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It's all about race: How state legislators respond to immigrant constituents

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Abstract

How do elected representatives respond to the needs of immigrant constituents? We report the results of a field experiment on U.S. state legislators in which the nativity, likelihood of voting, and race/ethnicity of a hypothetical constituent are independently manipulated. The experimental design allows us to contribute new insights by isolating the various elements that may impede the connection between immigrants and elected representatives. Moreover, we explore racial/ethnic identities beyond black and white, by including Latino and Asian aliases. Contrary to expectations, nativity and voting status do not affect responsiveness. Instead, legislator behavior appears to be driven by racial/ethnic bias. Whites benefit from the highest degree of responsiveness, with blacks, Hispanics, and Asians all receiving lower response rates, respectively. This bias follows a partisan logic. Hispanic constituents receive lower responsiveness primarily from Republican legislators, while Asians experience discrimination from representatives of both parties. We argue that this difference may result from Hispanic identity sending a stronger signal about partisan affiliation, or from a prejudicial view of Asians as outsiders. In this interpretation, rather than the model minority, Asians become the excluded minority.

Keywords: *race and ethnic politics, representation, experiment, audit study*

In a recent case brought before the Supreme Court,[1] the plaintiffs claimed that legislative apportionment by population was unconstitutional because it counted those who could not vote, including persons under the age of 18, disenfranchised felons, and non-citizens. The Supreme Court ruled against the plaintiffs, leaving it to the states to determine the measure by which they apportion their legislative districts. This case raises a number of provocative and still unanswered questions, among them, the motivating question of our study: how do elected representatives respond to the needs of immigrant constituents?

The matter of political representation of immigrants is important partly because immigrants constitute a substantial portion of the US population. The United States is roughly 12 percent immigrant, including those who have naturalized, those who are legal immigrants, and those who are undocumented.

Beyond numerical importance, inadequate political representation of immigrants may have serious social consequences. Immigrants to the United States are the parents of a large group of voters whose party identification and level of political participation are not pre-determined, in spite of popular perceptions to the contrary (Abrajano and Alvarez, 2010; Hajnal and Lee, 2011). Minority groups consistently list political representation as an important concern (Mansbridge, 1999; Bowler and Segura, 2011; Wong et al., 2011). Quality of representation and perception of treatment by political elites have the potential to socialize immigrants and their children towards political participation and identification with certain political parties (Garcia-Bedolla, 2005). If representatives are largely non-responsive to immigrants, this exclusion could impact an entire generation of voters through the important channel of parental influence (Campbell et al., 1960). In addition to these downstream electoral effects, representatives being non-responsive to immigrants would seem to violate a general norm of fairness and equality. This lack of fairness is all the more important given that the relatively weak influence of immigrants on the legislative process may partially explain increasing inequality in the United States (McCarty, Poole and Rosenthal, 2006).

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[1]*Evenwel v. Abbott*

Existing scholarship points to two mechanisms that could lead representatives to be less responsive to immigrants. The first is self-interest. Office-seeking legislators (Mayhew, 1974), making strategically motivated choices about communicating with constituents (Fenno, 1978), might see immigrants as less decisive to their re-election calculus, because many immigrants cannot vote. A second source of diminished responsiveness is out-group bias. Immigrants may be exposed to bias because they are outsiders in terms of their national origin, or because they belong to a minority etho-racial group. A substantial body of literature has established that racial prejudice often drives public opinion towards certain political issues (Kinder and Kam, 2009) and that legislators often, in turn, discriminate against their constituents of color (Butler and Broockman, 2011).

Recent work on representation has provided new theoretical and empirical insights into the racial biases of elected officials, but, most scholarship around race and responsiveness of representation has focused on the black-white divide (Butler and Broockman, 2011; Grose, 2011; Butler and Crabtree, 2018).[2] To our knowledge, no prior studies have attempted to determine the relative importance of self-interest and bias as sources of diminished responsiveness to immigrants. We provide such a test by conducting a field experiment on state legislators in the United States. Our experiment leverages randomized cues that independently manipulate the nativity, likelihood of voting, and race of a hypothetical constituent.

We do not find that legislators change their behavior in response to variation in the immigrant characteristics that shape electoral incentives or define national membership. Instead, our results suggest that the racial/ethnic identity of a constituent drives representative behavior independently of additional information about where a constituent was born and whether or not that constituent is likely to vote. While this finding is consistent with the existing literature, our experiment contributes to the field by showing that this form of prejudicial behavior applies not only to a binary, black/white difference between constituents,

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[2]We discuss three exceptions to this trend, Mendez (2013); Janusz and Lajevardi (2016); Wong, Lajevardi and Nicholson (2017), below.

but to a wide range of racial identities. Whites benefit from the highest degree of responsiveness, with blacks, Hispanics, and Asians all receiving respectively lower response rates to their requests.

Moreover, we find that different mechanisms appear to be driving lower responsiveness to different racial groups. Specifically, there is a clear partisan divide in legislators' behavior toward Hispanic constituents, with Republicans being significantly less responsive to this group, while Democrats respond at rates similar to those for white constituents. In the case of Asian constituents, diminished responsiveness does not obey a partisan logic, as legislators of both parties respond to this group at a significantly lower rate. Finally, preferential treatment of whites is not the result of legislators implicitly believing that racial minorities direct costlier requests to their offices, as the differential response rate is present within different types of requests.

RACE, POLITICAL REPRESENTATION, AND LEGISLATOR RESPONSIVENESS

Political representation is a core feature of democracy, and the representation of minority groups (whether descriptive or substantive) has long been viewed as central to a vibrant democratic society. Quality of political representation is connected to minority trust in government, political participation, and partisan alignment. Considering that many minority groups, especially Latinos and Asians, participate at lower rates than whites and blacks, responsive representation could offer a pathway for parties to recruit a generation of new voters into their electoral coalitions (Hajnal and Lee, 2011).

Despite the prevailing preference for high quality representation, there is ample evidence that political elites do not prioritize engagement with minority groups. The literature on substantive representation has found mixed results as to whether minorities are better represented by white Democrats. While some studies have found little difference in the representation of minority constituents by co-ethnic as opposed to non-coethnic representatives (Swain, 1993; Hero and Tolbert, 1995; Cameron, Epstein and O'Halloran, 1996), others have

found that co-ethnics provide higher quality representation (Lublin, 1999; Tate, 2003). Studies that explore other means of citizen and legislator interaction have found more consistent evidence of bias against minority constituents. Notably, Broockman (2013) finds that white legislators are significantly less likely to respond to black constituents when the political benefits of doing so were diminished. In addition, Grose (2011) finds that black legislators are more likely to pursue particularistic benefits for black communities as well as place field offices in black areas when compared to white legislators. Finally, studies have found that political campaigns use constituents' socioeconomic status to focus their mobilization efforts, which leads to significantly lower levels of contact with black, Latino and Asian voters compared to whites. Campaigns also appear to differentially target minority groups, with Latinos less likely to be contacted when compared to blacks and Asians the least likely to be contacted compared to all other racial subgroups (Parry et al., 2008).

