables have a statistically detectable effect, and these do not follow a meaningful pattern. Adding the jury-level variables makes no statistically significant difference to the variance explained, and in models with only group composition variables, these are not jointly significant (F = 1.3).

verdicts against corporate defendants. In addition, the number of POCs in a jury had no effect on pre-deliberation preferences.

Predictors of Juror Post-Deliberation Preferences

To assess the influence of racial diversity after deliberation, we estimate the effect of racial composition on individual preferences at t_2 , controlling for the juror's pre-deliberation preference (t_0), juror demographics (including juror race), and legal case fixed effects. Case fixed effects account for all case characteristics including plaintiff characteristics.

Juries with more POCs may also have fewer male, older, college educated, and high income jurors. The racial composition effect may thus be due to other demographic characteristics. In addition, a racial composition effect may be entirely explained by aggregate pre-deliberation preferences. This would be consistent with simple cue-taking from fellow jurors, rather than the effect of a discussion. If any of these explanations apply, the effect of racial composition would evaporate once we account for these other features of the jury. Thus, we control for measures of the jury's demographic composition and the median pre-deliberation preference.

Table 2 presents the OLS estimates of jury composition on post-deliberation preferences, with standard errors clustered by jury. Column 1 contains only racial composition, juror demographics, and juror pre-deliberation preference; column 2 adds jury demographics; and column 3 adds the jury's median pre-deliberation preference.

The results show that racial composition significantly affects individual preferences. The omitted category is jurors sitting with 3 or fewer Whites — that is, with 2 or more people of color. Relative to these jurors, individuals deliberating exclusively with Whites prefer lighter corporate punishments. The magnitude is meaningful — nearly 7 percentage points (column 1). Sitting with only 1 POC juror also matters, but less so (about 4 percentage points). These racial composition effects are substantially larger than the effect of individual race (b = 0.028 in column 1). The effect of racial composition is also large compared to the other predictors. For example, it is equivalent to or greater than the effect of a jury with mostly high-income jurors. None of the other individual or group characteristics come close in magnitude. Even when we add the median pre-deliberation preference (column 3), the effects persist. Because people of color are too few to affect the median

preference, controlling for the median makes little difference.¹⁹ This finding is consistent with the possibility that racial composition matters by affecting the interaction among jurors.

These results are robust to a variety of model specifications. As detailed in Appendix H, they persist when we omit juror pre-deliberation preferences, include interactions between jury and juror characteristics, substitute in low-status group composition indicators, or include the focal juror in the composition variables. They are also robust to separating the dollars and ratings scales, and to using logged instead of ordinal dollars. Finally, results also endure when we account for the number of White and POC jurors with more punitive pre-deliberation preferences than the focal juror, suggesting that composition effects are not reducible to the distribution of preferences prior to group discussion.

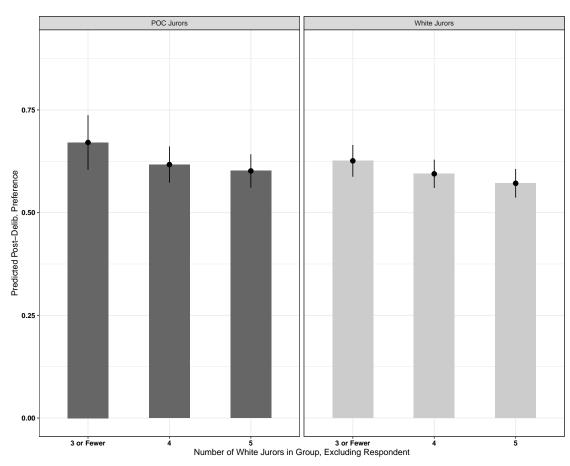


Figure 2. Predicted Individual Punitiveness by Individual and Group Race

Note: Predicted values computed from Model 1 in Table A7.

 $^{^{19}}$ The correlation between racial composition and median preference is low (r=0.09).

Figure 2 shows the effect of racial composition on white and POC jurors' preferences more clearly by presenting predicted post-deliberation preferences calculated from models interacting a jury's racial composition with individual race. As the figure demonstrates, both White and POC jurors are affected: regardless of their individual race, jurors wish to hold corporations more accountable for malfeasance when surrounded by more people of color.²⁰

Taken together, the results suggest that race affects preferences not only by shaping who a person is, but also the diversity of their decision-making group. Being surrounded by more people of color affects individual views on corporate power and accountability, even after controlling for other characteristics.

Jury Decisions

Next, we ask whether racial composition also influences jury decisions. Because the decision had to be unanimous, it was possible to have a hung jury, where the group failed to reach a verdict. We thus analyze the jury decision with a Heckit selection model. The first stage of the model predicts whether the jury reached a verdict or not.²¹ The second stage models the magnitude of the verdict. Analysis of both stages includes legal case fixed effects.

First-stage models reveal no effects of racial composition on reaching a verdict (Appendix I). Thus, we move directly to analyzing the verdict. Table 3 presents the results of the second stage. We analyze the verdict in each round of deliberation: t_1 (columns 1) and t_3 (column 2). The models control for all composition variables and the jury's median pre-deliberation preference (t_0). Omitting these controls does not materially change the results, as detailed below.

²⁰The effect of racial composition does not differ by juror race; for a tabular presentation of these results, see Appendix Table A7.

²¹We identify the selection model with the standard deviation of juror preferences at t_0 . This variable strongly predicts the likelihood of reaching a verdict and does not predict the second stage.

