

# Race, Voice, and Authority in Discussion Groups

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## **Abstract**

Few studies examine how often people of color voice their views or shape the discussion in civic or political decision-making groups. Existing studies do not link participants' private preferences to what they say, and lack data on racial inequalities in individuals' public speech. We analyze a large sample of citizens randomized to groups tasked with deciding on punishment for corporate malfeasance, an issue of consequence for communities of color. We develop systematic measures of racial inequality in voice and uptake during discussion. We find that members of color speak less and are less likely to mention their own preferences. These effects are not explained by racial differences in preferences or by being the lone racial minority. Race also shapes the uptake of preferences during discussion. A seat at the table does not suffice for equal voice.

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Group discussion is ubiquitous in American civic life. Americans meet to deliberate and reach collective decisions in a variety of settings, including juries, town meetings, local committees, civic forums, and voluntary associations. Approximately a quarter of Americans report attending a political meeting on local, town, or school affairs in the past year (Smith 2013).

These institutions are not only prevalent; they are also supposed to embody core democratic ideals (Collins 2021). Equal standing in the deliberation within these groups is one such ideal (Gutmann and Thompson 1996; Mansbridge 1983), long identified as a keystone of the American civic tradition (Tocqueville 1969/1840).

However, in practice, group discussion may not always be characterized by equal standing. Social identities with less authority in society may also have less authority in discussions of public affairs (Beauvais 2018; Sanders 1997; Young 2000). Race is a key dimension of social inequality in the United States. In fact, by some accounts, it is the single deepest cleavage in society and politics (Hutchings and Valentino 2004). It may thus pose significant barriers to equal standing in deliberation. For one, people of color (POC) tend to be numerically under-represented when citizens come together to discuss matters of common concern (Nuamah and Ogorzalek 2021; Sahn 2023; Schaffner, Rhodes, and Raja 2020). Furthermore, even if they are numerically represented, their mere presence may not suffice to guarantee deliberative equality (Einstein, Glick, and Palmer 2019).

According to contemporary philosophers of democracy, equality in deliberation consists of at least two features. One is equal voice. Deliberation must facilitate the expression of diverse perspectives and interests. Social disadvantage should not create discursive disadvantage (Fraser 1992; Sanders 1997; Young 2000). People should feel free to speak their minds and to participate actively, regardless of their status in society. Another requirement is “deliberative uptake” (Bohman 1996; Scudder 2020). In the back-and-forth of deliberative exchange, the voices of all group members should be “actually heard and ultimately considered,” regardless of social status (Scudder 2020, p. 21). Voice and uptake matter because they are connected to authority — the expectation of influence. To achieve equal substantive representation in the decision, disadvantaged groups must have robust “authoritative representation” — discursive actions that shape “the expectation that a person, or group, can exercise power and influence others” (Mendelberg, Karpowitz, and Oliphant 2014, p. 35). If a situation deters people of color from expressing their views, or prevents

them from receiving a hearing, then being “in the room where it happens” may not suffice for equal representation.

A central question, then, is whether people of color have equal voice and whether their perspectives are equally considered during group discussion. However, the answer is unclear. While scholars have demonstrated a race gap in influence over group *decisions* (Karpowitz et al. 2023; Nuamah and Ogorzalek 2021; Schaffner, Rhodes, and Raja 2020), we know little about the discursive process that allocates power differently by race.

Here, we address this question with novel data from small groups of citizens discussing how much corporations should be punished when they harm ordinary citizens. These groups are modeled on the civil jury setting, an important site of public decision-making that often has political dimensions. Juries frequently consider damages against corporations that have violated rights or harmed vulnerable communities (Hans, Gastil, and Feller 2014). In this sense, in civil juries, marginalized groups have the potential to hold powerful actors accountable for actions that disproportionately harm them (Gifford and Jones 2016; Kahan et al. 2007; Unnever, Benson, and Cullen 2008).

We analyze data from 407 six-member groups, as well as a subset of 147 groups with more granular information available. Because individuals were randomly assigned to a group, the design eliminates selection confounds present in observational studies of racial diversity. While it is impossible to randomly assign individuals to race, researchers randomly assigned individuals to groups. Thus, participants were unable to select into a group, the racial composition of the groups varied exogenously, and the effect of racial composition is causally identified. In addition, the large sample affords statistical power to detect differences by race. A final key advantage of the data is that it allows us to link transcripts of individuals’ speech with their private pre-deliberation preferences. This allows us to measure how often white participants and participants of color articulate their own preference — a vital measure of voice — and how often others mention those preferences — a key measure of uptake. In sum, this dataset can reveal racial differences in who speaks their own mind and how much others listen to them, a goal until now impossible due to the dearth of data on individual speech and preferences.

We do not claim that this sample generalizes to what actual juries do. In fact, our aim is not to study juries specifically. Rather, we use these data to understand race and authority in decision-

making groups more generally. These data offer two important advantages over existing research. First, they yield rich and precise measures of voice and uptake unavailable in existing data we know of. Studies of juries, local meetings, and civic organizations have not linked the text of the discussion to individual pre-discussion preferences. Without such data it is not possible to know who speaks their mind and how successful they are. Second, the requirement of unanimity in these groups may promote norms of listening to different perspectives, impartiality, and the quest for justice (Cramer 2007; Karpowitz and Mendelberg 2014). If we uncover a racial gap here, where conditions are more favorable, then it is likely more severe in other situations.

We find that people of color are systematically disadvantaged during group deliberation. White individuals speak longer, mention their own preferences more often, and are more likely to speak at pivotal times. Though this design cannot isolate the causal effect of individual race, these patterns persist when controlling for other features of the individual and of deliberation, including education and income. We lack statistical power to separate POC into their constituent ethnoracial groups, but results are similar when examining Hispanic Americans, who are the plurality in our sample.

We explore two mechanisms for racial gaps in voice: preferences, and numerical representation. We find that the race gap in voice is not explained by preferences: while white and POC members tend to hold somewhat different preferences, the race gap remains when we control for preferences. However, preferences do matter for the race gap in uptake; members who disagree with their group receive more uptake if they are white.

The second mechanism we test — numerical representation — also has null effects: the race gap in voice persists even when the focal member is not the only POC in the group. Moving from 1 to 2 POC members in a group of 6 does not mitigate the race gap in participation. Future work should investigate whether groups with equal or majority POC produce different outcomes. Even without such data, the results are informative, because they capture the typical range of racial composition in real groups in a white-majority country.

Finally, we find that these race gaps matter substantively, in that race shapes what people say. People of color are more likely to invoke words describing harms inflicted by corporations on plaintiffs and to make references to fairness. If they have less voice and uptake, this may mean less substantive representation of disadvantaged perspectives.

Though these data were gathered before the Black Lives Matter movement altered norms about race, there is reason to think these patterns are similar today, as we elaborate below. For example, a recent study of racial dynamics in interviews found that Black survey respondents are more likely to self-silence when speaking with a white interviewer than is the case with whites speaking with an interviewer of color, and this race gap is no weaker in more recent years (Wamble et al. 2022).

These results make three contributions to the question of equal representation in politics and public affairs. First, they reveal substantial inequalities of authoritative representation by race. Race shapes unequal power not only by determining who is in the room and what they decide, but also by influencing who speaks their mind, and whose preferences shape other deliberators' speech. These racial inequalities in deliberation may help explain the severe racial inequities in representation in government, well-documented in existing scholarship (Collins 2021; Einstein, Glick, and Palmer 2019; Nuamah and Ogorzalek 2021; Karpowitz et al. 2023). That research has not been able to test the mechanism for lack of data on the discussion itself. Our findings suggest that even when POC have access to government decision-making, they may be stymied by barriers to voice and influence. Second, the evidence rules out the most obvious mechanism; the race gap in voice persists when we account for preferences. Third, the findings disconfirm a simple model of representation: these gaps persist even when POC are not alone in a group. When it comes to race, a variety of civic and political spaces — town meetings, juries, local committees, and voluntary associations — may fail to meet democratic standards of equal standing in debates about fairness, harm, and responsibility, even under circumstances favorable to deliberation.

## **Equality of Voice and Authority**

Ideals of equality and inclusion stand at the heart of theories of deliberative democracy (Bohman 1996; Habermas 1996; Young 2000). As Mansbridge et al. argue, the extent to which “multiple and plural voices, interests, concerns, and claims” are included in group decision-making is “*the central element* of what makes deliberative democratic processes democratic” (Mansbridge et al. 2012, p. 12, emphasis added). An inclusive deliberation is one in which status inequalities, such as “the discriminatory effects of class, race, and gender inequalities” (Gutmann and Thompson 2004, p. 50), are minimized. As Cohen writes, in the deliberative ideal, “the existing distribution of power and resources *does not . . . play an authoritative role in their deliberation*” (1997, p. 74, emphasis added).

Critics of deliberative theory have argued that in practice, actual discussion falls short of this ideal. Discussion may mirror or even magnify existing authority structures (Fraser 1992; Young 2000). Social status affects the value accorded to the perspectives and the modes of expression of members of a social identity (Sanders 1997; Young 2000). Status differences may thus stymie the quest for deliberative inclusion.

Empirical evidence lends some support to this critical perspective, especially when the group's structure enhances the disadvantages of social status. Lower-status group members tend to exercise less voice and are often afforded less authority (Ridgeway and Nakagawa 2017). This marginalization takes many forms. Lower-status group members tend to speak less (Carli 1989; Dubrovsky, Kiesler, and Sethna 1991; Karpowitz, Mendelberg, and Shaker 2012). They receive more negative interruptions and discursive microaggressions, and fewer discursive signals of social rapport (Dovidio et al. 1988; Johnson 1994; Mendelberg, Karpowitz, and Oliphant 2014; Ng, Brooke, and Dunne 1995). Their perceived authority in the eyes of other group members is lower (Dovidio et al. 1988; Dubrovsky, Kiesler, and Sethna 1991; Karpowitz, Mendelberg, and Shaker 2012). Their distinctive priorities and preferences are less likely to be taken up during discussion (Mendelberg, Karpowitz, and Goedert 2014; Ridgeway and Smith-Lovin 1999). They are less likely to influence other members' preferences and the group's decision (Karpowitz and Mendelberg 2014; York and Cornwell 2006). All these measures of voice, uptake, authority, and influence tend to move in concert, and all rise and fall with status in the deliberating group. In these ways, authoritative representation is constructed in the deliberation itself.