Existing research on legislator responsiveness has mostly examined the connection between legislators and black constituents, although emerging research has found that increasing Latino populations has had an influence on the legislative process, at both the state and federal level (Casellas, 2007; Juenke and Pruehs, 2012; Rouse, 2013). There has been scant research on the legislative representation of Asian populations, and we are aware of only one study of legislative responsiveness that includes Asians *and* Latinos (Wong, Lajevardi and Nicholson, 2017). Given the growing Latino and Asian populations in America, we posit that a more complete examination of legislator responsiveness in America must include these emerging groups. Moreover, as the main focus of our study is the representation of immigrants, we chose to include the two racial groups who make up the majority of current immigrants to the United States.

While significant portions of Latinos and Asians in America are of foreign origin (Wong et al., 2011; Abrajano and Alvarez, 2010), we know of only three experimental studies that examine how legislators respond to immigrants of minority racial status. Wong, Lajevardi and Nicholson (2017) exposes representatives to a request for a lobby visit from hypothetical

constituents of varying races and legal statuses. Mendez (2013) also finds that legislators were generally less responsive to undocumented Latino constituents, but this effect was greatly reduced among Latino legislators. Latino legislators did not discriminate within their own racial group based on legal status, suggests that outgroup bias may indeed be a determining factor in the way representatives respond to immigrants. Janusz and Lajevardi (2016) find that when it comes to the provision of constituent services, responses to Hispanic constituents is roughly equal to white constituents, but that Republican legislators are more likely to discriminate against constituents who identify themselves as undocumented.

More generally, Kim (1999) theorized the existence of different dimensions of racial discrimination, arguing that minority groups can be both discriminated on a "valence" dimension, which judges blacks and Hispanics as having lesser civic virtue than whites, as well as a "foreignness" dimension, which judges Asians as inscrutable and less loyal to American values. These dimensions of discrimination may incentivize legislators to respond to different types of constituents in different ways. A legislator may be disinclined to be responsive to immigrant constituents regardless of race because a constituent's immigration status may override his or her race as an effect. A legislator may also show preferential treatment to constituents based on valence qualities, judging that "good" minorities, such as Asians, are worth investing time to respond to. We return to this question of multidimensional discrimination in the discussion section below. Presently we state our expectations for the impacts of immigrant characteristics on legislator behavior.

HOW SHOULD WE EXPECT LEGISLATORS TO RESPOND TO IMMIGRANTS?

Legislators can develop a connection with constituents through a variety of actions, including personal communication, seeking particularistic benefits for their district, and the choice of which bills to sponsor or support (Fenno, 1978). Here we focus on the response of legislators to constituent requests for casework, which have been the subject of vigorous debate as to their importance (Fiorina, 1977, 1981; Johannes and McAdams, 1981*a,b*). In

spite of this controversy, we note that recent scholarship on Congressional elections reinforces the argument that casework matters. If the actions and "brands" of parties as a whole are becoming increasingly important (Leveck and Kim, 2013; Tausanovitch and Warshaw, 2015), legislators may see responding to constituent requests as a way of cultivating a personal vote.

Irrespective of their importance in electoral contests, we focus on requests for casework because they are the subject of a robust empirical literature, and represent an observable, direct connection between legislators and their constituents. Because our core inferences are about the effect of a randomly assigned treatment, there is no concern that variation between legislators in the importance of casework will bias our results.

Requests for casework can be presented to legislators by any constituent, particularly in an age of electronic communication. Our aim here is to identify factors that systematically determine how legislators respond to these requests, particularly those emanating from immigrant constituents. We now consider two such factors: self-interest and bias.

Self-interest

Following Mayhew (1974), we assume that representatives are primarily office seekers. From Fenno (1978), we take the proposition that representatives pursue this goal partly through tailoring personal communication with constituents. In sum, self-interested legislators will (i) dedicate scarce time to responding to personal communication from constituents, and (ii) prioritize those communications that come from constituents who are more likely to vote for them.

We argue that, all else equal, representatives will be less responsive to immigrant constituents, because the former are on average less likely to vote. This raises the question of how representatives might, first, determine that a constituent is an immigrant, and second, link immigration status to likelihood of voting. One such informational pathway is through knowledge of the constituent's nativity, i.e., whether the constituent was born in the United States or in another country. This information provides the representative with probabilis-

tic knowledge about the constituent's ability to vote, as most Americans born in another country are non-citizens and therefore ineligible to vote.[3] Representatives could also learn whether or not a constituent is a citizen. Compared to nativity, citizenship provides a more direct signal of the constituent's ability to vote. However, as we explain below, manipulating nativity rather than citizenship allows us to provide a more direct test of the two competing mechanisms of self-interest and bias.

While nativity transmits an indirect signal of the constituent's importance for a representative's electoral self-interest, representatives may also encounter direct signals about a constituent's voting behavior. These could be gathered from secondary data (e.g., the voter file) or from self-reported statements about voting. All else equal, the self-interest mechanism suggests that direct signals that a constituent does vote should cause a legislator to be more responsive to communication from that constituent.

Bias

The second explanation we consider is that elected officials may respond more favorably to members of their in-group (Butler and Broockman, 2011). Using both observational methods and experimental studies, scholars have repeatedly found that office holders respond more often and provide "better" information to individuals like them (Grose, 2014; Butler, 2014). For instance, white legislators respond at higher rates to inquiries from white constituents than from black constituents, and black legislators similarly favor black constituents (Butler and Broockman, 2011). A common racial tie can even prompt legislators to assist individuals who are not part of their constituencies (Broockman, 2013; Grose, 2014; Butler, 2014).

Of the many attributes that might mark immigrants as members of an outgroup we focus on nativity and race/ethnicity. While nativity provides an indirect signal about the

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[3]The 2010-2014 five-year estimates of the American Communities Survey (accessed via American FactFinder) show that, as of 2014, roughly 53% of the foreign born population are naturalized citizens.

constituent's ability to vote, it directly signals the constituent's membership in a group defined by national origin. Thus the bias mechanism also predicts that foreign born constituents will be less likely to receive responses to their inquiries. We consider the matter of distinguishing between these two mechanisms below.

Immigrants may also be viewed as belonging to an outgroup because of their race. In the current study, we propose a simple approach to studying such bias. Because we lack data on the racial identities of state legislators, we focus on the direct effect of minority (as opposed to white) racial identity, rather than estimating the effect of common racial ties. Since the majority of state legislators are white (Butler, 2014), the presence of bias will likely be detectable even if it occurs only in the offices of white legislators.[4] Thus we hypothesize that, all else equal, legislators will be less likely to respond to requests from constituents belonging to racial minorities.

Before continuing, further justification is required for our focus on a constituent's nativity rather than citizenship. Citizenship is clearly an important feature of immigrant identity. We focus on nativity rather than citizenship because our primary motivation is to distinguish between two motivations for diminished responsiveness toward immigrants – self interest and bias.

In nativity and voting status, we have identified two factors that can be independently manipulated, and all possible combinations of these factors can be presented as stimuli to our subjects. If, instead of nativity, we were to manipulate the citizenship status of the constituent, one combination of the two factors would not be feasible, namely a non-citizen voter. We focus on nativity rather than citizenship in order to avoid the theoretical gap left by this "empty cell".