Table 2. Predictors of Post-Deliberation Individual Punitiveness

	Dependent variable:		
	Post-Delib	eration Prefe	erence (t_2)
	(1)	(2)	(3)
Race (Baseline: <= 3 Whites)			
4 Whites	-0.040**	-0.034*	-0.030^{*}
	(0.015)	(0.015)	(0.015)
5 Whites	-0.065^{***}	-0.056^{***}	-0.047^{**}
	(0.015)	(0.015)	(0.015)
Gender (Baseline: <= 1 man)	(010-0)	(010-0)	(0.020)
2 Men		-0.011	-0.007
		(0.012)	(0.012)
3+ Men		0.011	0.017
ST WICH		(0.015)	(0.015)
Age (Baseline: 0 older jurors)		(0.013)	(0.013)
1 Older		-0.010	-0.006
l Oldel			
2011		(0.011)	(0.011)
2 Older		-0.022	-0.013
2 011		(0.014)	(0.014)
3+ Older		-0.011	0.001
		(0.023)	(0.023)
Education (Baseline: 0 college graduates)			
1 College Grad		-0.022	-0.017
		(0.018)	(0.018)
2 College Grad		-0.020	-0.013
-		(0.018)	(0.018)
3 College Grad		-0.011	-0.005
		(0.020)	(0.019)
4+ College Grad		-0.025	-0.019
O		(0.025)	(0.025)
Income (Baseline: 0 high income jurors)		((/
1 High Income		-0.013	-0.016
Tingh meone		(0.017)	(0.016)
2 High Income		-0.015	-0.017
2 Tright income		(0.017)	
2 - Llich Income		-0.050**	(0.016)
3+ High Income			-0.047**
		(0.018)	(0.018)
La l'ad la al Das Dalla Das (anno accessor)	0.200***	0.298***	0.047***
Individual Pre-Delib. Preference (t_0)	0.300***		0.247***
	(0.017)	(0.018)	(0.019)
Jury Median Pre-Delib. Preference (t_0)			0.264***
			(0.035)
Constant	0.479***	0.553***	0.417***
	(0.024)	(0.034)	(0.038)
Legal Case Fixed Effects?	Yes	Yes	Yes
	Yes	Yes	Yes
	162		
Indiv. Demographic Controls?			
	2,655 0.453	2,655 0.460	2,655 0.471

Note: Individual controls include race, gender, age, education, and income. Standard errors clustered by jury. $^*p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$, two-tailed.

Table 3. Predicting Punitiveness of Verdicts among Non-Hung Juries

	Dependent variable:		
	Verdict (Round 1)	Verdict (Round 2)	
	(1)	(2)	
Race (Baseline: <= 4 Whites)			
5 White	-0.024	-0.040	
	(0.035)	(0.032)	
6 White	-0.003	-0.068^{*}	
	(0.039)	(0.034)	
Gender (Baseline: <= 1 man)	, ,	, ,	
2 Men	0.012	-0.085	
	(0.046)	(0.044)	
3 Men	-0.015	-0.062	
	(0.047)	(0.042)	
4+ Men	-0.126	-0.009	
	(0.084)	(0.070)	
Age (Baseline: 0 older jurors)	(0.001)	(0.070)	
1 Older	0.003	0.0003	
i Older	(0.033)	(0.028)	
2 Older	0.044	-0.017	
2 Older	(0.038)	(0.034)	
3+ Older	-0.011	-0.016	
5+ Older	(0.051)	(0.044)	
Education (Baseline: <= 1 college graduate)	(0.051)	(0.044)	
2 College Grad	-0.033	-0.005	
2 College Grad			
2 College Crad	(0.042) -0.009	(0.036) -0.020	
3 College Grad			
A - Callaga Crad	(0.037) -0.068*	(0.031) -0.010	
4+ College Grad			
(Bli (Bli)	(0.034)	(0.029)	
Income (Baseline: 0 high income jurors)	0.001	0.000*	
1 High Income	0.001	-0.090*	
N T T 1 T	(0.054)	(0.045)	
2 High Income	-0.093	-0.094	
A T T . 1 . T	(0.059)	(0.048)	
3 High Income	-0.096	-0.095	
	(0.064)	(0.052)	
4+ High Income	-0.028	-0.083	
	(0.053)	(0.045)	
Median Pre-Delib. Preference (t_0)	0.799***	0.565***	
	(0.058)	(0.072)	
Constant	0.288**	0.583***	
Constant	(0.089)	(0.095)	
Observations	449	449	
R ²	0.771	0.643	
Adjusted R ²	0.750	0.612	
ρ	1.424	-0.471	
P Inverse Mills Ratio	0.389*** (0.097)	-0.098 (0.108)	

Note: *p<0.05; **p<0.01; ***p<0.001, two-tailed.

Racial composition does not consistently matter for jury verdicts. The jury's racial diversity has no effect in Round 1. It does influence verdicts in Round 2, where all-White juries are less willing to punish corporations. However, when we separate dollars and ratings, we find that racial composition matters in only one of the four outcomes: the second round of punishment ratings (Appendix Table A15). As detailed in Appendix I.2, this pattern of inconsistent effects remains when we omit the demographics and the median, if we instead use indicators of low status, or if we abandon the Heckit framework. Overall, then, racial diversity does not consistently affect verdicts.