### **Racial Inequalities in Discussion Are Under-Studied**

Previous political science research on deliberation is useful in documenting patterns of inequality in discussion and in demonstrating how social status inhibits authoritative representation. But it is almost entirely based on social categories other than race. Whether race is subject to these dynamics remains unknown. This is a significant omission. In a society fundamentally shaped by racial inequalities, a wide array of issues directly or indirectly implicate the distribution of life chances by race (Hutchings and Valentino 2004). Notably for our study, the race gap in business ownership and wealth is substantial (Herring and Henderson 2016), and this inequality shapes views of corporate power and malfeasance. In fact, race predicts support for addressing

corporate harm better than income (Unnever, Benson, and Cullen 2008). Thus, we aim to explore patterns of *racial* inequality in voice and authority.

To be sure, there is extensive prior work on race in group deliberations, especially in the literature on juries. However, according to a thorough recent review, despite the voluminous research on juror race, “considerably less research has focused on interacting juries” and what white and POC jurors actually say (Devine et al. 2001, p. 673). Few studies can reliably measure racial inequalities in participation: most lack sufficient numbers of POC participants and measures of voice, uptake, and preferences.

In addition, causally identified studies of jury racial composition are surprisingly rare, even in mock jury settings where randomization is feasible. As one review noted, “jury demographic composition has rarely been manipulated” (Devine et al. 2016, p. 679), restricting researchers’ ability to draw causal conclusions about the effects of racial diversity. 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, p. 225). Very few studies have randomized the group’s racial composition by randomizing individuals to groups, which is the only way to randomize racial composition and study the behavior of people of different racial groups, and those that did so often lack statistical power or do not specifically examine voice and deliberative uptake (Peter-Hagene 2019; Sommers 2006; Karpowitz et al. 2023).<sup>1</sup>

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<sup>1</sup>For example, Peter-Hagene (2019) randomized the presence of white vs. nonwhite confederates, but did not include jurors of color among the study participants, making it impossible to examine patterns of voice among POC jurors. Lynch and Haney (2011) conduct a mock-jury experimental study of juror behavior in capital cases, but as they describe, they “did not include the large number of jury groups that would be needed to achieve the required statistical power” (p. 83), nor were individuals randomly assigned to juries (the optimal way to approximate randomized racial composition other than using confederates of different race). In addition, while the design included important strengths — actual deliberation in a realistic situation, pre- and post-deliberation measures of juror preferences, and post-deliberation evaluations of the trial evidence — the study did not examine the deliberation itself. In another relevant study (Salerno, Peter-Hagene, and Jay 2019), one participant at a time was exposed to messages presented as the

For our purposes, the most relevant prior studies were conducted by Sommers (2006), who varied jury composition between all-white 6-person juries and juries with 4 white and 2 Black jurors. The racially diverse juries deliberated more carefully, and their white jurors were more likely than those on all-white juries to believe in the innocence of the defendant. This suggests that jurors of color do exercise influence. However, this study has limitations. It did not measure POC jurors' voice and influence during the discussion (such as the racial balance of speakers, POC jurors' power of agenda-setting, how often POC jurors articulated their pre-deliberation preferences, or how much those preferences were taken up by others).<sup>2</sup>

Beyond the mock jury literature, studies of real juries are also limited in their ability to study deliberation itself.<sup>3</sup> Observational studies typically survey participants after the fact and ask about their perception or memory (Pennington and Dolliver 2021; Winter 2018); or they survey third party views (Clair and Winter 2016; Ellis and Diamond 2003). These research designs yield important insights, but they cannot rule out the potential biases from the typically high rates of missing data on cases and jurors, and selective recall.<sup>4</sup>

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utterances of mock jurors in a deliberation, and “[confederate] holdouts who expressed anger (versus no anger) were less effective and influential when they were female (but not male, Study 2) or Black (but not White, Study 3)—despite having expressed identical arguments and anger” (abstract).

<sup>2</sup>In a recent study, Karpowitz et al. (2023) found evidence of racial inequalities of influence in the decisions of the groups we study here. While racial composition modestly affected the private, post-deliberation opinions of both white and POC jurors, it had no effect on the group decision. In addition, the study found that members whose preference differed substantially from their group were substantially less able to move the decision in their direction if they are POC, even when holding the same preference. In other words, POC jurors with dissenting preferences were far less influential than comparable dissenting white jurors. While this study can assess the causal effects of racial composition through random assignment of individuals to groups, it did not examine the deliberation, and has none of our outcome measures.

<sup>3</sup>But see Diamond and Rose (2005).

<sup>4</sup>For example, Bowers, Steiner, and Sandys (2001) surveyed real jurors about their experiences and compared white male-dominated juries to others on the preferences of different-race jurors, their perceptions of deliberation, and the considerations discussed; see also Cornwell and Hans (2011).



Studies of real juries are hampered in other ways as well. These studies by definition have no control over jury composition. Through peremptory challenges, people of color are often struck from jury service in precisely the cases where lawyers expect their presence may change the outcome (Eisenberg 2017; Fukurai and Krooth 2003). The consequence of this biased selection process is that the resulting jury composition is likely correlated with important aspects of the case, including the relevance of race to the case. Devine et al. (2016), who have conducted some of the most extensive studies of racial composition on real juries, emphasize the difficulty posed by the high correlation between group racial composition and other features of cases. 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” (p. 679). In summary, few studies measure actual voice or how a jury’s demographic composition affects it.

Our contribution, then, is to assess racial inequalities in authoritative representation by directly examining patterns of voice and uptake during discussion. There is good reason to expect racial inequalities in voice and authority. For example, Einstein, Glick, and Palmer (2019) document substantial racial disparities in public comments at planning and zoning board meetings in Massachusetts. In the cities they studied, whites comprised 80 percent of the adult population but 95 percent of the commenters who spoke up by offering testimony at the meeting. Substantial racial disparities of voice persisted even in more diverse localities, and were accompanied by other markers of status inequalities, such as home ownership. Further, the under-representation of people of color among those who attend is consistent with their under-representation in the actions of local government; the preferences of people of color are less represented in the outcomes of local political institutions (Schaffner, Rhodes, and Raja 2020).

What this literature has not yet revealed is how race shapes the process of discussion and its content. The rate at which those in the room speak, articulate their own thoughts, and receive uptake remains unknown. We argue that race is likely to affect specific facets of voice and uptake that together produce authoritative representation. Race is a set of identity markers carrying strong signals of social status (Lerman and Weaver 2014). The nation’s fraught history of racial inequality may construct the speech of people of color as less authoritative, with implications for their willingness to exercise voice and their ability to achieve influence and authority within the group.

## **Voice, Uptake, and Authoritative Representation**

We begin with the act of speaking. People of color may engage in self-silencing in mixed-race conversations. They may mute the expression of their preferences, or express views other than their own, especially when they have reason to believe that their preferences may diverge from those of whites. Consistent with this possibility, Black survey respondents are more likely to mirror average white opinion when interviewed in person by white interviewers (White and Laird 2020). Davis attributes dynamics like these to the accumulated experience of day-to-day life in a society marked by racial stratification, which leads some people of color to “conceal their true political beliefs and place self-imposed limits on their freedom of expression” in conversation with whites (1997, p. 309).

Self-silencing has profound consequences for deliberators’ ability to exercise influence and generate authoritative representation. The more a group member speaks, the greater their chance to express their view and influence the deliberation. People who speak more are also perceived as more influential by other group members (Dubrovsky, Kiesler, and Sethna 1991; Karpowitz, Mendelberg, and Shaker 2012; Shelly et al. 1999). Accordingly, how much a person speaks is an important form of authority.

To be sure, not all words are substantive contributions to deliberation. A person who speaks but does not engage with the decision-making task may not have exercised meaningful voice. An additional measure of voice, then, is how often a person discusses the choices before the group. This includes their own preference, and any preferences articulated during discussion. Expressing one’s own preference for the outcome, though, is an especially important measure of voice. A perspective cannot move the group if it is never voiced in the first place. And the more a particular view is voiced, the more persuasive it is likely to be, and the more likely the group’s decision is to reflect that view (Karpowitz and Mendelberg 2014; Kathlene 1994).

Beyond direct preferences about the group’s decision, voice may also involve other elements of speech that express a speaker’s point of view and frame the group’s decision. For example, a participant may offer distinct perspectives, ideas, interests, claims, and considerations. The words deliberators choose to speak represent the values, criteria, and arguments the speaker believes are important to the group’s decision-making task. Young (2000) argues that identity shapes these

words, frames, and modes of communication, and that speaking them is a form of empowerment for marginalized identities. By articulating their perspectives and interests, people of color may lead others to understand “what takes place in different social locations and how social processes appear to connect and conflict from different points of view...” (p. 118). For this reason, we also explore the extent to which white and POC group members use different words or take up different topics when they speak.

Just as not all kinds of speech matter equally, speech does not matter equally at all points in a deliberation. A group member who speaks at the very beginning of a discussion has a chance to set the agenda; they can raise ideas or frame the question under discussion in ways that shape the rest of the deliberation (Dubrovsky, Kiesler, and Sethna 1991; Mendelberg, Karpowitz, and Goedert 2014). At the other end of the deliberation, the final few moments of a discussion may be critical. The considerations that are on the table at the point of collective decision-making may carry more weight. Making one’s voice heard when a final decision is being reached is thus another potential form of voice.