Finally we note that the two possible explanations of representative behavior are not entirely distinct. Because minority racial identity is highly correlated with political parti-

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[4]With the appropriate data, a subsequent analysis could determine whether prejudice is driven by racial mismatch between legislators and hypothetical constituents.

sanship, representatives may use the racial cue to draw inferences about partisanship. If this is the case, the cue of racial identity could potentially impact representative behavior through the channel of self-interest rather than bias. This argument is explored below in our analysis of partisanship.

<center>SAMPLE AND EXPERIMENTAL DESIGN</center>

To determine whether self-interest or bias drive legislators' behavior toward immigrant constituents, we contacted a sample of state legislators with requests for information. Our population of interest is the universe of $7,383$ state legislators in the 50 U.S. states. Our sample includes all legislators that publicly provide their email addresses to the Sunlight Foundation (Foundation, 2016), along with legislators from the state of California. In total, the sample consists of $5,087$ legislators from 42 states.[5], or approximately 69 percent of all state legislators.

Experimental stimulus and randomized elements

The experimental stimulus consists of an email containing a request for information, and appearing to come from a constituent, which was delivered to each legislator in the sample (Crabtree, 2018).[6] Our request texts were randomly sampled from a pool of questions we collected from the frequently asked question section of legislator webpages. Each request was paired with a specific subject line, as shown in Table 1. While we were not interested *ex ante* in how legislators responded to these different requests, we vary these requests to avoid the possibility that staff working in multiple legislative offices might notice patterns among our requests and thereby draw the conclusion that they are under study.

<center>[Table 1 about here.]</center>

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[5]Appendix B lists all states in the sample.

[6]Interventions such as this raise several ethical concerns. We address these issues in Appendix A.

In addition to including a request for information, each email contained a set of randomized cues designed to test our theoretical expectations. We independently manipulated two factors: *nativity* and *voting status*. The nativity factor has three levels. In the control condition, the sender provides no information about their nativity. In the native-born condition, the sender identifies as being born in the United States. In the foreign-born condition, the sender identifies as being born outside the United States.[7] The voting status factor also consists of three levels. In the control condition, the sender did not provide any information about whether he votes. In the vote and does not vote conditions, the sender states whether or not he votes. The nativity and voting status factors combine to yield nine different treatment arms. Table 2 lists all nine possible treatment arms, along with the corresponding text.

[Table 2 about here.]

To explain the role of bias in legislative responsiveness, we also vary constituent race. This factor takes four values: white, black, Hispanic, and Asian. In keeping with a well-established approach we use the name of the email sender to indicate the race/ethnicity of the hypothetical constituent (Bertrand and Mullainathan, 2004, among others). The particular names used to signal racial identity may impact the external validity of a study of this sort, and thus the choice merits some attention. Table 3 presents the name used to signal each racial treatment, along with information about the relative prevalence of those names. Name prevalence is computed separately for first and last names, using data from the Social Security Administration and Census Bureau, respectively.[8]

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[7]See previous section for our theoretical motivation for choosing to signal nativity rather than citizenship.

[8]We know of no publicly available data that systematically combines first and last names to give the prevalence of particular combinations, nore are we aware of a reliable source that reports name prevalence for immigrants only.

While the table shows it is unlikely that any of our cues would be remarked as extremely uncommon, we discuss potential name effects in greater detail below.[9] To make the names as similar as possible, we used short first names beginning with the letter 'J.' Gender was held constant to maximize statistical power, and we arbitrarily chose the gender of the hypothetical constituent to be male. Each of the racial treatments is paired with the full list of treatments presented in Table 2, resulting in a fully crossed factorial design with 36 experimental conditions.

[Table 3 about here.]

For the same reason that we vary the request text, we also randomized the valedictions included in the emails as well as the type of white-space separator used before the email signature.[10] To ground understanding of our intervention, figure 1 presents one possible email sent to state legislators.

[Figure 1 about here.]

Assignment to treatment and implementation details

Randomization of all 36 treatments was blocked on pre-treatment covariates plausibly predictive of legislative responsiveness. These covariates include a state indicator, a dummy variable indicating whether a legislator is a Republican, the percent Asian in a legislator's district, the percent black in a legislator's district, the percent Latino in a legislator's district, and the percent immigrant population in a legislator's district. Data for legislator partisan affiliation come from the Sunlight Foundation and the California State Legislature. Data for the demographic variables come from the 2014 American Communities Survey.

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[9]Concerns about name effects may be particularly relevant for the African American cue. We discuss these in detail in Appendix C.

[10]Appendix D presents the full list of valedictions and separators.

Of the 5,087 legislators in our original experimental sample, 124 could not be reached because of invalid email addresses, and these are excluded from the sample, as per common practice (Butler and Broockman, 2011). All results reported in our paper refer to the remaining sample of 4,963 state legislators that received one of our emails.[11] Each legislator received a single email, with no follow-up in case of non-reply. Emails were delivered across four different days in four separate waves, with participants randomly assigned to one of these waves.[12]

The outcome measure reported in the analyses is EMAIL RESPONSE, which is coded 1 if a legislator or member of her staff replied to our email within two weeks and 0 otherwise.[13] We do not count auto-responses as replies.

EMPIRICAL RESULTS

The overall response rate is 36.2 percent, which is within the range observed in similar previous studies (Costa, N.d.). This provides some evidence that our requests were not perceived as fundamentally different than other requests that have been made of legislators in prior studies. Figure 2 visualizes the raw response rates by experimental condition for each of the 36 treatment arms in the factorial design. The combinations are sorted by racial cues. The primary result visible in the raw data is that the main driver of legislator responsiveness appears to be the race of the constituent.

While this generally confirms the existing literature (Costa, N.d.; Butler, 2014), the

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[11] The results are substantively similar if we do not drop legislators with invalid email addresses.

[12] Comparison between a model that regresses assignment on covariates and a null model (Gerber and Green, 2012, 107) suggests that covariate imbalances between groups are no greater than might occur by chance ($p \approx 1$).

[13] The emails responses generated by our request show little variation in any characteristics that could be used as additional dependent variables. Results are substantively similar using a count of replies as the outcome rather than a binary measure.

results add nuance to previous findings by suggesting an underlying racial hierarchy in the behavior of legislators toward their constituents. White constituents receive responses most often (41.8 percent response rate), followed by blacks (39.4 percent response rate), Hispanics (34.7 percent response rate), and finally Asians (32.6 percent response rate). As we explore below, the data do not demonstrate an increasing treatment effect for each racial category (the equivalent of a "dose-response" for race). They are, however consistent with a more complex model of race than that suggested by a binary, black/white distinction.

[Figure 2 about here.]

The treatments have a highly statistically significant and substantively large effect on the probability of receiving a reply from state legislators. An omnibus Wald test of the null hypothesis that none of the treatments has any effect tells us that we can reject the null that email replies are independent of the 36 experimental treatments ($p \approx 0$). We can also reject the null that email replies are independent of the nativity and voting cues ($p \approx 0$) and the racial cues ($p \approx 0$).