Representation in Jury Decisions

Why might racial diversity fail to consistently change the group's decision? One possibility is that POC jurors are not numerous enough to move the verdict. Put simply, they may not have the votes. This suggests the possibility that racial minorities are experiencing the predictable fate of numerical minorities, regardless of race. However, an alternative possibility is that they are doubly disadvantaged. They not only have small numbers, but low status. The question becomes: are the preferences of people of color poorly represented in the decision because they are *racial* minorities, or because they are a *numerical* minority? In other words, how does POC influence compare to the influence of an equally-sized dissenting White minority?

To gain traction on this question, we turn to the literature on social inequalities in political influence. In that literature, studies examine the relative influence of advantaged and disadvantaged social groups by analyzing which of them carries more weight when they prefer different outcomes. For example, Gilens (2012) finds that when the preferences of low-income and high-income Americans diverge, low-income Americans have no influence on policy change, while affluent Americans can have substantial influence. Key to that analysis is identifying the instances where the social groups disagree, and estimating the relative impact of each group's preferences on the outcome. Following this literature, we examine the relative influence of dissenting POC jurors and their White majority fellow jurors on the verdict. We go beyond that literature with a crucial additional step: we compare this racial influence gap to a placebo influence gap, using White dissenters in all-White juries.

First, we must verify the existence of interracial disagreement. As expected, we find that prior

to any deliberation, the average within-jury difference between POC jurors and their fellow White jurors is approximately 2 points on the 0-8 scale — a substantial and statistically significant opinion divide.²² Given that White and POC jurors disagree in many juries, we can ask which racial group exercises more influence in juries where preferences diverge. The following analysis includes only juries in which racial differences exceed 1.5 points on the 0-8 scale — that is, where POC jurors' preferences diverged meaningfully from the preferences of White jurors.²³ We call these jurors POC "dissenters."

Next, we calculated the distance between each jury's verdict and the average pre-deliberation preferences of White and POC jurors, disclosed privately just before each round. For instance, if the average White juror preferred 1 and the verdict was 2, the difference for Whites would be 1 point. If the average person of color in that jury preferred 5, the POC difference from the verdict would be 3.²⁴ In this example, the opinions of White jurors were better represented in the verdict by a margin of 2 units. This 2-unit racial difference in representation is the "influence gap" between Whites and people of color within the jury.²⁵ By comparing White and POC jurors within juries, this measure avoids concerns about differences in the variance of pre-treatment preferences across juries.

We begin where people of color are most likely to be disempowered: juries with a lone POC member. Across both rounds, the racial influence gap in these juries is large (nearly 1.5 units) and

²²As Appendix K demonstrates, these differences are much greater than chance.

²³We restrict our analysis to juries with meaningful racial group cleavages because when jurors agree prior to deliberation, the question of which racial group's opinions were most influential is impossible to identify. We chose the 1.5-point cutoff because it represents a substantively meaningful difference on our nine-point scale while preserving statistical power for analysis. The percentage of juries exceeding the cutoff ranges between about 50-60 percent across the rounds. If we choose a different cutoff — for example, the top quartile of racial differences in verdict preferences — the differences we show below are even larger, though less precisely estimated.

²⁴The actual average distance between POC preferences and verdicts is at least 2 on the nine-point scale in every round, and sometimes more than 3.

²⁵Lone POC and White dissenters have nearly identical hung-jury rates.

highly precise (p < 0.000001).²⁶

Of course, this influence deficit may be due not to race but to the difficulty *any* lone dissenter faces. To investigate this, we conducted a placebo test. We randomly selected one dissenting White jurior in all-White juries to be the placebo juror, restricting the analysis to all-White juries where the difference between the randomly chosen juror and the average of the remaining jurors exceeded 1.5, the same threshold we used to define POC dissenters. We find that the influence gap for lone White dissenters is only 0.6 units — less than half the gap for lone POC dissenters.²⁷ In other words, while lone White dissenters also experience an influence deficit, it is far less than what POC dissenters face.

Next, we directly test whether the influence of POC and placebo dissenters differs statistically. To do so, we ran 500 iterations of the placebo test within each round and scale, re-randomizing (with replacement) which juror in every all-White jury was chosen as the placebo. We then determined whether the randomly chosen juror was a dissenter. For each of our 500 iterations, we computed the median influence gap in each round for all juries with dissenters. This approach allows us to show where the actual median influence gap for POC dissenters falls in the placebo distribution of median influence gaps. For simplicity, we present results with both rounds aggregated.²⁸

In addition, to generalize beyond lone dissenters, we expand our analysis to include juries with 2 POC dissenters. In these juries, the average influence gap experienced by people of color is again large (1.01 units) and statistically significant (p = 0.0003). To evaluate the relative size of that gap, we followed the same procedure outlined above.

In Figure 3, we present the distribution of median influence gaps in our placebo groups, shown

²⁶The distances between the verdict and the average POC and White juror are 2.65 and 1.18 units, respectively. When we disaggregate by round and by ratings and dollar scale, the influence gap is large and statistically significant in every round except dollars-first juries in Round 1, and even there the difference is substantial (approximately one unit) and marginally significant (p = 0.06). See Appendix L.

²⁷This placebo gap is statistically significant (p = 0.002) when we pool rounds and scales, but when we disaggregate, it is significant only once (Appendix Figure A8).

²⁸Patterns persist if we disaggregate by round (Appendix Figure A9).