Authoritative representation is not merely a function of the individual group member, however. How other deliberators engage the preferences of their peers also matters. As we noted, deliberative “uptake” occurs when the group engages and fairly considers the preferences of all group members (Sanders 1997; Scudder 2020). Discussion in which a POC deliberator’s preference is mentioned less often than a white member’s preference would constitute evidence of a potential loss of uptake.

The source of these disparities in group uptake also matters. Are they the result of white deliberators mentioning their own preferences more often? That would point to voice as the crucial conduit of authority. Or are they instead driven by a failure of members to consider POC and white preferences equally? That implies uptake is the key channel of authority. As we noted, there is evidence for this mechanism, and the mock jury literature reinforces this notion. For example, a Black confederate was perceived as more emotional than a white confederate expressing the same angry message (Salerno, Peter-Hagene, and Jay 2019)

A final source of uptake disparity resides in the formal leadership of the group. In addition to exercising authority directly, formal leaders, such as chairs, moderators, or forepersons, may increase a member’s authority by devoting more of their speech to that member’s preference

(Johnson 1994). Our final test, then, considers whether the group's foreperson gives equal consideration to all preferences regardless of speaker race. If uptake disparity in the discussion is linked to foreperson uptake, this suggests formal leadership as a pathway to equal authoritative representation.

## **A Potential Mitigator of Racial Inequality in Discussion**

Because authoritative representation is constructed during discussion and decision-making, it hinges on the specific discursive practices within the group. Effective deliberative contexts could ameliorate unequal authoritative representation by signaling the equal status of all group members, inviting their full participation, and promoting the need to consider all perspectives (Cramer 2007). Important features of the group may exacerbate or mitigate discursive inequality and members' ability to achieve authoritative representation.

The literature on unequal representation has pointed to group composition as one such feature. Some studies of race and representation suggest that the numerical under-representation of people of color may lead to substantive under-representation (Preuhs 2006), perhaps because being in the numerical minority shapes a group's status. Identity minorities may therefore be more hesitant to speak up or to divulge their authentic preferences when they find themselves in the group's numerical minority. In studies of gender inequality, for example, this pattern is more prevalent in groups with few women (Karpowitz and Mendelberg 2014). Likewise, voice could also be affected by a group's racial composition.

Group composition may also affect how other deliberators respond to the perspectives of people of color. For example, according to Cramer (2007), in race dialogue groups, whites are more open to Black viewpoints when their group includes a large number of Black group members, and racial minorities tend to speak more and express a distinctive point of view more frequently in such contexts. In other words, larger numbers of disadvantaged group members may facilitate both their willingness to speak up and the tendency of other group members to consider their perspectives fully and fairly. Conversely, discursive patterns can decrease the status and authority of low-status minority groups in the deliberation even further.

## Hypotheses

Our theory of inequality in authoritative representation suggests several testable hypotheses. Our main expectation is that white members will exercise more voice and will receive more uptake than people of color. This inequality of authority could be evident in two ways. First, it may be seen in the extent to which whites and POC speak, speak early and late, talk about the choices the group could make, and express their own preferences. Second, racial inequality may show up in uptake: the preferences of white members may occupy more of the group's discussion, by occupying more of the discussion of fellow members or the formal leader.

We offer two additional hypotheses about factors that could shrink this racial gap. First, if the preferences of people of color diverge from those of whites, this may explain why their preferences receive less uptake. We test whether the racial gap diminishes when preferences are shared across lines of race. If the gap remains even in the face of controls for preferences, then that would be evidence of distinctly racial disparities. Second, racial gaps may be mitigated when more POC are included in the group (Cramer 2007). We examine whether racially diverse groups empower POC members, leading to greater voice and uptake.

Our null hypothesis is that the race gap does not exist in any of these measures. In a setting such as ours, with unanimous rule and an emphasis on full and fair deliberation, the demand to consider all perspectives may empower each member to speak and allow them to be heard. This individual empowerment may create racial equality. Previous work has shown that unanimity can indeed mute status inequalities in groups where low-status individuals form the numerical minority (Karpowitz and Mendelberg 2014). Thus, in this ideal setting, people of color may feel free to exercise voice and their fellow members may give their speech equal uptake (Gastil et al. 2010; Schwartzberg 2018).

This type of context — norms of consensus and fair deliberation — is not a mere ideal. It exists in practice in a variety of settings. Those include juries (Gastil et al. 2010), race dialogue groups (Cramer 2007), and small decision-making bodies that meet regularly (Mansbridge 1983). In other words, a favorable setting for racial equality of authoritative representation exists in a range of civic and political spaces. Whether racial equality might emerge in such settings is the subject of our analysis.

## Data and Methods

We leverage a unique dataset to measure when white and POC members voice their views in deliberation, and how often others take up those views. Our design was pre-registered at [https://osf.io/zsk4m/?view\\_only=718e2a41b8274f77a1f8a412cc29be64](https://osf.io/zsk4m/?view_only=718e2a41b8274f77a1f8a412cc29be64).

### Data

We analyze data from a mock-jury experiment that randomly assigned jury-eligible citizens from Phoenix, Arizona to hundreds of six-member “juries” (Sunstein et al. 2002; Schkade, Sunstein, and Kahneman 2000) tasked with making decisions about punitive damages against corporations in civil cases.<sup>5</sup>

While race does not feature in these cases, we expect it can shape relevant experiences and political sensibilities about harm and fairness. And in fact, POC in this sample privately indicated a pre-deliberation preference for much more serious punishment of harmful corporations: about \$2 million more. This effect of race is larger than that of any other individual demographic characteristic, including gender, age, education, and income.<sup>6</sup>

Past work has found that group racial composition shapes these decisions (Karpowitz et al. 2023). However, the *content* of these deliberations remains unexplored. Here we investigate racial patterns in speech behavior. The data includes individual and group demographics, private pre-deliberation and post-deliberation preferences, and the group decisions. As described below, we merged this data with transcripts of the deliberations.

Each jury was instructed to decide on the punitive damages to be awarded in one of 15 legal

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<sup>5</sup>This study was originally designed to address a different research question: does the infinite scaling property of money cause highly variable damage awards? To answer this question, all groups deliberated about the same case twice, in randomized order: once to assign a dollar amount of punitive damages, and once to rate the severity with which the company should be punished on a 0-8 scale. This treatment does not affect our results, with severity ratings and dollars exhibiting similar patterns, so we pool these two conditions and include an indicator for it in our models.

<sup>6</sup>This relative comparison is reported in (Karpowitz et al. 2023), who use similar data to ours. On the severity rating scale, POC’s average score is 0.3 higher (out of 8).

cases. Each case was assigned to a roughly equal number of juries.<sup>7</sup> All cases were adapted from actual legal cases involving a corporate defendant found liable for some harm against an individual plaintiff. The gender and age of the plaintiffs varied across the cases, as did the type and severity of the corporation's wrongdoing. For example, one case involved a secretary exposed by her company to harmful radiation; another involved a man injured in an accident caused by defective brakes.<sup>8</sup> Juries received no information about the race of the plaintiff.

Participants were told a prior jury had already decided the corporation was liable and determined compensatory damages, so they only decide on punitive damages, using a "preponderance of the evidence" legal standard. The judge's instructions explained the purpose of punitive damages is "to punish a defendant and to deter a defendant and others from committing similar acts in the future."

Jury-eligible citizens in Phoenix were recruited by a survey research firm and paid \$35 for their participation. Sessions occurred across five weekends, with hundreds of participants each weekend. Participants arrived at the study site, privately reported their demographic information, viewed videotaped narratives of their assigned case and read the same information in writing, and then recorded their private preferences about the appropriate punitive damages in the case using one of two randomly assigned scales (either dollars or severity rating). They were then randomly assigned to a six-person mock jury, instructed to choose a foreperson who would "preside over" the group's deliberations, and asked to deliberate for up to 30 minutes before arriving at a unanimous decision (or declare themselves hung if they could not come to a decision). After this deliberation, participants recorded their private preferences on the same case using the other scale (dollars or severity ratings), and the jury deliberated again (about the same case) for up to 30 minutes to reach a decision on this scale. The median group deliberated for 27 minutes total, and the transcripts suggest groups discussed their task thoroughly. We analyze the first round of deliberation, as second-round deliberations tended to be much shorter and less substantive, given that the jury was considering the same case a second time.

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<sup>7</sup>In the full sample, between 32-35 groups were assigned to each case.

<sup>8</sup>See Appendix S15 for brief descriptions of all 15 cases, detailed information from one sample case, and instructions.

We paid transcribers to transcribe the audio recordings of the full text of each discussion. We have usable transcripts for 407 (out of 550 possible) juries. The primary reason some transcripts are not available is poor audio quality, making it impossible to generate a transcript or distinguish the voices. Unfortunately, the tapes, and thus the transcripts, do not label individuals with a unique, identifying speaker label. To link speakers with the experimental and self-reported data described above, we used cross-walk information common to both the transcripts and the data: legal case, deliberation order, participant gender (gleaned from the audio and from some names mentioned on the tape), and expressed preferences. To use expressed preferences for this purpose, research assistants listened to each stated preference in the audio, compared it to the pre-deliberation preference each member had recorded in their pre-deliberation questionnaire, and linked a voice to a juror.<sup>9</sup> Intercoder reliability for this identification process is high (Krippendorff's  $\alpha = 0.80$ ).<sup>10</sup> Research assistants then assigned lines of speech uttered by a single speaker in the transcripts to a speaker identifier.<sup>11</sup> Through this process, we linked 956 people in 198 groups to speech in the transcripts. We do not find systematic differences in the demographics of participants who could and could not be linked to transcripts, except that women were less likely to be identified. Importantly, *there are no differences in our ability to link white and POC participants to their speech*.<sup>12</sup> Nevertheless, to avoid any potential bias from transcripts with many unidentified speakers, our individual-level analysis uses only the 767 individuals in the 147 groups for which at least 80% of the words are attributed to an identified speaker. We use the full dataset of 407 juries for group-level analysis.