To estimate treatment effects, we use a linear probability model (LPM) (Wooldridge, 2010).[14] including only treatment indicators, blocking covariates, and fixed effects defining the other characteristics of the experimental conditions.[15] The reference category is a white constituent who does not signal their nativity or voting status. To account for heterogeneity in the error term, we use HC2 robust standard errors (Angrist and Pischke, 2008).[16] Figure 3 displays the results of this model.[17]

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[14]Estimates from logit and probit models (shown in Table 1 in Appendix E) are substantively similar.

[15]These include the wave in which the email was sent, the question directed to the legislator, and the valediction and separator used in the email, as described above.

[16]The results are substantively the same if we use classic standard errors or if we use standard errors with the Bell-McCaffrey (BM) adjustment recommended by Lin and Green (2015).

[17]Table 2 in Appendix E presents the LPM coefficient estimates and robust standard errors.

The core result of the model reflects the pattern in the raw data; legislators are significantly less likely to respond to emails from any minority group. The probability of receiving a reply is 3 percentage points lower for blacks, 7 points lower for Hispanics, and 9 points lower for Asians, all compared to the reference category of whites. While these findings are suggestive of a racial hierarchy in legislator responsiveness, our sample is not large enough to demonstrate such a hierarchy exists. Wald tests indicate that while the response to blacks is significantly different from the response to Hispanics ($p < 0.05$) and Asians ($p < 0.01$), the difference between Hispanic and Asian effects is not statistically significant ($p \approx 0.19$). Taken together. Taken together, these tests suggest that while there is bias against all minority racial groups, the bias experienced by Hispanics and Asians in interacting with representatives may be larger than the bias experienced by blacks.

While the black racial cue did cause a lower raw response rate than the white cue, this difference is not significant at the 0.05 level ($p = 0.095$). In light of the robust literature demonstrating bias in legislator response toward blacks (Butler, 2014; Broockman, 2014), it would be remarkable indeed to discover that such bias were no longer present. One can certainly conceive of factors that may have changed the way legislators respond to black constituents, including the ongoing "Black Lives Matter" movement, and even the possibility that legislators have internalized the results of previous audit studies. It would seem premature, however, to draw such a conclusion based on a single study. This is particularly true because our study used a single name, "Jamal Wilkerson", to signal black racial identity. Particularly when combined with the native-born cue, "Jamal Wilkerson" may simply provide too weak a signal of Black racial identity, resulting in the failure to replicate previous findings.

In addition to this unexpected finding on black race, the LPM results also suggest that there is a weak tendency for legislators to favor individuals who mention their voting status, regardless of whether they vote. This is indicated by the positive and statistically significant

coefficient on Votes Cue ($p < 0.10$).[18] The coefficient for the No Votes term is also positive, but the confidence interval around it includes zero. While it might appear that voters are favored over non-voters, the difference between these two terms is not statistically significant ($p \approx 0.32$). Our preferred explanation for this finding is that penalizing constituents who announce that they do not vote carries greater risk, than favoring those who proclaim that they do vote, becuase those who do not vote now may become able to vote in the future. Alternatively, it may be that mentioning voting in any form primes legislators to think about their electoral interests, and thus generates a higher response rate.

Similarly, there is a tendency for legislators to exhibit bias against those who mention their nativity, regardless of whether they are American- or foreign-born. This is indicated by the negative and statistically significant coefficients on both the Foreigner Cue ($p < 0.01$) and the Native Cue. While we anticipated that the foreign-born would receive a lower response rate, the fact that constituents announcing themselves to be native-born or likewise discriminated against is unexpected. Rather than discard the notion that legislators may favor native-born constituents, we find it more plausible that the particular signal of nativity used (*I was born in the US*) may have induced bias not related to nativity, but to some other attribute of the constituent.

The expectations outlined above suggest that, beyond the average effects of each cue, certain combinations of cues could be particularly important for responsiveness. This does not, however, appear to be the case. We find little evidence that the effect of any of the experimental cues is conditional on the presence of any other. While the raw data presented in Figure 2 seems to suggest that there are important differences within racial cues based on the presence of nativity and voting cues, these differences are not statistically significant at conventional levels. In this sense, the results suggest that both the unconscious and strategic

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[18]The signal transmitted to legislators by the voting status treatment may be weakened by the well-known tendency of individuals to exaggerate how often they have voted. Any resulting attenuation would cause us to underestimate the effect of voting status.

calculations that drive legislative responsiveness are less nuanced than theory might suppose. Indeed, it seems as if legislators primarily view their constituents through the lens of race.

The partisan logic of discrimination

The sources of diminished responsiveness appear to vary across different racial groups. For Hispanics, nearly all of the diminished responsiveness is concentrated in the behavior of Republican legislators. By contrast, Asian constituents receive responses at roughly the same (low) rate from both Republicans and Democrats. Figure 4 visualizes these results.[19]

[Figure 4 about here.]

How can we account for this pattern? We posit an informational explanation based on the level of certainty conveyed by each cue. If Hispanic constituents are viewed as being more reliably Democratic, this may make Democratic legislators more likely to respond to these constituents, and lead to a contrasting effect among Republican legislators. If legislators are less certain about the party identification of Asian constituents, neither Republicans nor Democrats can count on them as part of the core constituency. This may lead to lower levels of responsiveness among legislators of both parties.

Of course, these results report a conditional average treatment effect, in which the conditioning variable (partisan status of the legislator) is not randomly assigned. This means that the results are open to confounding by unobserved factors. The advantage of our proposed explanation, however, is that it could be tested in future experiments by varying the partisanship of Asian and Hispanic constituents.

Additional Empirical Findings

While our theory focuses on the effects of constituent-level characteristics, we know from previous work that the features of the specific requests made to legislators can also influence

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[19]Table 3 in Appendix F presents the LPM coefficient estimates and robust standard errors.

responsiveness. Butler, Karpowitz and Pope (2012) show, for example, that legislators are more responsive to service requests than policy requests. Our design allows us to test the extent to which legislators favor certain types of service requests. As shown in Table 1, we randomly asked legislators one of five different questions. One category includes service requests that focus on information about legislative functions: "How can I track the progress of a bill?"; "How can I get a copy of the state budget?"; "Where can I find information on touring the capital?" A second category includes service requests that focus on constituent assistance with other governmental institutions: "I'm having problems with the local government. Can you help?"; "Who can I contact if I have a problem with a state agency?" This second category more closely resembles typical casework requests.

To distinguish if legislators respond to these types of requests differently, we create a CONSTITUENT ASSISTANCE indicator. It is coded 1 if the email from a hypothetical constituent contains a request for assistance with other government institutions, and 0 otherwise. We then re-estimate the model presented in Figure 3, including this indicator. Figure 5 presents the results of this analysis.[20] The negative and statistically significant ($p < 0.01$) coefficient for this term shows that legislators are less likely to respond to typical casework requests than informational requests; the probability of receiving a response to a casework request is 4 percent lower than the probability of receiving a response to an informational request.