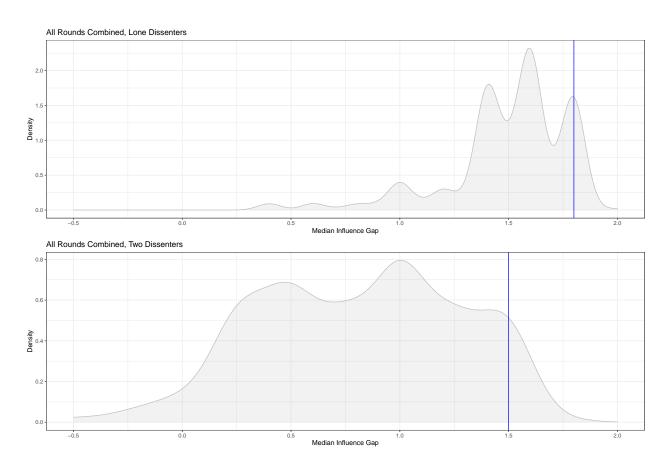


Figure 3. Median Influence Gap for POC and Placebo Dissenters

Note: Gray curves represent the distribution of median influence gaps for 500 iterations of the placebo test using all-White juries, with one/two members of the group randomly selected to be the placebo 'POC'. Blue lines represent the actual median racial influence gap for juries with one or two POC dissenters, respectively.

in gray. The top panel shows the distribution for juries with a lone dissenter, and the bottom panel for juries with two dissenters. The key evidence is the location of the blue line, representing the actual median influence gap for POC jurors. In both panels, the blue line falls in the extreme tail of the distribution of placebo influence gaps (at the 98th and 99th percentile of lone and two dissenters, respectively). Thus, POC dissenters exert less influence than White dissenters. People of color do not exercise less influence only because they are outnumbered dissenters. They experience substantial disempowerment above and beyond the disempowerment of White dissenters in all-White juries.

To put this difference in perspective, consider two juries, one with a White dissenter who prefers 5, and one with a POC dissenter preferring 5. Both juries have 5 other White jurors whose

preferences average to 2.5. Based on our results, we would expect the verdict of the jury with the White dissenter to be around 1 scale point away from the dissenter's initial position, a verdict of about 4. The jury with the POC dissenter, however, would come to a verdict between 2 and 3 — nearly one-third of the scale away from the dissenter's initial preference of 5, comparable to the difference between a "mild" punishment and a "substantial" one on the punishment scale.

As a robustness check, we identified every lone dissenter in our all-White juries across every round and computed the influence gap for those juries.²⁹ To these dissenting White jurors, we added all lone POC dissenters. We then regressed the influence gap on an indicator of whether the dissenting juror was White or a person of color.³⁰ We again find that lone POC dissenters were less influential than lone White dissenters in all-White juries (b = 0.48, $SE_b = 0.19$, p = 0.01). As shown in Figure 4, the estimated influence gaps are about 50 percent larger for lone POC dissenters.

Third, it may be that POC dissenters are not disadvantaged by race per se but rather by starting with a more anti-corporate preference. Indeed, the POC dissenters are substantially more likely to have more punitive preferences than their juries than their White placebo dissenters. To test this explanation, we conducted a matching analysis. We paired POC dissenters with White dissenters with similar pre-deliberation preferences relative to their jury's mean.³¹ We repeated the regression analysis of dissenters using the weights produced by the matching analysis, which achieved good balance on the matching variables. As Figure 4 shows, the substantive conclusion is unchanged: POC dissenters experience a greater influence gap than white dissenters (b = 0.39, $SE_b = 0.20$, p = 0.05).

Finally, we also performed a non-parametric permutation test, which involves re-sampling (without replacement) the influence gaps in our set of lone dissenters 2000 times, then using that

²⁹Up to now, we randomly chose a placebo juror, then tested to see if they are a dissenter, then computed the median influence gap in juries where the randomly selected juror met the threshold for dissent. In this analysis, we analyzed every permutation of lone vs. other jurors in every all-White jury, adding all who met the dissent threshold to our analysis.

³⁰We use legal case fixed effects, aggregated rounds, and clustered standard errors by jury.

³¹See Appendix L.1 for details and Appendix L.2 for a comparison of White and POC dissenter characteristics.

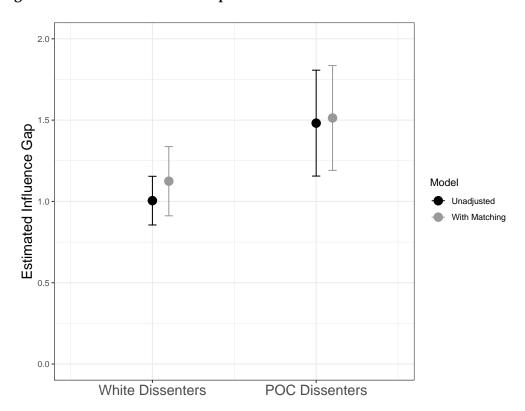


Figure 4. Estimated Influence Gaps for Lone POC and Placebo White Dissenters

Note: Points represent estimated influence gaps for POC and placebo White Dissenters with 95% confidence intervals. Results estimated from an OLS regression with robust standard errors (clustered by jury) and fixed effects for legal case. Black dots represent unadjusted samples, while gray dots represent models in which White and POC jurors were matched on their pre-deliberation preferences relative to their juries. N=861.

sample of permutations to test the sharp null hypothesis of no difference between White and POC dissenters. Again, the difference in influence gaps between lone POC and lone White dissenters is significantly greater than chance (z=2.57, p=0.01, two-tailed test). Appendix Figure A10 presents visual evidence that the difference between POC and White lone dissenters is located in the extreme tail (99th percentile) of our distribution of 2000 permutations.