These data were collected between 1999 and 2001. Though substantial time has passed, we see these data as informative about group deliberations today. Wamble et al. (2022) recently investi-

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<sup>9</sup>This process was facilitated by the fact that jurors often went around the table and stated their pre-deliberation preferences for punitive damages. In addition, jurors sometimes mentioned their names or were called on by name.

<sup>10</sup>See Appendix 3.1 for a full discussion of the process and the calculation of intercoder reliability.

<sup>11</sup>As explained in Appendix S3.1, on average, each pair of coders attributed about 70% of the same words in the transcript to any single speaker.

<sup>12</sup>More detail showing how missingness is not a threat to causal inference can be found in Appendix S3.



gated the extent to which Black survey interviewees respond differently to interviewers of different races, finding little change over time. Survey respondents in the 2010s remain highly sensitive to the race of their conversational partner, just as they were decades earlier. This provides suggestive evidence that selective self-expression by racial context persists today to a similar degree as when these data were collected.<sup>13</sup>

## Measures

Individual race and group racial composition are our key predictors. Eighty-six percent of the participants are white, six percent are Hispanic, three percent are Black, and five percent identified with other races. Although this is a larger and more racially diverse sample than many studies of group decision-making, it lacks power to examine each racial group separately. Thus, for the purposes of analysis, we pool all those who identify as racial or ethnic minorities and refer to them as people of color (POC); as Pérez (2021) shows, this is a meaningful identity category. Measured this way, there is sufficient variation in the racial composition of groups to allow us to estimate its effects: of the 407 groups with matched transcripts, 34% (137 groups) are all-white, 48% (194) contain 5 whites and 1 POC, 16% (66) have 4 whites and 2 POC, and 2% (10) include 3 POC or more (see Appendix S2 for additional details).<sup>14</sup> Our findings hold when separately analyzing the most numerous POC in our sample—Hispanic Americans—albeit with less precision due to lower power (see Appendix S11).<sup>15</sup>

We develop measures of voice and authority to assess the concepts described above. Some are constructed from the speech of all deliberators. These rely on the full transcripts and are available for all individuals in the 407 groups for which transcripts are available. Others are constructed

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<sup>13</sup>Smalarz et al. (2023) found evidence implying that social desirability bias may have increased over time. In that case, our data may suffer less of it than more current data, though we do not wish to over-state this possibility.

<sup>14</sup>To analyze the effects of racial composition we pool juries with two POC or more.

<sup>15</sup>The relevant population to which we can benchmark is the share of non-Hispanic white jurors among voter registration records, a major source of jury summons despite prohibitions against over-relying on those records. The non-Hispanic white share of those registered to vote in 2020 is 70 percent (Table 2 in Fabina and Scherer (2022)).

with text from individual speakers — the 767 identified individuals in the 147 groups for which at least 80% of the words are attributed to an identified speaker. Descriptive statistics for key measures can be found in Appendix S5.

With this data, we can calculate the amount and timing of each individual juror’s speech, and the frequency with which the juror’s preferred punishment is mentioned by themselves or others. This allows us to capture levels of voice and uptake for each white and POC juror. Because these measures are calculated at an individual level, they are not *mechanically* affected by the fact that white participants outnumber POC within most groups. For example, if we measured the number of words spoken by all the white jurors in a group and all the POC jurors in the group, the words spoken by white jurors would be greater simply because there are more white jurors. Measuring the words spoken by each individual white juror and each individual POC juror means these totals are not mathematically inflated or deflated by racial composition.

As we discuss below, one key measure of authority is the extent to which the group discusses a member’s (privately recorded) pre-deliberation preference for punitive damages. Considering, choosing, rejecting, or compromising among these preferences is the heart of the group’s decision task. To measure preference mentions, we developed code that identifies scale points and dollar amounts in speech: for example, the number 8, or \$500,000. These are the preferences group members considered in each round. We validated the code by comparing its results to the preferences coded by human coders, and find it produces acceptable false positive and negative rates of 5-15% (see Appendix S4). This approach captures any mention of a preference, regardless of whether it is raised by someone advocating for or disagreeing with it. Both kinds of mentions indicate that a person’s preference is being introduced or considered as a possible outcome; thus, we are interested in both.

Our first measure of voice is speech length: the number of words spoken by the focal member. Second, we measure the number of times the focal member mentions *any* group member’s preference — an indication they are contributing to the process of reaching a decision by discussing specific possible outcomes. Third, we construct two measures of the timing of the focal member’s speech: whether the member speaks at the beginning or end of the deliberation, important points for influence. Specifically, we measure the “earliness” of a person’s participation by counting how far their first line of speech is from the beginning of the deliberation, and “lateness” by measuring

how far their last line of speech is from the conclusion of the deliberation. More “influence” — a turn closer to the beginning or end — is denoted by higher numbers. Fourth, we measure how often the focal member mentions *their own* pre-deliberation preference. This is a crucial measure of voice, representing an effort to express one’s own authentic view and to exercise influence over the decision.

Next, we measure uptake. First, we count the number of times the focal member’s preference was mentioned by *anyone in the group*. The frequency with which a preference is discussed by the group represents the extent to which a person’s prior opinion is “taken up” during deliberation, or how much focus it receives. This measure uses the full dataset of non-identified transcripts, maximizing our statistical power. The number of times a preference is mentioned is strongly correlated with the group’s decision (see Appendix Figure S3). Thus, this measure is directly tied to influence.

To isolate uptake from voice, we construct a second measure of uptake: how often a member’s predeliberation preference is mentioned by others in the group — *omitting* the focal member’s own mentions of that preference. Third, we repeat this uptake measure only for the foreperson’s mentions of the focal member’s preference. To be sure, if a person never mentions their own preference, others are less likely to take it up. We cannot correct this problem by conditioning on a juror’s mentions of their own preference, as this behavior is downstream of their racial identity, potentially biasing the estimated effect of race. Instead, we rely on *other* jurors’ mentions of a member’s preference, *regardless* of whether the member themselves voices it.

We use the subsample of individually-identified speakers to measure all these variables except the total mentions of a focal member’s preference (which uses all jurors in groups with transcripts).

Finally, we move beyond preference mentions, and construct other measures of possible racial differences in speech content. Specifically, we use two approaches. First, we use a frequency difference approach to find the sets of words that are most distinctive to both white and POC speakers (Grimmer, Roberts, and Stewart 2022). Second, we employ structural topic modeling to examine the possibility that white and POC speakers raise different topics (Roberts et al. 2014). These measures characterize the effects of race on the broader content of deliberation, establishing the substantive significance of differences in voice or uptake.

## Methods of Analysis

For each measure of voice in deliberation, we test a) whether POC members have less voice than whites, b) whether this race gap can be explained by differences in preferences, c) whether the gap shrinks when accounting for other features of the deliberation (such as its length), and d) whether the gap is mitigated when POC members are assigned to more diverse groups. We estimate OLS models regressing measures of voice and uptake on individual race. To test (a), we include only individual race and fixed effects for legal case and for assigned order (severity rating first or dollars first). These variables remain in all models. We omit other individual demographic controls to avoid conditioning on variables that are affected by race. Models controlling for education, gender, age, and income are in Appendix S10; results are similar.

Models testing (b) add three measures of the focal member's preference: their pre-deliberation preference; their absolute distance from their group's median pre-deliberation preference; and how many others in their group share their exact preference (See Appendix S5 for descriptive statistics). These controls test whether the race gap is due to the fact that POC members hold preferences that are more punitive, farther from the group median, or less often held by others. Appendix S8 reports analyses with different controls for relative distance.

In model (c), we add controls for features of the discussion that could explain the race gap but are endogenous to the deliberation. These include speech length and whether the focal member is the foreperson, as these mechanically shape speech behavior. We interpret these models with caution given the endogeneity, regarding them as merely suggestive of mechanisms. For example, juries chose the foreperson, and white jurors were more than twice as likely to be chosen.<sup>16</sup>

Finally, to test whether disadvantage is mitigated in more-diverse groups, we return to a basic model and add an interaction between individual race and group racial composition in model (d). (Models including the interaction and all controls are in Appendix S6.) Because participants were randomly assigned to the group, we avoid selection effects in the group's racial composition and can evaluate the causal effect of increasing racial representation. We measure racial composition using categorical variables for each possible group composition: 6 white, 5 white, and 4 or fewer white jurors. This avoids imposing the assumption that participation changes linearly as the num-

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<sup>16</sup>Seven percent of POC are forepersons, compared to 18% of whites.

ber of white jurors in a group increases. It allows us to detect whether racial composition affects behavior differently when decreasing from 6 to 5 Whites compared to decreasing from 5 to 4 or fewer whites.

We calculate robust standard errors clustered at the group level. Because all outcome variables are right-skewed, we take the natural log of each.<sup>17</sup> In addition to reporting each main finding, we summarize them in a final figure for ease of interpretation (see Figure 3). This figure can guide readers through the complexities of each result.

## Results

### Speech Length and Timing

To analyze individual speech outcomes, we use the 767 individuals in the 147 groups for which at least 80% of the words are attributed to an identified speaker.

We first examine the relationship between an individual's race and the amount they speak. Table 1 presents regression models of the logged number of words. The first model includes only individual race and fixed effects for scenario (the legal case) and scale (dollars or ratings). The results in Column 1 of Table 1 suggest that white members speak more: the coefficient of .597 means a white member speaks 142 more words than a POC member. This is a substantial difference, representing an increase of 39 percent above an even share of the typical deliberation length.

Columns 2 and 3 turn to possible explanations. Because white members are more likely to have others who share their preference (Appendix S7), they may feel more encouraged to speak. Column 2 adds controls for pre-deliberation preferences. While some of these variables predict length, the coefficient on race is not diminished. The third column adds an indicator for whether the participant was chosen as foreperson, which could necessitate speaking longer, and for group speech length. The race effect remains large and significant in the presence of these variables. Thus, even after controlling for preferences, for formal authority (foreperson status), and for de-

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<sup>17</sup>As shown in Appendix S12, results hold if we account for skewness by using negative binomial regressions instead of the log-transformation of the dependent variables.