[Figure 5 about here.]

Beyond its intrinsic interest, by randomly assigning different types of requests, we rule out the possibility that legislators respond differentially to racial minorities because of a presumption that those groups make more burdensome requests for assistance. While we can determine that informational requests receive favorable treatment, our design does not allow us to explain why this is the case. It might be that legislators are less likely to reply to those requests because they impose a higher burden on legislator or staff time. It also might be that

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[20]Table 4 in Appendix G presents the LPM coefficient estimates and robust standard errors.

these generic requests for assistance are correlated with negative constituent qualities. Future work should investigate why the type of constituent service request influences responsiveness.

Confounded cues and the preanalysis plan

Among the more puzzling findings of our experiment, is that signaling that a constituent is native-born leads to response rates that are indistinguishable when compared to a cue that the constituent of foreign-born, and lower than the rate for a control condition in which no information about nativity is delivered. This finding contrasts starkly with the pre-registered expectations that native-born constituents would receive higher responsiveness through both of our proposed theoretical mechanisms. The result is all the more puzzling, in that it does not depend on the characteristics of the constituency or the legislator. Moreover, while the effect of the native-born cue is strongest in the white and Hispanic racial conditions, this interaction between the two conditions is not statistically significant. In short, this finding demands further explanation, which we now present, along with discussion of two relevant methodological points.

We find the most plausible explanation of this finding to be that the specific wording used to deliver the native-born cue (*I was born in the US*) induced legislators to view the constituent as less deserving of response for reasons not directly related to their nativity. While the data do not allow us to explore this conjecture further, we find it substantially more defensible than the main alternative, which is that legislators are intrinsically less responsive to native-born constituents.

The possibility that this cue may have induced some unintended belief in legislators brings up an important general pitfall for studies of this type. Whenever an experimental treatment is delivered via a single verbal cue, the treatment and cue are perfectly confounded and their effects cannot be separated. In order to know whether it is the specific phrase, *I was born in the US*, or legislators' beliefs about constituents' nativity that led to lower response rates, it would be necessary to use at least one other cue to signal nativity. The

same confounding holds true for a single name, rather than a set of names meant to cue the same racial identity (Gaddis, 2014). In effect, the treatment of race becomes confounded by the specific name chosen. Future studies should give careful consideration to gap between the theoretical concepts of interest and the specific experimental cues used to study them.

The finding that stating a constituent was "born in the US" decreases response rates also provides a clear example of the purpose of the pre-analysis plan in preventing the selective presentation of results. Because our design included a control condition in which no information about nativity was signaled, we could have omitted the native-born cue from the analysis and focused on the findings more easily reconciled by our theoretical framework. The existence of a public pre-analysis plan effectively dissuaded us from considering this sort of "fishing" (Humphreys, de la Sierra and van der Windt, 2013).

Discussion and Conclusion

This study set out to examine the behavior of elected representatives toward immigrants. By experimentally manipulating the traits of a hypothetical constituent, we sought to determine whether state legislators were motivated by self-interest or bias in responding to requests for constituent services. The results appear to strongly favor the second of these two mechanisms. While constituents who reported that they vote received higher response rates relative to the control condition, those who reported *not* voting were not penalized through lower responsiveness. Constituents who reported being native-born received response rates on par with those who signaled they were foreign-born. In short, experimental cues intended to alter the rational calculations of self-interested legislators did not induce behavior consistent with that explanation.

The findings not only show that Hispanic and Asian constituents are less likely to receive responses to their requests for constituent services, but they also reveal a surprising partisan logic to this discrimination. Bias towards Hispanics is concentrated among Republican legislators, while bias towards Asians is present in representatives of both major parties. The

terms Latino and Asian encompass a wide and diverse array of different ethnicities, each with their own distinct political, social, and economic qualities (Ramakrishnan et al., 2016; Stepler and Brown, 2016). While our experiment did not explore the differences between different ethnic groups among Asians and Latinos, research has shown there to be a tendency for white Americans to treat both Asians and Latinos as a single entity (Carter and Perez, 2016). It is likely that different Asian and Latino ethnic groups may also suffer from the same kind of discrimination we observe in this paper, although examining inter-ethnic differences in legislator response is an opportunity for further study.

In designing this experiment, our primary aim was to learn about the mechanisms that drive legislator responsiveness. While the results presented above provide important insight into this process, there are at least two ways in which future research could build upon our study to explore these mechanisms more carefully.

The self interest mechanism should, in theory, operate differently in legislators facing term limits than in those who are still eligible to run for reelection. While we could have compared treatment effects between those states that do and do not have term limits, such a comparison is likely to be confounded by other factors that distinguish those groups of states. A more rigorous test of this hypothesis would involve information about the career trajectory of each legislator, to determine whether she has termed out of the house in which she currently serves, and whether she is eligible to run for office in another chamber. Legislative biographies of this sort are not available to us. However, a study that incorporated this information would provide even greater insight into the importance of self interest for legislative responsiveness to immigrants.

Turning to the second mechanism, bias is typically defined with reference to an outgroup that is somehow excluded from the mainstream. While we uncover strong evidence of bias, we are not able to determine whether legislators who themselves belong to racial minorities are more responsive to minority constituents. Again, data limitations prevent us from pursuing this hypothesis in an adequately rigorous way. While there are some publicly available data

on the racial identities of legislators for the period in question, these data are incomplete. Moreover, issues of measurement error in the racial categorization of legislators demand close attention, and we lack a transparently constructed data set in order to assess the sources of such error. Future research that resolves these data issues will be essential in determining the nature of bias in legislative responsiveness.

The findings of our study provide additional support for the increased scrutiny that the "model minority" image has recently received. While Asian-Americans have long been considered a privileged "model minority" (Chou and Feagin, 2008), the results represent a strong empirical case that Asians still face discrimination in the important areas of political access and representation. These results further point to a more complex racial dynamic for Asians in American politics, who are often stereotyped as a community as having desirable valence qualities (Bobo, 2011; Bowler and Segura, 2011). While there is evidence that these valence qualities are imputed to Asian candidates (Visalvanich, 2016), the findings suggest that those positive stereotypes do not necessarily lead to higher quality representation for Asian communities. This discrepancy may be a source of political disaffection for Asian communities (Hajnal and Lee, 2011) and could also explain why Asians prioritize descriptive representation (Vo, 2004).

The results for Hispanic constituents, on the other hand, indicate a larger ethnic politicization of Hispanics. The strength of Latino partisanship has grown in the last eight years, with growing numbers of Latinos supporting Democrats and identifying with the Democratic Party (Pantoja, N.d.; Lopez et al., 2016). In the aftermath of the 2012 U.S. presidential election, many observers asserted that Republicans needed to expand their political outreach to Hispanic groups in order to remain competitive at the national level. The results indicate that Republican disaffection from Hispanics is a systemic problem that reaches down to the state legislative level, and could complicate the party's efforts to make appeals to this growing part of the electorate. Garcia-Bedolla (2005) found that Hispanics in Los Angeles were more inclined towards the Democratic Party after having perceived the California Republi-

can Party as being hostile to their communities, a trend that has continued at the national level (Abrajano and Alvarez, 2010; Hajnal and Lee, 2011). Lack of political responsiveness by state legislators to Hispanic constituents could also contribute to growing Hispanic disaffection with the GOP at the state level, which, in turn, could begin to influence legislative and executive races in GOP-dominated states with growing Hispanic populations, such as Arizona, Texas, or Florida.