In sum, POC dissenters are significantly under-represented in jury decisions, and not merely because they are the numerical minority. The disempowerment experienced by people of color exceeds the effect of simply being outnumbered. Thus, racial diversity does not consistently affect verdicts because POC jurors experience unique barriers in moving the rest of the jury in their direction.

Discussion and Conclusion

The American political tradition has long placed significant power in the hands of citizen decision-making groups, and no deliberative setting is more consequential than the jury. Serving on a jury is not only a mark of respect; it also offers a rare chance at substantive representation for racial minority viewpoints. Civil rights groups fought for equal representation on juries partly for that reason (Sommers 2008). The jury is thus a key site of democratic deliberation and decision-making.

Like many empowered citizen groups, juries are often not representative of their communities. Jurors are more likely to be White, affluent, better educated, and older (Diamond and Rose 2005, 257).³² Our findings suggest this exclusion matters. White and POC jurors tend to arrive with different preferences, and the presence of people of color shifts the preferences of the group members. This effect holds even when accounting for the jury's initial preferences. Excluding POC jurors omits a set voices who lean toward greater corporate accountability, at least in the sample we studied.

However, while racial diversity affects private views, it does not consistently move group decisions — in this case, jury verdicts. Racial diversity changes minds, but the change is insufficient to translate into votes. That is not because dissenters simply struggle to change verdicts no matter who they are; dissenters do have some success, but primarily if they are White. Notably, even when White and POC dissenters start with the same preference and the same distance from their jury, they do not end with the same influence. To our knowledge, our analysis is the first to quantitatively demonstrate the prevalence and magnitude of the disempowerment experienced by people of color in small decision-making groups.

Why might verdicts remain unchanged even when private preferences change? This important question is best addressed by future research, but one intriguing possibility comes from "expectation states" theory (Ridgeway and Correll 2006). This theory argues that group decisions rest partly on members' expectation that others will discount low-status members. In our study, even

³²Though peremptory challenges based on race are unconstitutional, they still disproportionately exclude Blacks (Hunt 2015), and jury pools are often disproportionately White and affluent (Hannaford-Agor and Waters 2011).

jurors who are privately persuaded by people of color may believe that other jurors are not. That belief may constrain their votes.

Studies of status influence in task groups support this mechanism. Task-group members often believe that fellow members disrespect members belonging to low-status social categories such as race (Ridgeway and Correll 2006). Importantly, this dynamic yields a process of "pluralistic ignorance": these beliefs cause people "to assume that 'most people' esteem one group more than another when few at a personal level actually do" (Ridgeway and Correll 2006, 434). These expectations outweigh the member's own preference "when the consequences of individuals' decisions depend on coordinating their decisions with the actions of salient others" (Correll et al. 2017, 308) — exactly the context of our jury deliberations, which occurred under unanimous rule.³³ In other words, some jurors may expect that the jury will discount people of color even if they themselves do not. If many members believe the group will disregard POC jurors, their public vote may conform to that belief, even if they are personally persuaded by the POC members. These dynamics constitute one way that racism and other status biases undermine the promise of democracy. While more evidence is needed to explore this and other potential explanations, such evidence would suggest that fostering in higher status people the courage to resist status-based expectations and stereotypes should be an important goal of civic institutions and education.

The strong causal identification from our design has important advantages, and the study mitigated the usual trade-off in external validity by including realistic case facts, jury-eligible adults, and actual lengthy deliberations rather than stylized exchanges. Nevertheless, more work is needed to assess how far the results generalize across different issues, procedures, time, and other factors, though we do not expect dramatically different results over time given the stability of racial hierarchy and its relationship to corporate power. In addition, the racial minorities in this study consist primarily of Hispanic (mostly Mexican) and Black Americans. These populations

³³Further evidence comes from various experimental studies. For example, witnessing a high-status confederate speak assertively and influence a lower-status participant caused participants to infer that these social categories have, respectively, high and low respect (Ridgeway and Correll 2006). Ridgeway and Nakagawa (2017) find that task group members rate a low-status task-group member as more reasonable and cooperative when the low-status task-group member defers to a high-status task-group member.

are generally more concerned than are White Americans with corporate harm and risk, because they tend to be both economically and racially disadvantaged. Future work with greater statistical power should investigate differences between these and other racial minority groups, whose participation and opinions may follow different patterns based on their lived experience or the content of their racial identity.

In sum, our evidence, drawn from hundreds of deliberating groups, is clear in one respect: race is not only a characteristic of individuals. It is also a feature of decision-making groups. The question becomes why and how racial diversity matters. Our results implicate status: being in the numerical minority poses an extra barrier when an identity group enters the deliberation with lower social status. Closer attention to status inequalities can shed light on deliberative and representative democracy.

Acknowledgements

We thank Abdullah Aydogan, Dan Cassino, Raymond Hicks, Andrew Owen, Lee Shaker, Anna Stroinski, and Andrew Tyner for research assistance as well as the editors and anonymous reviewers for constructive suggestions and helpful guidance. We thank David Schkade for providing the questionnaire data and audio recordings.