**Table 1. Length of Speech (in words)**

	Base Model	Preference Control	Endog. Controls	Interaction
Indiv. Race: White	0.597*** (0.150)	0.631*** (0.146)	0.452** (0.147)	0.654** (0.242)
Preference		0.059* (0.025)	0.043 (0.022)	
Pref. Distance		0.139*** (0.038)	0.108** (0.034)	
Others Sharing Pref.		-0.156 (0.127)	-0.204* (0.089)	
Foreperson			1.418*** (0.122)	
Total Group Speech Length			0.548*** (0.098)	
<i>Omitted: Less than 5 whites</i>				
5 Whites				0.290 (0.288)
6 Whites				-0.035 (0.292)
<i>Omitted: White x Less than 5 whites</i>				
White x 5-White Group				-0.106 (0.289)
R2 Adj.	0.051	0.089	0.311	0.052
Scenario and Scale FEs	X	X	X	X
SE Clusters	Group	Group	Group	Group
N Clusters	147	143	143	147

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

liberation length, the racial disparity persists.

The final column adds an interaction between race and racial composition, to test whether the effect of race diminishes in more diverse groups. In that case, the coefficient on “White x 5-White Group” would be positive. This would indicate that the race gap in groups with 5 whites and 1 POC is larger than the race gap in the omitted category of groups with fewer than 5 whites and at least 2 POCs. However, this coefficient is insignificant. That is, the racial disparity is not affected by adding a second or third POC.<sup>18</sup>

<sup>18</sup>In this model, the coefficient on “Indiv. Race: White” is the race gap in groups with fewer than 5 whites. We omit the interaction term for groups with 6 whites, as there are no POC in these groups.

Next, we consider the number of times a member mentions any member's preferences, including their own. These mentions allow participants to shape the decision by raising specific options the group could choose or reject. As Table 2 shows, white members indeed mention more preferences than POC members. Again, this racial disparity is not explained by preferences. It also holds when we control for the person's total speech length and their foreperson status.<sup>19</sup> Neither is the gap affected by adding a member of color — the interaction term with racial composition is small and not significant. Not only are white members speaking more, they are more often “in the thick” of the deliberative process, mentioning specific choices for the group to consider.

**Table 2. Deliberator Mentions of Any Preference**

	Base Model	Preference Control	Endog. Control	Interaction
Indiv. Race: White	0.337*** (0.066)	0.355*** (0.064)	0.119* (0.052)	0.360*** (0.090)
Preference		0.051*** (0.014)	0.024* (0.010)	
Pref. Distance		0.013 (0.021)	−0.032 (0.017)	
Others Sharing Pref.		−0.133** (0.043)	−0.102* (0.043)	
Total Indiv. Speech			0.290*** (0.019)	
Foreperson			0.479*** (0.066)	
<i>Omitted: Less than 5 whites</i>				
5 Whites				0.061 (0.134)
6 Whites				0.020 (0.122)
<i>Omitted: White x Less than 5 whites</i>				
White x 5-White Group				−0.061 (0.130)
Scenario and Scale FEs	X	X	X	X
SE Clusters	Group	Group	Group	Group
N Clusters	147	143	143	147
R2 Adj.	0.124	0.161	0.512	0.121

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

<sup>19</sup>The effect attenuates, but we interpret this attenuation cautiously because the added controls are endogenous.

This pattern recurs in the timing of speech. Table 3 shows results for the first speech turn relative to the beginning of the deliberation, and Table 4 shows results for their last speech turn relative to the end. In both cases, we reverse the outcome so positive coefficients indicate more voice. Table 3 suggests that whites speak earlier than POC. This gap is undiminished by preference controls (second column). The gap is partly explained by foreperson status (third column); however, white members were much more likely to be chosen foreperson, so foreperson status should be viewed as a possible mediator of race rather than representing an alternative explanation to race. Finally, the gap does not close in more diverse groups (fourth column).

**Table 3. Position of First Speech Turn (Distance from Beginning of Deliberation)**

	Base Model	Preference Control	Endog. Control	Interaction
Indiv. Race: White	0.279*** (0.082)	0.271*** (0.082)	0.136 (0.073)	0.294* (0.142)
Preference		0.026 (0.017)	0.001 (0.016)	
Others Sharing Pref.		0.063 (0.044)	0.011 (0.039)	
Pref. Distance		0.017 (0.028)	0.006 (0.025)	
Foreperson			1.296*** (0.058)	
Total Group Speech Length			-0.119* (0.051)	
<i>Omitted: Less than 5 whites</i>				
5 Whites				0.103 (0.157)
6 Whites				0.041 (0.104)
<i>Omitted: White x Less than 5 whites</i>				
White x 5-White Group				-0.053 (0.181)
Scenario and Scale FEs	X	X	X	X
SE Clusters	Group	Group	Group	Group
N Clusters	147	143	143	147
R2 Adj.	0.012	0.010	0.278	0.009

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

As Table 4 shows, this pattern persists for speaking near the conclusion. White members' last turn comes four turns closer to the end of deliberation. Again, preferences do not explain the gap,



and being a foreperson shrinks but does not erase it. Again, there is no significant interaction with racial composition. If getting the “last word” means greater influence, white participants may be more involved in shaping the decision.

**Table 4. Position of Last Speech Turn (Distance from End of Deliberation)**

	Base Model	Preference Control	Endog. Control	Interaction
Indiv. Race: White	0.343*** (0.095)	0.320*** (0.096)	0.191* (0.087)	0.484*** (0.145)
Preference		0.026 (0.016)	0.001 (0.014)	
Pref. Distance		0.053 (0.029)	0.042 (0.025)	
Others Sharing Pref		−0.035 (0.055)	−0.085 (0.053)	
Foreperson			1.246*** (0.068)	
Total Group Speech Length			−0.122* (0.057)	
<i>Omitted: Less than 5 whites</i>				
5 Whites				0.130 (0.178)
6 Whites				−0.107 (0.119)
<i>Omitted: White x Less than 5 whites</i>				
White x 5-White Group				−0.220 (0.197)
Scenario and Scale FEs	X	X	X	X
SE Clusters	Group	Group	Group	Group
N Clusters	147	143	143	147
R2 Adj.	0.020	0.024	0.249	0.018

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

## Preference Mentions

We now turn to uptake, a critical component of authority. We first examine the number of times a person’s preference is mentioned in the full deliberation, using data from all 2,442 participants in the 407 groups with transcripts. Though this analysis does not allow us to pinpoint which juror mentions a person’s preference, it is the only analysis that can take advantage of the full set of transcripts. We then turn to the subset of people linked to their individual speech to analyze

uptake by the focal member's fellow members and by the focal member's foreperson.

Table 5 shows the number of times a person's preference is mentioned by their group. As before, we test whether there is a race gap, and whether it declines as we add controls.<sup>20</sup> In the next column, we add a control for the total number of preference mentions by the group (excluding the focal member's). Finally, we test whether the race gap shrinks in more racially diverse groups.

The first column of Table 5 shows that white participants' preferences are mentioned significantly more by the group.<sup>21</sup> The coefficient of .173 means white participants have their preference mentioned about one time more, a sizeable gap since the average member's preference is mentioned only 5 times. In the second and third columns, the race gap is not muted by controls for preferences, nor by the group's total number of preference mentions. Whites' advantage remains more than half the size of the effect of having one additional person share one's preference. In column 4, the race gap shrinks to near 0 in groups with fewer than 5 whites (that is, groups with at least two POC); however, the interaction term is not significant, meaning the race effects in more and less diverse groups are indistinguishable. We therefore cannot definitively conclude that more diverse groups mitigate the race gap.

The total number of times a preference is mentioned is substantively important to the outcome of group discussions. Figure 1 illustrates this by plotting a group's most-mentioned preference against its eventual decision. About 60% of groups choose the preference the group mentioned most, and 80% come within one scale point.<sup>22</sup> Thus, when white members' preferences receive

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<sup>20</sup>Controlling for the number of others with the focal member's preference is especially important because we cannot distinguish mentions of the focal member's preference from mentions of another member's identical preference. For example, if the focal member and another member prefer a punishment of \$100,000, we count any mention of \$100,000 as a mention for both people; each one might have twice as many preference mentions as a person with a unique preference simply because there are twice as many people to raise it. While this control is important, we interpret this model with caution as the variable is endogenous to race: nonwhite members are much less likely to have shared preferences (Appendix S7).

<sup>21</sup>White participants' groups may also mention preferences far from theirs less often; see Appendix S9.