Finally, the results for blacks are suggestive of a racial hierarchy in the behavior of elected representatives. While the results are certainly not sufficient to question the well-established finding that representatives are less responsive to black constituents, the evidence suggests that the degree of this bias may be less extreme than that encountered by Hispanics and Asians. One possible explanation for this distinction between minority groups is that, on average, blacks have a greater propensity to participate and vote than Asians and Hispanics (Hajnal, 2010). Further research will be required to establish the robustness of this racial hierarchy in representative behavior, particularly in light of the earlier discussion about confounded cues. Nevertheless, the results provide a provocative counterpoint to the traditional racial convention that sees black Americans as receiving most of the political discrimination in America. We have shown that race and ethnicity remain a dynamic factors in American politics, whose impacts may change dramatically depending on context. As America becomes a more multi-racial country, understanding the contours and consequences of discrimination will require a complex and multi-dimensional understanding of race.

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Tables and Figures

Figure 1: Possible Instance of Email Text

```
Dear Representative Smith,
Who can I contact if I have a problem with a state agency?  I vote and hope
to hear from you soon.

Sincerely,
Jamal Wilkerson
```

Note: One possible email sent to state legislators.

Table 1: Request texts

Subject line	Question
Question about legislation	How can I track the progress of a bill?
Problem with state agency	Who can I contact if I have a problem with a state agency?
Capitol tour	Where can I find information on touring the Capitol?
Local government issue	I'm having problems with the local government. Can you help?
State budget	How can I get a copy of the state budget?

Note: Text of requests delivered to legislators, along with the corresponding email subject line.

Table 2: Combinations of non-racial cues

Level of nativity cue	Level of voting cue	Cue text
Control	Control	*I hope to hear from you soon.*
Control	Votes	*I vote and hope to hear from you soon.*
Control	No Vote	*Even though I don't vote, I hope to hear from you soon.*
Foreign born	Control	*Even though I wasn't born in the US, I hope to hear from you soon.*
U.S. born	Control	*I was born in the US. I hope to hear from you soon.*
Foreign born	Votes	*Even though I wasn't born in the US, I vote and I hope to hear from you soon.*
Foreign born	No Vote	*I wasn't born in the US. Even though I don't vote, I hope to hear from you soon.*
U.S born	Votes	*I was born in the US. I vote and I hope to hear from you soon.*
U.S born	No Vote	*I was born in the US. Even though I don't vote, I hope to hear from you soon.*

Note: All combinations of the nativity and voting cues delivered to legislators.

Table 3: Racial cues

Race	Name	Rank (first)	Rank (last)
White	Josh Wilson	4	14
Black	Jamal Wilkerson	397	719
Hispanic	Juan Gonzalez	59	13
Asian	Jian Wu	6088	461

Note: Reports the names used to cue different racial/ethnic identities, along with the corresponding racial category. The third column uses data from the Social Security Administration for the period 1975-2015, and reports the rank of the first name among all names registered to babies born in the United States. The fourth column reports the rank order of the last name from the 2010 U.S. Census. Looking at the first line of the table, "Joshua" was the fourth most common name given to male babies in the U.S. from 1975-2015, and "Wilson" was the 14th most common last name of those enumerated in the 2010 census.

Total Number of Responses By Experimental Condition
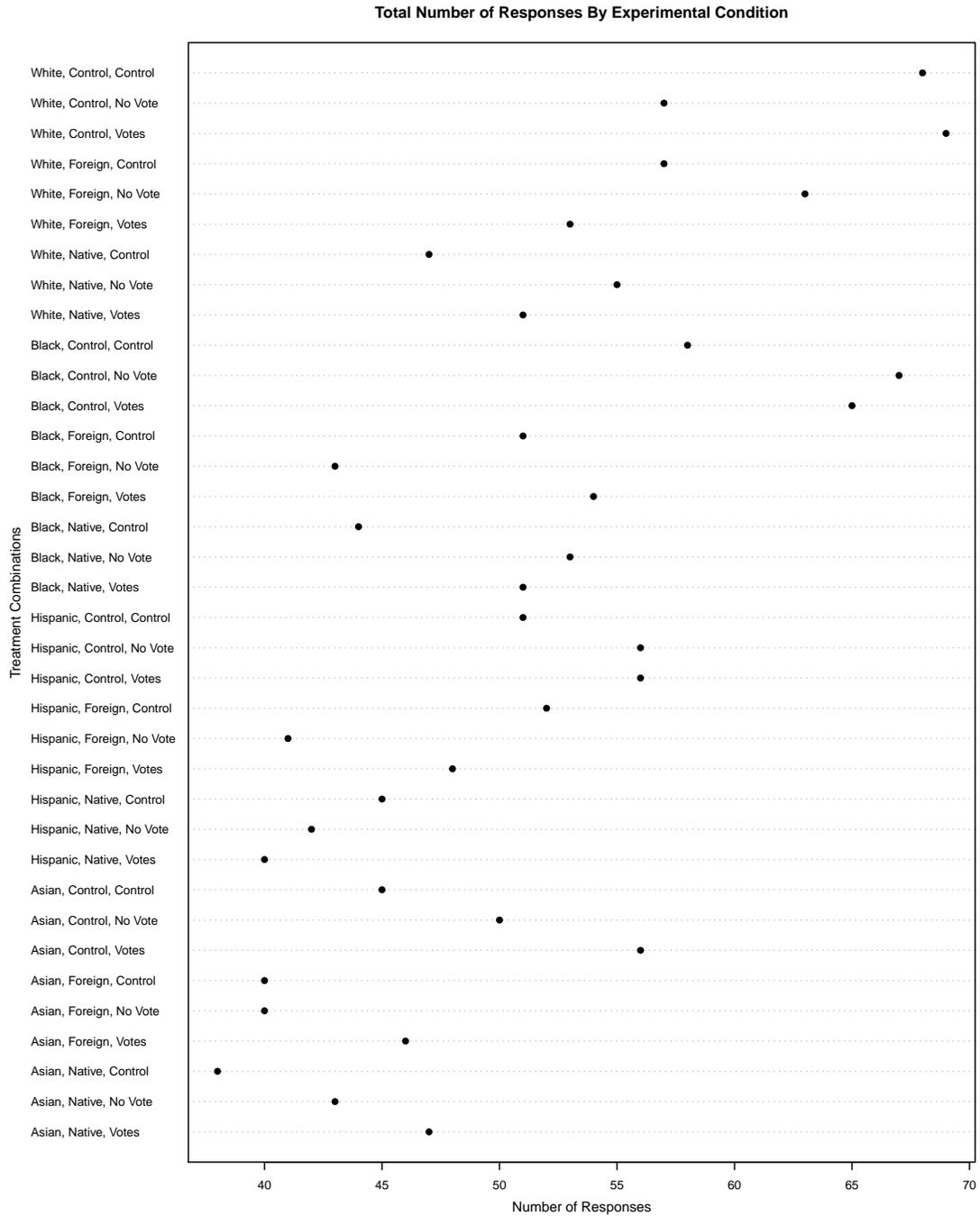
Figure 2: The raw number of replies by state legislators to emails corresponding to each of the 36 experimental treatments. Treatments are ordered by the race of the hypothetical constituent, with the first group of nine entries corresponding to white, the second group to black, the third to Hispanic, and the fourth to Asian. The pattern that emerges from this figure is one of decreasing responsiveness from legislators to constituents based on race. Compared to whites, the difference for 'being black' is relatively small compared to the difference of 'being Hispanic' or 'being Asian.' We estimate the differences per treatment condition below.
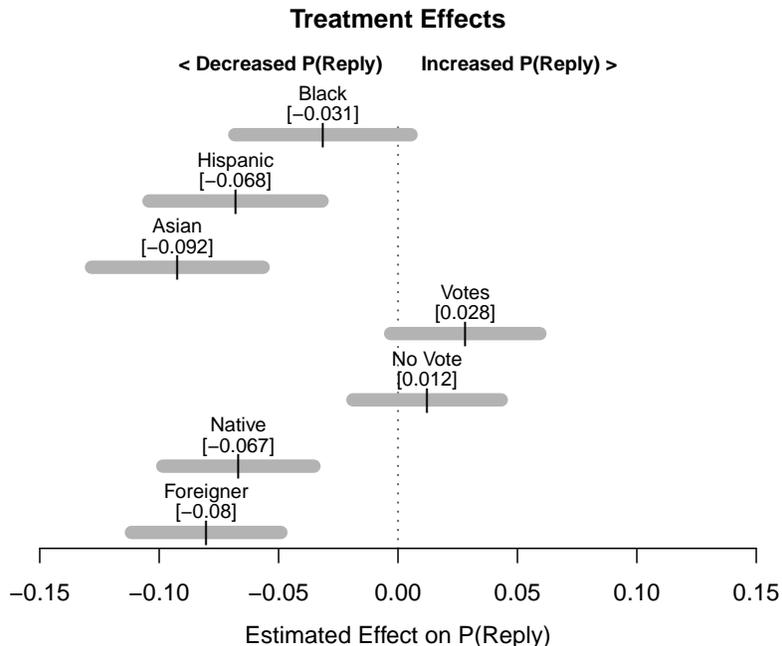
Treatment Effects