References

Angel, Stefan, Franziska Disslbacher, Stefan Humer, and Matthias Schnetzer. 2019. "What Did You Really Earn Last Year?: Explaining Measurement Error in Survey Income Data." *Journal of the Royal Statistical Society: Series A (Statistics in Society)* 182(4): 1411–1437.

Antonio, Michael E., and Verie P. Hans. 2001. "Race and the Civil Jury: How Does a Juror's Race Shape the Jury Experience?" In *Psychology in the Courts: International Advances in Knowledge*, eds. Ronald Roesch, Raymond R. Corrado, and Rebecca J. Dempster. New York: Routledge.

Anwar, Shamena, Patrick Bayer, and Randi Hjalmarsson. 2012. "The Impact of Jury Race in Criminal Trials." *The Quarterly Journal of Economics* 127(2): 1017–1055.

Barabas, Jason. 2004. "How Deliberation Affects Policy Opinions." *American Political Science Review* 98(4): 687–701.

Beauvais, Edana. 2018. "The Oxford Handbook of Deliberative Democracy." In *The Oxford Handbook of Deliberative Democracy*, eds. Andre Bächtiger, John S. Dryzek, Jane Mansbridge, and Mark Warren. New York: Oxford University Press, 143–155.

- Bolin, Robert, Sara Grineski, and Timothy Collins. 2005. "The Geography of Despair: Environmental Racism in the Making of South Phoenix, Arizona, USA." *Human Ecology Review* 12(2): 156–168.
- Bornstein, Brian H., and Michelle Rajki. 1994. "Extra-legal Factors and Product Liability: The Influence of Mock Jurors' Demographic Characteristics and Intuitions about the Cause of an Injury." Behavioral Sciences & the Law 12(2): 127–147.
- Brunell, Thomas, Chetan Dave, and Nicholas Morgan. 2009. "Factors Affecting the Length of Time a Jury Deliberates: Case Characteristics and Jury Composition." *Review of Law & Economics* 5: 23–23.
- Cappella, Joseph N., Vincent Price, and Lilach Nir. 2002. "Argument Repertoire as a Reliable and Valid Measure of Opinion Quality: Electronic Dialogue During Campaign 2000." *Politial Communication* 19(1): 73–93.
- Chambers, Simone. 2003. "Deliberative Democratic Theory." *Annual Review of Political Science* 6(1): 307–326.
- Clark, John, Marcus T. Boccaccini, Beth Caillouet, and William F. Chaplin. 2007. "Five Factor Model Personality Traits, Jury Selection, and Case Outcomes in Criminal and Civil Cases." *Criminal Justice and Behavior* 34(5): 641–660.
- Collins, Jonathan E. 2021. "Does the Meeting Style Matter? The Effects of Exposure to Participatory and Deliberative School Board Meetings." *American Political Science Review*: Forthcoming.
- Conley, Dalton. 1999. *Being Black, Living in the Red: Race, Wealth, and Social Policy in America*. Berkeley, Calif.: University of California Press.
- Correll, Shelley J., Cecilia L. Ridgeway, Ezra W. Zuckerman, Sharon Jank, Sara Jordan-Bloch, and Sandra Nakagawa. 2017. "It's the Conventional Thought That Counts: How Third-Order Inference Produces Status Advantage." *American Sociological Review* 82(2): 297–327.
- Cramer, Katherine J. 2007. *Talking about Race: Community Dialogues and the Politics of Difference*. Studies in communication, media, and public opinion Chicago: University of Chicago Press.
- Darity, William A., and A. Kirsten Mullen. 2020. From Here to Equality: Reparations for Black Americans in the Twenty-First Century. Chapel Hill: The University of North Carolina Press.
- Davis, Darren W. 1997. "The Direction of Race of Interviewer Effects among African-Americans: Donning the Black Mask." *American Journal of Political Science* 41(1): 309–322.
- Deveaux, Monique. 2018. "Poor-Led Social Movements and Global Justice." *Political Theory* 46(5): 698–725.
- Devine, Dennis J., Laura D. Clayton, Benjamin B. Dunford, Rasmy Seying, and Jennifer Pryce. 2001. "Jury Decision Making: 45 Years of Empirical Research on Deliberating Groups." *Psychology, Public Policy, and Law* 7(3): 622–727.
- Devine, Dennis J., Paige C. Krouse, Caitlin M. Cavanaugh, and Jaime C. Basora. 2016. "Evidentiary, Extraevidentiary, and Deliberation Process Predictors of Real Jury Verdicts." *Law and Human Behavior* 40(6): 670–682.