<sup>22</sup>The figure is for ratings deliberations because the ratings scale allows a more precise mapping

**Table 5. Number of Group Mentions of Indiv. Preference**

	Base Model	Preference Control	Endog. Controls	Interaction
Indiv. Race: White	0.173** (0.058)	0.168** (0.056)	0.170** (0.059)	0.038 (0.105)
Preference		0.052*** (0.011)	0.060*** (0.011)	
Pref. Distance		-0.039* (0.019)	-0.040* (0.019)	
Others Sharing Pref.		0.194*** (0.034)	0.293*** (0.034)	
Total Pref. Mentions			0.239*** (0.040)	
<i>Omitted: Less than 5 whites</i>				
5 Whites				-0.164 (0.115)
6 Whites				0.084 (0.082)
<i>Omitted: White x Less than 5 whites</i>				
White x 5-White Group				0.193 (0.124)
Scenario and Scale FEs	X	X	X	X
SE Clusters	Group	Group	Group	Group
N Clusters	405	384	384	405
R2 Adj.	0.083	0.143	0.180	0.084

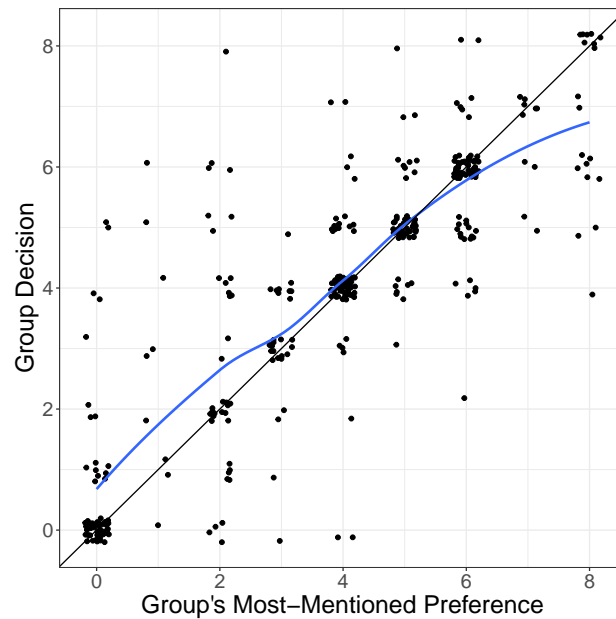
\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

more uptake, they are more likely to be reflected in the final outcome. This finding highlights the importance of authoritative representation as a conduit between who is in the room and what the room decides.

Why might whites' preferences receive more discussion? Are white participants mentioning their own preferences more, or do their preferences receive more uptake by other members, or by forepersons? To answer these questions, we return to the individual speech dataset, and analyze who mentions each preference. Table 6 models three different outcomes: the number of times a person mentions their own preference; the number of times a person's preference is mentioned by others; and the number of times a person's preference is mentioned by the foreperson. All models control for the number of members with the focal member's preference.

of preference unto decision. See Appendix S4 for details.

**Figure 1. Group decision by group's most-mentioned preference**



*Note:* Figure based on ratings deliberations; 20% jitter was added to observations to illustrate point density. Blue line represents LOESS fit, and black line represents 45° line.

**Table 6. Number of Times Focal Person's Preference is Mentioned by Specific Members**

	Own Mentions- Raw	Own Mentions	Others' Mentions	Forep. Mentions
Indiv. Race: White	0.187** (0.070)	0.116 (0.073)	0.018 (0.087)	0.067 (0.079)
<i>Omitted: Less than 5 whites</i>				
5 Whites	0.002 (0.082)	0.001 (0.073)	0.003 (0.062)	-0.008 (0.053)
6 Whites	0.011 (0.092)	0.005 (0.081)	0.016 (0.075)	-0.023 (0.057)
Others Sharing Pref.	0.022 (0.036)	0.080* (0.039)	0.425*** (0.045)	0.281*** (0.045)
Total Pref. Mentions		0.242*** (0.036)	0.587*** (0.035)	0.590*** (0.033)
Scenario and Scale FEs	X	X	X	X
SE Clusters	Group	Group	Group	Group
N Clusters	142	142	143	120
R2 Adj.	0.036	0.120	0.458	0.401

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

The first model shows that white members mention their own preferences significantly more than POC members. Is this because white participants are especially likely to talk about their own preference, or is it simply because they mention *all* preferences more often? The second model shows that this relationship weakens with a control for the total number of times a participant mentions any preference. This result suggests that white participants mention their own preferences more because they talk about more preferences overall. Alternatively, perhaps they mention more preferences because they are more likely to mention their own.

The third column turns from own mentions to others' mentions of the focal member's preference — a key measure of uptake. Here we see a null race effect: whites' preferences are not mentioned more often by other members.<sup>23</sup> Likewise in column 4, there is no race gap in foreperson uptake of the focal preference.<sup>24</sup>

However, the null effect of race on preference mentions by other members conceals important variation based on individuals' preferences.<sup>25</sup> Figure 2 shows the predicted number of times the focal preference is mentioned by others, by race and by the distance from the median preference. While their preferences do receive uptake when they happen to match the pre-deliberation preferences of the other group members, POC members receive less uptake when they are far from the median. By contrast, white group members receive relatively high levels of uptake regardless of the relationship between their preferences and the group's median. This conditional effect of race is not only large but statistically precise, as seen in Appendix Table S6.<sup>26</sup> POC members are uniquely disadvantaged when their preferences diverge from their group's — that is, in the situation where their unique point of view could make the most difference.

In all, these results point to two important mechanisms for unequal uptake. First, the frequent mentions of whites' preferences in the discussion are driven by voice — by whites' greater tendency to mention preferences themselves. Second, when POC diverge from the group, their

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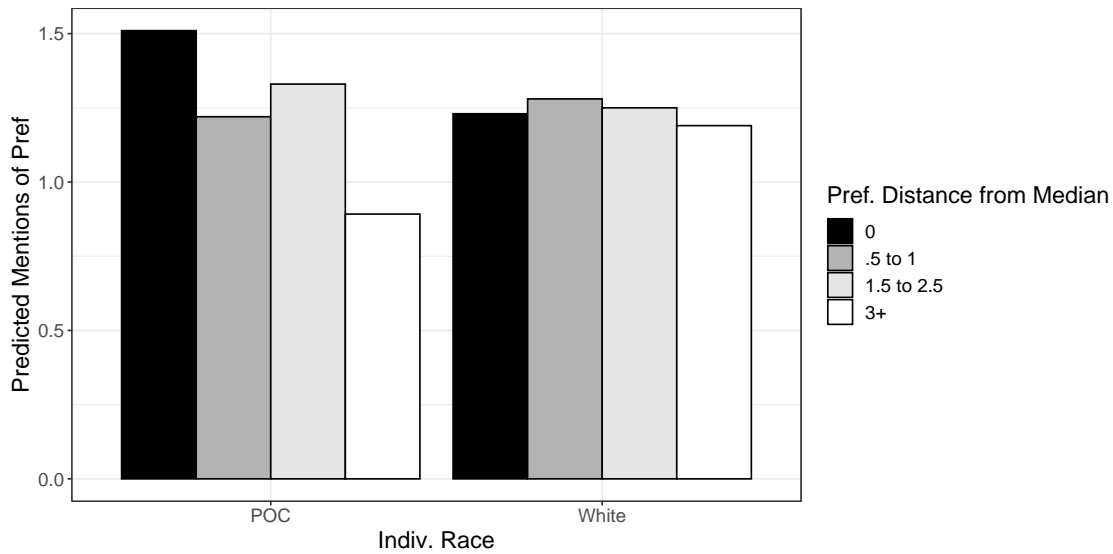
<sup>23</sup>Similar results hold when examining only mentions by other white members; see Appendix S9.

<sup>24</sup>Removing the total mentions control from columns 3 and 4 does not change these results.

<sup>25</sup>This exact analysis was not preregistered but we did preregister the hypothesis that race gaps exist for dissenting members.

<sup>26</sup>See Appendix S8 for full results, and for results showing that white and POC members benefit equally from shared preferences.

**Figure 2. Predicted mentions of a person’s preference by others in their group**



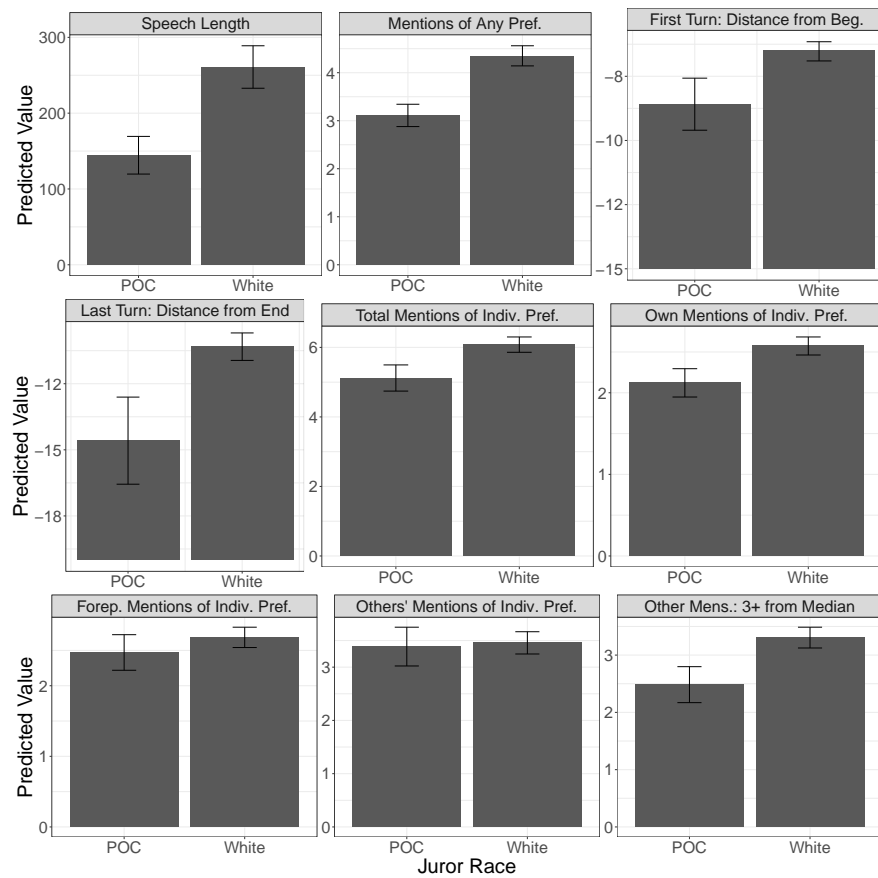
*Note:* Predictions are calculated separately by individual race and distance from the predeliberation median. All other variables are held at their means.

lower uptake in discussion is directly driven by the failure of group members to engage those preferences.