Figure 3: Results of a linear probability model that examines the effect of the treatment variables on legislator responsiveness. Legislators are less likely to answer emails from racial minorities than white constituents. The probability of a black constituent receiving a reply is approximately 3 percent lower than the probability for whites. The estimated effect of 'being black' is relatively small compared to the effect of 'being Hispanic' or 'being Asian.' The probability of a Hispanic receiving a reply is about 7 percent lower than the probability for whites and the probability of an Asian constituent receiving a reply is about 9 percent lower. The black plotted vertical bars represent estimated treatment effects. The thick horizontal bars represent 95% confidence intervals. The horizontal axis represents the treatment effects (coefficients) from the linear probability model described in the text. The treatment variables are displayed in order of the model specification described in the text. Additional blocking covariates and various fixed effects are not visualized.

Treatment Effects

< Decreased P(Reply)   **Increased P(Reply) >**

Black
[−0.013]

Hispanic
[−0.018]

Asian
[−0.091]

Votes
[0.024]

No Vote
[0.021]

Native
[−0.09]

Foreigner
[−0.078]

Republican
[0.027]

Asian x Republican
[−0.003]

Hispanic x Republican
[−0.091]

Black x Republican
[−0.035]

Votes x Republican
[0.009]

No Vote x Republican
[−0.014]

Foreigner x Republican
[0.042]

Native x Republican
[−0.003]

−0.2   −0.1   0.0   0.1   0.2

Estimated Effect on P(Reply)

Figure 4: Results of a linear probability model that examines whether treatment effects are conditional on the partisan affiliation of legislators. The results suggest that the sources of diminished responsiveness appear to vary across different racial groups. For Hispanics, nearly all of the diminished responsiveness is concentrated in the behavior of Republican legislators. By contrast, Asian constituents receive responses at roughly the same (low) rate from both Republicans and Democrats. The black plotted vertical bars represent estimated treatment effects. The thick horizontal bars represent 95% confidence intervals. The horizontal axis represents the treatment effects (coefficients) from the linear probability model described in the text. The treatment variables are displayed in order of the model specification described in the text. Additional blocking covariates and various fixed effects are not visualized.

Treatment Effects

< Decreased P(Reply)   Increased P(Reply) >

Black
[−0.029]

Hispanic
[−0.067]

Asian
[−0.091]

Votes
[0.028]

No Vote
[0.012]

Native
[−0.066]

Foreigner
[−0.079]

Constituent Assistance
[−0.04]

−0.15   −0.10   −0.05   0.00   0.05   0.10   0.15

Estimated Effect on P(Reply)