- Diamond, Shari Seidman, and Mary R. Rose. 2005. "Real Juries." *Annual Review of Law and Social Science* 1(1): 255–284.
- Diamond, Shari Seidman, Miachel J. Saks, and Stephan Landsman. 1998. "Juror Judegments About Liability and Damages: Sources of Variability and Ways to Increase Consistency." *DePaul Law Review* 48(2): 301–326.
- Einstein, Katherine Levine, David M. Glick, and Maxwell Palmer. 2019. *Neighborhood Defenders*. New York: Cambridge University Press.
- Eisenberg, Ann M. 2017. "Removal of Women and African-Americans in Jury Selection in South Carolina Capital Cases, 1997-2012." *Northeastern University Law Review* 9(2): 299–345.
- Farrar, Cynthia, Donald P. Green, Jennifer E. Green, David W. Nickerson, and Steven Shewfelt. 2009. "Does Discussion Group Composition Affect Policy Preferences? Results from Three Randomized Experiments." *Political Psychology* 30(4): 615–647.
- Fishkin, James S. 1997. *The Voice of the People: Public Opinion and Democracy*. New Haven: Yale University Press.
- Fraser, Nancy. 1992. "Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy." In *Habermas and the Public Sphere*, ed. Craig Calhoun. Cambridge, MA: MIT Press , 109–142.
- Fukurai, Hiroshi, and Richard Krooth. 2003. *Race in the Jury Box: Affirmative Action in Jury Selection*. SUNY Press.
- Gastil, John, and Philip J. Weiser. 2010. *The Jury and Democracy: How Jury Deliberation Promotes Civic Engagement and Political Participation*. New York: Oxford University Press.
- Gifford, Donald G., and Brian Jones. 2016. "Keeping Cases from Black Juries: An Empirical Analysis of How Race, Income Inequality, and Regional History Affect Tort Law." Washington and Lee Law Review 73(2): 557–651.
- Gilens, Martin. 2012. *Affluence and Influence: Economic Inequality and Political Power in America*. Princeton, NJ: Princeton University Press.
- Gutmann, Amy, and Dennis F. Thompson. 2004. *Why Deliberative Democracy?* Princeton, N.J.: Princeton University Press.
- Habermas, Jürgen. 1996. Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy. Cambridge, MA: MIT Press.
- Hamilton, Darrick, and William A. Darity. 2017. "The Political Economy of Education, Financial Literacy, and the Racial Wealth Gap." *Federal Reserve Bank of St. Louis Review* 99(1): 59–76.
- Hannaford-Agor, Paula, and Nicole L. Waters. 2011. "Safe Harbors from Fair-Cross-Section Challenges? The Practical Limitations of Measuring Representation in the Jury Pool." *Journal of Empirical Legal Studies* 8(4): 762–791.
- Hans, Valerie P., John Gastil, and Traci Feller. 2014. "Deliberative Democracy and the American Civil Jury." *Journal of Empirical Legal Studies* 11(4): 697–717.

- Hariri, Jacob Gerner, and David Dreyer Lassen. 2017. "Income and Outcomes: Social Desirability Bias Distorts Measurements of the Relationship between Income and Political Behavior." *Public Opinion Quarterly* 81(2): 564–576.
- Harris, Allison P., and Maya Sen. 2019. "Bias and Judging." *Annual Review of Political Science* 22(1): 241–259.
- Hastie, Reid, Steven Penrod, and Nancy Pennington. 1983. *Inside the Jury*. Cambridge, MA: Harvard University Press.
- Haynie, Kerry Lee. 2001. *African American Legislators in the American States*. New York: Columbia University Press.
- Herring, Cedric, and Loren Henderson. 2016. "Wealth Inequality in Black and White: Cultural and Structural Sources of the Racial Wealth Gap." *Race and Social Problems* 8(1): 4–17.
- Hunt, Jennifer S. 2015. "Race, Ethnicity, and Culture in Jury Decision Making." *Annual Review of Law and Social Science* 11(1): 269–288.
- Kahan, Dan M., Donald Braman, John Gastil, Paul Slovic, and C. K. Mertz. 2007. "Culture and Identity-Protective Cognition: Explaining the White-Male Effect in Risk Perception." *Journal of Empirical Legal Studies* 4(3): 465–505.
- Kahneman, Daniel, David Schkade, and Cass Sunstein. 1998. "Shared Outrage and Erratic Awards: The Psychology of Punitive Damages." *Journal of Risk and Uncertainty* 16(1): 49–86.
- Karpowitz, Christopher F., and Tali Mendelberg. 2014. *The Silent Sex: Gender, Deliberation, and Institutions*. Princeton, NJ: Princeton University Press.
- Kastellec, Jonathan P. 2013. "Racial Diversity and Judicial Influence on Appellate Courts." *American Journal of Political Science* 57(1): 167–183.
- Maass, Anne, Russell D. Clark, and Gerald Haberkorn. 1982. "The Effects of Differential Ascribed Category Membership and Norms on Minority Influence." *European Journal of Social Psychology* 12(1): 89–104.
- Mansbridge, Jane. 1999. "Should Blacks Represent Blacks and Women Represent Women? A Contingent "Yes"." *The Journal of Politics* 61(3): 628–657.
- Mansbridge, Jane J. 1983. *Beyond Adversary Democracy*. University of chicago press ed. Chicago: University of Chicago Press.
- Massey, Douglas S. 2009. "Racial Formation in Theory and Practice: The Case of Mexicans in the United States." *Race Soc Probl* 1: 12–26.
- Mendelberg, Tali. 2002. "The Deliberative Citizen: Theory and Evidence." In *Political Decision Making, Deliberation and Participation: Research in Micropolitics*, eds. Michael X. Delli Carpini, Robert Y. Shaprio, and Leonie Huddy. Vol. 6 Greenwich, CT: JAI Press.
- Myers, C. Daniel. 2017. "Interests, Information, and Minority Influence in Deliberation." *The Journal of Politics* 79(3): 804–822.