Figure 3 summarizes our findings. We use the most basic model in each analysis to generate predicted values for each measure, for white and POC participants.<sup>27</sup> As the figure illustrates, white participants consistently participated more and in more influential ways in deliberation. For the first six measures, white participants exercised significantly more voice: speech length, mentions of any preference, the distance of their first turn from the beginning of the deliberation, the distance of their last turn from the end, the total number of times their preference was mentioned by their group, and the number of times they mentioned their own preference. The final two measures — uptake by others and by the foreperson — do not show a significant race gap, but a race gap in uptake does emerge when POC diverge from their group.

<sup>27</sup>We use column 1 in Tables 1 through 5, columns 1, 3, and 4 in Table 6, and column 1 in Appendix Table S6. Error bars represent significance of differences intervals (Radean 2023).

**Figure 3. Summary of Key Results**



*Note:* Each pane shows the predicted outcome for white and POC participants based on the basic models in tables 1-6. For “first turn” and “last turn”, scales are coded so that larger numbers denote more influence.

**Figure 4. Selected Words Used More Often by White and POC Deliberators**

Words used more often by POC jurors:		
<i>Harm to plaintiff or others</i>	warn, fault, suffer, die, serious	I do think it's somebody else's <b>fault</b> for what he's suffering... ...this child is going to <b>suffer</b> for the rest of her life. ...neglecting the welfare of the individual is <b>serious</b> .
<i>Common good or fairness</i>	public, fair, proper, wrong, correct	...make sure that it's a hundred percent safe for the <b>public</b> use. I think 1,000,000 sounds <b>fair</b> . I think if had they taken the <b>proper</b> steps along the way...
<i>Companies and consumers</i>	work, consume, manufacture, hire, buy, sell, done	...they really didn't care for their <b>consumer</b> . The <b>manufacturer</b> should have advertised it publicly. The company has <b>done</b> all that they are required to...
Words used more often by white jurors:		
<i>Legal terms</i>	punitive, jury, compensatory, disregard, standard	Where is this money going to, the <b>punitive</b> damages? I think it really was total reckless <b>disregard</b> ... ...because they were within OSHA <b>standards</b> .
<i>Analytical terms</i>	talk, question, read, word, assume, percent	We're not <b>talking</b> about them. We're <b>talking</b> about this case. We're to decide about the lady in <b>question</b> ... I would <b>assume</b> that was how they came up with the 200,000.
<i>Preference or position terms</i>	zero, middle, pick, between, start, high, end, less, large	Everybody can probably agree to right in the <b>middle</b> of that right? I think I probably got the <b>high</b> end, I put 15,000,000. Let's <b>start</b> with 6, does anybody feel that's still too low?

## Speech Content

Do these race gaps matter to substantive representation? To address this question, we examine differences in the content of speech by white and POC participants. First, we identify individual words that are used more often by POC or white deliberators (Benoit 2020; Grimmer, Roberts, and Stewart 2022). Appendix S13 details how we processed the texts and identified distinctive words, and contains full lists of words that are most distinctive to white and POC speakers. Following standard practice, we used these lists, along with our reading of how these words were used in context, to identify patterns in word frequency (Nelson 2020). Figure 4 presents these patterns by listing relevant words and representative sentences in which deliberators used those words.

POC deliberators were more likely to use words discussing the harm done to the plaintiffs or others similar to them. For example, “suffer” falls in the 19th percentile of words used by white participants, but the 42nd percentile of words used by POC. These differences are consistent with the fact that POC preferred stronger punishment for the corporation inflicting the suffering. Their greater rhetorical emphasis on harm may have been an attempt to explain their views about the importance of holding the company accountable for the consequences of its actions. POC participants were also more likely to use words related to fairness, like “fair,” “proper,” and “wrong,” as well as words referencing consumers, companies, and their obligations.

In turn, white participants were more likely to invoke legal words, referencing terms from



the case materials, such as “reckless disregard” and “compensatory damages.” They also used analytical terms that framed the debate or the facts, and terms related to specific preferences. The latter is consistent with our earlier finding that white participants were more likely to mention specific preferences. Whites’ greater use of analytical and legal terms, and greater propensity to state and to frame punishment preferences, is consistent with a more concerted attempt to exercise authority in the discussion.

As a final measure of content, we employ structural topic modeling to search for racial differences in discussion topics.<sup>28</sup> Unlike the word frequency analysis, topic modeling identifies clusters of words that co-occur in the speech of some deliberators but not others (Roberts et al. 2014). We estimated 10 models, each containing 30 topics. We found only one topic present in multiple models that differed by race. This topic relates to forepersons’ talk about their administrative tasks. In all, then, white and POC participants did not mention different topics.<sup>29</sup>

In sum, while members approached the cases in similar ways, they exhibited subtle but meaningful differences in the considerations they emphasized. These differences raise the stakes of the authority gaps we observed. POC expressed some different ideas in their speech. If they do not speak as often, those ideas get shorter shrift in the discussion.

## Discussion

Authority in deliberation is an important face of power and a key facet of substantive representation. Our aim has been to assess the existence of race gaps in that authority.

In many ways, the situation we study should be a favorable one for egalitarian deliberation, with its unanimous decision rule and the widespread expectation that members should listen to each other, assess facts impartially, and reach just decisions (Schwartzberg 2018). Nevertheless, even in this setting, we find substantial race gaps. Using data on actual voice and uptake in discussion, we find that such groups fall short of the ideal of equality. White members speak more and are more likely to discuss preferences and to speak at key moments. These patterns

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<sup>28</sup>See Appendix S14 for further details.

<sup>29</sup>As noted above, white participants were much more likely than POC to be forepersons. Indeed, when we control for foreperson status, the racial difference in this topic shrinks by half.

are consistent with the conclusion that white participants are more likely to set the deliberative agenda and to have the final say. These racial disparities are not merely an artifact of having preference allies. Nor do they consistently disappear by adding another person of color to the group.

Not only do white members exercise more voice, they also enjoy more uptake in the discussion. That is, the preferences of people of color are much less discussed. The crucial circumstance for deliberation is when a member disagrees with their group, and it is there that white members are most clearly advantaged by their race: other members discuss whites' divergent preferences more often than POC's divergent preferences. This finding also suggests a possible source of the race gap in voice. POC members may hesitate to attempt the exercise authority if they accurately perceive their speech will not be well received by a white-majority group. However, this notion requires additional tests before it can become a firm conclusion.

If race shapes voice and authority, does that matter to the substance of the discussion? The evidence here suggests it may indeed matter. POC and white members use some different language when they speak — suggesting that when POC participate less, a distinctive perspective is lost from the deliberation. To be sure, people do not approach the task at hand in fundamentally different ways, and the topics they address do not differ by race. However, POC members are more likely than white members to emphasize words indicating the harm corporations may inflict on ordinary people and to raise considerations of fairness.

Taken together, our results suggest the importance of authority during discussion. The concept of authority matters to theories of deliberation, in that status gaps in authority disrupt the deliberative ideal of the “forceless force” of the better argument and equal standing in the exchange of reasons and evidence. How authority is instantiated during deliberation should thus feature much more prominently in the deliberation literature. These results also speak to research on representation. Scholarship has already shown that racialized communities are physically underrepresented in settings where vital decisions are made about their interests (Einstein, Glick, and Palmer 2019; Nuamah and Ogorzalek 2021). And it has already found that white members exercise more influence over group decisions (Karpowitz et al. 2023). This study contributes a missing piece to this picture: race also shapes representation during the discursive process of reaching decisions.

This study also advances scholarship in three methodological ways. The variables we developed to measure authority offer insights into how status becomes instantiated in discussion. Random assignment to groups, coupled with transcripts of what was said, allows us to test the effect of racial diversity on discussion. Finally, linking the content of discussion with private views allows us to measure how well discussion represents genuine preferences.

That said, this study is only one step on the road to a more complete view of how race shapes group discussion. Though our dataset includes a large number of groups, we are not able to link every transcript line to an individual. While the linkage process did not introduce systematic biases, missing data limits our statistical power in some analyses.

Likewise, although our sample is larger than existing studies of race and discussion, it lacks enough individuals of color to assess how dynamics change when people of color form the majority, or when people of color are not pooled into one category of analysis. These important questions should be addressed in future work. There is reason to think white jurors may participate more even when in the minority: by controlling for the number of jurors sharing someone's preference, we show that even white jurors with few allies sharing their preferences participate more often than POC jurors in the same predicament (see also Karpowitz et al. 2023).

In addition, the results should be replicated with observational and qualitative data drawn from naturally occurring groups. Our design leverages the advantages of internal validity; its predictable disadvantage of external validity should be addressed in future research.

In addition, our study examines group deliberation within the context of a jury, which features a defined task with specific rules and expectations, such as the unanimity requirement, the presence of a foreperson who "presided" over the group's work, and formal instructions from the judge about the jury's purpose and the relevant features of the law. More work remains to be done to explore other contexts and institutional features of small-group decision-making, such as different decision rules, group tasks, leadership structures, and methods of facilitation or moderation.

Finally, there is still more to learn about the dynamics of the deliberative interaction. Are the preferences discussed in a positive, negative, or neutral way? When people of color speak up, do white deliberators' responses build or sap the authority of POC speakers? These are some of the important elements of voice and authority we were not able to measure (Karpowitz and Mendelberg 2014).

While a first step, this study indicates the need to carefully examine and better understand deliberative equality and inequality in the words people speak. In deliberation, authority is produced through acts of discursive participation. We have shown that people of color experience systematic disadvantage in voice and authority that is not resolved merely by adding another person of color to the group. Better understanding the nature of that disadvantage — and how to ameliorate it — is worth further research.

**Data Availability Statement** Our design was pre-registered, and our pre-analysis plan can be found at the following link: [https://osf.io/zsk4m/?view\\_only=718e2a41b8274f77a1f8a412cc29be64](https://osf.io/zsk4m/?view_only=718e2a41b8274f77a1f8a412cc29be64).

Code used to produce all of the analysis in the manuscript and supplementary materials can be found at the same location. This archive also includes the data needed to produce all the results except those on speech content. Data including verbatim deliberation excerpts has been withheld to protect the confidentiality of participants, so the transcripts themselves and intermediate datasets including verbatim excerpts from the transcripts are not publicly available. We can, however, provide the transcripts we used to generate the analysis dataset pending scientific review and a completed material transfer agreement. Requests for the transcript data should be submitted to the corresponding author.

## References

- Beauvais, Edana. 2018. "Deliberation and Equality." 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.
- Benoit, Ken. 2020. "Text as data: An overview." *The SAGE handbook of research methods in political science and international relations*: Forthcoming.
- Bohman, James. 1996. *Public Deliberation: Pluralism, Complexity, and Democracy*. Cambridge, MA: MIT Press.
- Bowers, William J., Benjamin D. Steiner, and Marla Sandys. 2001. "Death Sentencing in Black and White: An Empirical Analysis of the Role of Jurors' Race and Jury Racial Composition." *University of Pennsylvania Journal of Constitutional Law* 3(1): 171–274.
- Carli, Linda L. 1989. "Gender Differences in Interaction Style and Influence." *Journal of Personality and Social Psychology* 56(4): 565–576.
- Clair, Matthew, and Alix S. Winter. 2016. "How Judges Think about Racial Disparities: Situational Decision-Making in the Criminal Justice System." *Criminology* 54(2): 332–359.
- Cohen, Joshua. 1997. "Deliberation and Democratic Legitimacy." In *Deliberative Democracy: Essays on Reason and Politics*, eds. James Bohman, and William Rehg. MIT Press: Cambridge, MA.
- 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.
- Cornwell, Erin York, and Valerie P. Hans. 2011. "Representation through Participation: A Multi-level Analysis of Jury Deliberations." *Law & Society Review* 45(3): 667–698.
- 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.
- 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.
- 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.
- Dovidio, John F., Clifford E. Brown, Karen Heltman, Steve L. Ellyson, and Caroline F. Keating. 1988. "Power displays between women and men in discussions of gender-linked tasks: A multichannel study." *Journal of Personality and Social Psychology* 55(4): 580–587.
- Dubrovsky, Vitaly, Sara Kiesler, and Beheruz Sethna. 1991. "The Equalization Phenomenon: Status Effects in Computer-Mediated and Face-to-Face Decision-Making Groups." *Human-Computer Interaction* 6(2): 119–146.
- 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.
- Ellis, Leslie, and Shari Siedman Diamond. 2003. "Race, Diversity, and Jury Composition: Battering and Bolstering Legitimacy." *Chicago-Kent Law Review* 78(3): 1033–1058.
- Fabina, Jacob, and Zachary Scherer. 2022. Voting and Registration in the Election of November 2020. Technical report U.S. Census Bureau, U.S. Department of Commerce. <https://www.census.gov/content/dam/Census/library/publications/2022/demo/p20-585.pdf>
- 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, E. Pierre Deess, Philip J. Weiser, and Cindy Simmons. 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 Anal-

- ysis of How Race, Income Inequality, and Regional History Affect Tort Law." *Washington and Lee Law Review* 73(2): 557–651.
- Grimmer, Justin, Margaret E Roberts, and Brandon M Stewart. 2022. *Text as data: A new framework for machine learning and the social sciences*. Princeton University Press.
- Gutmann, Amy, and Dennis F. Thompson. 1996. *Democracy and Disagreement*. Cambridge, Mass.: Belknap Press of Harvard 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.
- 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.
- 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.
- Hutchings, Vincent L., and Nicholas A. Valentino. 2004. "The Centrality of Race in American Politics." *Annual Review of Political Science* 7(1): 383–408.
- Johnson, Cathryn. 1994. "Gender, Legitimate Authority, and Leader-Subordinate Conversations." *American Sociological Review* 59(1).
- 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.
- Karpowitz, Christopher F., and Tali Mendelberg. 2014. *The Silent Sex: Gender, Deliberation, and Institutions*. Princeton, NJ: Princeton University Press.
- Karpowitz, Christopher F., Tali Mendelberg, and Lee Shaker. 2012. "Gender Inequality in Deliberative Participation." *American Political Science Review* 106(3): 533–547.
- Karpowitz, Christopher F., Tali Mendelberg, Elizabeth Mitchell Elder, and David Ribar. 2023. "The Effects of Racial Diversity in Citizen Decision-Making Bodies." *The Journal of Politics*: Forthcoming.
- Kathlene, Lyn. 1994. "Power and Influence in State Legislative Policymaking: The Interac-



- tion of Gender and Position in Committee Hearing Debates." *American Political Science Review* 88(3): 560–576.
- Lerman, Amy E., and Vesla M. Weaver. 2014. *Arresting Citizenship: The Democratic Consequences of American Crime Control*. Chicago: The University of Chicago Press.
- Lynch, Mona, and Craig Haney. 2011. "Mapping the Racial Bias of the White Male Capital Juror: Jury Composition and the "Empathic Divide"." *Law & Society Review* 45(1): 69–102.
- Mansbridge, Jane J. 1983. *Beyond Adversary Democracy*. University of Chicago Press ed. Chicago: University of Chicago Press.
- Mansbridge, Jane, James Bohman, Simone Chambers, Thomas Christiano, Archon Fung, John Parkinson, Dennis F Thompson, and Mark E Warren. 2012. "A Systemic Approach to Deliberative Democracy." In *Deliberative Systems: Deliberative Democracy at the Large Scale*, eds. John Parkinson, and Jane Mansbridge. New York: Cambridge University Press , 1–26.
- Mendelberg, Tali, Christopher F. Karpowitz, and J. Baxter Oliphant. 2014. "Gender Inequality in Deliberation: Unpacking the Black Box of Interaction." *Perspectives on Politics* 12(1): 18–44.
- Mendelberg, Tali, Christopher F. Karpowitz, and Nicholas Goedert. 2014. "Does Descriptive Representation Facilitate Women's Distinctive Voice? How Gender Composition and Decision Rules Affect Deliberation." *The American Journal of Political Science* 58(2): 291–306.
- Nelson, Laura K. 2020. "Computational grounded theory: A methodological framework." *Sociological Methods & Research* 49(1): 3–42.
- Ng, Sik Hung, Mark Brooke, and Michael Dunne. 1995. "Interruption and Influence in Discussion Groups." *Journal of Language and Social Psychology* 14(4): 369–381.
- 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.

- Preuhs, Robert R. 2006. "The Conditional Effects of Minority Descriptive Representation: Black Legislators and Policy Influence in the American States." *The Journal of Politics* 68(3): 585–599.
- Radean, Marius. 2023. "The Significance of Differences Interval: Assessing the Statistical and Substantive Difference between Two Quantities of Interest." *The Journal of Politics* 85(3): 000–000.
- Ridgeway, Cecilia L., and Lynn Smith-Lovin. 1999. "The Gender System and Interaction." *Annual Review of Sociology* 25(1): 191–216.
- 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.
- Roberts, Margaret E., Brandon M. Stewart, Dustin Tingley, Christopher Lucas, Jetson Leder-Luis, Shana Kushner Gadarian, Bethany Albertson, and David G. Rand. 2014. "Structural Topic Models for Open-Ended Survey Responses." *American Journal of Political Science* 58(4): 1064–1082.
- Sahn, Alexander. 2023. "Public Comment and Public Policy." *Presented at the 2023 Western Political Science Association Meeting*: Forthcoming.
- Salerno, Jessica M., Liana C. Peter-Hagene, and Alexander C.V. Jay. 2019. "Women and African Americans Are Less Influential When They Express Anger during Group Decision Making." *Group Processes & Intergroup Relations* 22(1): 57–79.
- Sanders, Lynn M. 1997. "Against Deliberation." *Political Theory* 25(3): 347–376.
- Schaffner, Brian F., Jesse H. Rhodes, and Raymond J. La Raja. 2020. *Hometown Inequality: Race, Class, and Representation in American Local Politics*. New York: Cambridge University Press.
- Schkade, David, Cass Sunstein, and Daniel Kahneman. 2000. "Deliberating about Dollars: The Severity Shift Empirical Study." *Columbia Law Review* 100: 1139–1176.
- Schwartzberg, Melissa. 2018. "Justifying the Jury: Reconciling Justice, Equality, and Democracy." *American Political Science Review* 112(3): 446–458.
- Scudder, Mary F. 2020. *Beyond Empathy and Inclusion: The Challenge of Listening in Democratic Deliberation*. New York: Oxford University Press.
- 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.

- Shelly, Robert K., Lisa Troyer, Paul T. Munroe, and Tina Burger. 1999. "Social Structure and the Duration of Social Acts." *Social Psychology Quarterly* 62(1): 83.
- Smalarz, Laura, Rose E. Eerdmans, Megan L. Lawrence, Kylie Kulak, and Jessica M. Salerno. 2023. "Counterintuitive Race Effects in Legal and Nonlegal Contexts." *Law and Human Behavior* 47(1): 119–136.
- Smith, Aaron. 2013. Civic Engagement in the Digital Age. Technical report Pew Research Center Washington, DC: . <http://pewinternet.org/Reports/2013/Civic-Engagement.aspx>
- 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.
- 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.
- Tocqueville, de Alexis. 1969/1840. *Democracy in America*. New York: Doubleday & Company.
- 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.
- Wamble, Julian J, Chryl N Laird, Corrine M McConnaughy, and Ismail K White. 2022. "We are one: the social maintenance of black democratic party loyalty." *The Journal of Politics* 84(2): 682–697.
- White, Ismail K., and Chryl Nicole Laird. 2020. *Steadfast Democrats: How Social Forces Shape Black Political Behavior*. Princeton, New Jersey: Princeton University Press.
- Winter, A. S., M. Claire. 2018. "Jurors' Subjective Experiences of Deliberations in Criminal Cases." *Law & Social Inquiry* 43(4): 1458–1490.
- 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. 2000. *Inclusion and Democracy*. New York: Oxford University Press.