- Myers, C. Daniel, Edith C. Kieffer, A. Mark Fendrick, Hyungjin Myra Kim, Karen Calhoun, Lisa Szymecko, Lynnette LaHahnn, Charo Ledón, Marion Danis, Zachary Rowe, and Susan Dorr Goold. 2020. "How Would Low-Income Communities Prioritize Medicaid Spending?" *Journal of Health Politics, Policy and Law* 45(3): 373–418.
- Nuamah, Sally A., and Thomas Ogorzalek. 2021. "Close to Home: Place-Based Mobilization in Racialized Contexts." *American Political Science Review*: Forthcoming.
- Pennington, Liana, and Matthew J. Dolliver. 2021. "The Effect of Deliberation on Jurors' Attitudes toward Jury Service in Criminal Cases." *Law & Social Inquiry* 46(2): 391–406.
- Pérez, Efrén O. 2021. Diversity's Child: People of Color and the Politics of Identity. University of Chicago Press.
- Peter-Hagene, Liana. 2019. "Jurors' Cognitive Depletion and Performance during Jury Deliberation as a Function of Jury Diversity and Defendant Race." *Law and Human Behavior* 43(3): 232–249.
- Price, Vincent, and Joseph N. Cappella. 2002. "Online Deliberation and Its Influence: The Electronic Dialogue Project in Campaign 2000." IT & Society 1(1): 303–329.
- Ridgeway, Cecilia L., and Sandra Nakagawa. 2017. "Is Deference the Price of Being Seen as Reasonable? How Status Hierarchies Incentivize Acceptance of Low Status." Social Psychology Quarterly 80(2): 132–152.
- Ridgeway, Cecilia L., and Shelley J. Correll. 2006. "Consensus and the Creation of Status Beliefs." *Social Forces* 85(1): 431–453.
- Rose, Mary R., and Shari Seidman Diamond. 2008. "Judging Bias: Juror Confidence and Judicial Rulings on Challenges for Cause." *Law & Society Review* 42(3): 513–549.
- Sahn, Alexander. Forthcoming. "The Effectiveness of Lobbying In Public Meetings: Evidence From San Francisco.": Forthcoming.
- Sanders, Lynn M. 1997. "Against Deliberation." Political Theory 25(3): 347–376.
- Schwartzberg, Melissa. 2018. "Justifying the Jury: Reconciling Justice, Equality, and Democracy." *American Political Science Review* 112(3): 446–458.
- Shaw, Emily V., Mona Lynch, Sofia Laguna, and Steven J. Frenda. 2021. "Race, Witness Credibility, and Jury Deliberation in a Simulated Drug Trafficking Trial." *Law and Human Behavior* 45(3): 215–228.
- Sommers, Samuel R. 2006. "On Racial Diversity and Group Decision Making: Identifying Multiple Effects of Racial Composition on Jury Deliberations." *Journal of Personality and Social Psychology* 90(4): 597–612.
- Sommers, Samuel R. 2008. "Determinants and Consequences of Jury Racial Diversity: Empirical Findings, Implications, and Directions for Future Research." Social Issues and Policy Review 2(1): 65–102.
- Sommers, Samuel R., and Phoebe C. Ellsworth. 2001. "White Juror Bias: An Investigation of Prejudice Against Black Defendants in the American Courtroom." *Psychology, Public Policy, and Law* 7(1): 201–229.

- Soss, Joe, and Vesla Weaver. 2017. "Police Are Our Government: Politics, Political Science, and the Policing of Race–Class Subjugated Communities." *Annual Review of Political Science* 20(1): 565–591.
- Stoddard, Olga, Christopher F. Karpowitz, and Jessica R. Preece. 2021. "Strength in Numbers: A Field Experiment in Gender, Influence, and Group Dynamics." Unpublished paper, Brigham Young University.
- Sumaktoyo, Nathanael Gratias, David W. Nickerson, and Michael J. Keane. 2017. "Discussion Group Composition and Deliberation Experience." *Journal of Experimental Political Science* 3(2): 164–173.
- Sunstein, Cass R., Reid Hastie, John W. Payne, David A. Schkade, and W. Kip Viscusi. 2002. *Punitive Damages: How Juries Decide*. Chicago: University of Chicago Press.
- Tanford, Sarah, and Steven Penrod. 1986. "Jury Deliberations: Discussion Content and Influence Processes in Jury Decision Making." *Journal of Applied Social Psychology* 16(4): 322–347.
- Taylor, Tanya S., and Harmon M. Hosch. 2004. "An Examination of Jury Verdicts for Evidence of a Similarity-Leniency Effect, an Out-Group Punitiveness Effect or a Black Sheep Effect." *Law Hum Behav* 28(5): 587–598.
- Unnever, James D., Michael L. Benson, and Francis T. Cullen. 2008. "Public Support for Getting Tough on Corporate Crime." *Journal of Research in Crime and Delinquency* 45(2): 163–190.
- White, Ismail K., and Chryl Nicole Laird. 2020. *Steadfast Democrats: How Social Forces Shape Black Political Behavior*. Princeton, New Jersey: Princeton University Press.
- Williams, Marian R., and Melissa W. Burek. 2008. "Justice, Juries, and Convictions: The Relevance of Race in Jury Verdicts." *Journal of Crime and Justice* 31(1): 149–169.
- York, E., and B. Cornwell. 2006. "Status on Trial: Social Characteristics and Influence in the Jury Room." *Social Forces* 85(1): 455–477.
- Young, Iris Marion. 1985. "Humanism, Gynocentrism and Feminist Politics." Women's Studies International Forum 8(3): 173–183.

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