Figure 5: Results of a linear probability model that examines whether legislators reply different to requests for assistance as opposed to informational requests. Specifically, this model is identical to the one presented in Figure 3, with the one addition of the CONSTITUENT ASSISTANCE indicator. The results suggest that legislators are less likely to respond to typical casework requests than informational requests. The probability of receiving a response to a casework request is 4 percent lower than the probability of receiving a response to an informational request. The black plotted vertical bars represent estimated treatment effects. The thick horizontal bars represent 95% confidence intervals. The horizontal axis represents the treatment effects (coefficients) from the linear probability model described in the text. The treatment variables are displayed in order of the model specification described in the text. Additional blocking covariates and various fixed effects are not visualized.
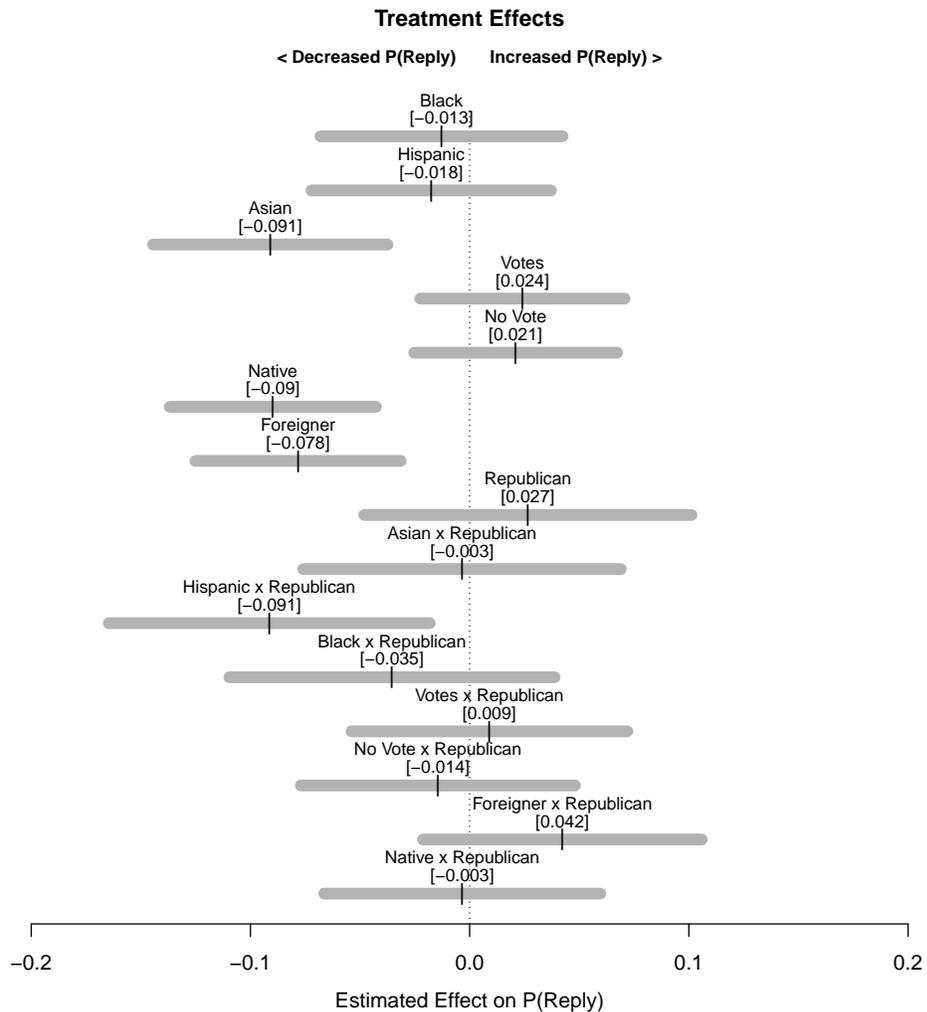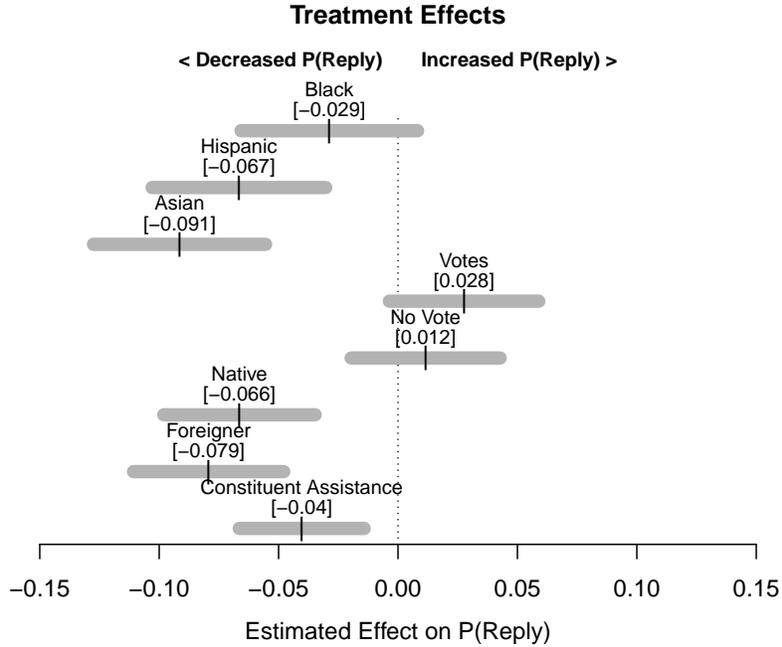
Supplementary Information for
"It's all about that race: How state legislators respond to
immigrant constituents"

(Not for publication.)

Butler and Broockman (2011) provides a detailed discussion of the ethical concerns involved in an audit experiment like the one we report here. We believe that the study has similarly minimized any potential harm to legislators or their constituents, particularly by maintaining the anonymity of the data.[21] Nevertheless, the proliferation of studies of this type, along with concerns about their potential consequences, demands further consideration.

In our view, the most important potential negative impact of the ongoing use of audit studies that take elected representatives as their subjects is the possibility that publicizing repeated studies of this type could distort representatives' behavior. We see two ways in which this could occur. As legislators become sensitized to the possibility that they are being studied, they could come to doubt the veracity of correspondence they receive, which could in turn lead them to ignore or to respond in less helpful ways to certain types of requests. On the other hand this awareness could lead legislators to attempt to avoid what they believe might be perceived as discriminatory behavior.

Taking the stylized view that legislators are interested in maximizing the time available to them to do their jobs, the first negative outcome seems unlikely. The amount of time it would take legislators and their staff to determine the true source of an email is likely to be much greater than the time required to simply respond to a request. So long as the total number of auditing emails arriving at each office remains low, it seems unlikely that representatives would change their behavior toward constituents based on assumptions about whether or not they are being audited.

The second outcome, that awareness of potentially being audited could lead legislators to change their own behavior, carries with it the possibility that legislators could change their behavior *only* in those areas in which they believe monitoring is ongoing. This outcome would comport well with political economy models, which argue that monitoring can induce accountability and improve the quality of governance. However, it would seem to demand a greater focus by social scientists on developing novel forms of auditing the behavior of representatives, in order to avoid elected and appointed officials "gaming the system" by eliminating bias only within a narrow scope of their actions.

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[21]We were granted exemption by the human subjects review board.

Appendix B

Legislators from the following states are included in the sample.

- Alabama
- Alaska
- Arkansas
- Arizona
- California
- Colorado
- Connecticut
- Delaware
- Florida
- Georgia
- Hawaii
- Iowa
- Idaho
- Illinois
- Indiana
- Kansas
- Kentucky
- Louisiana
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- North Carolina
- North Dakota
- Nebraska
- New Hampshire
- New Mexico
- New York
- Nevada
- Oklahoma
- Oregon
- Pennsylvania
- Rhode Island
- Tennessee
- Utah
- Washington
- Wisconsin
- West Virginia
- Wyoming

APPENDIX C

Previous studies have not used experimental cues to signal nuanced components of racial identity. Instead, the authors of these studies selected cues that are representative of each group type. For example Gaddis (2014) use 3 names for each of four racial-gender groups: Jalen, Lamar, and DaQuan (African-American/male); Nia, Ebony, and Shanice (African-American/female); Caleb, Charlie, and Ronny (White/male); and Aubrey, Erica, and Lesly (White/female). Gaddis and Ghoshal (2015) use 4 names for each of two female only racial groups: Brenda Olson, Heidi Wood, Joan Peterson, and Melany Mc-Grath (White/female); and Fatima Al-Jabiri, Basimah Hadad, Iman Farooq, and Maryam Qasim (Arab/female). Bertrand and Mullainathan (2004) use 9 names for each of four gender-racial groups: Emily, Anne, Jill, Allison, Laurie, Sarah, Meredith, Carrie, Kristen (White/female); Aisha, Keisha, Tamika, Lakisha, Tanisha, Latoya, Kenya, Latonya, Ebony (African-American/female); Todd, Neil, Geoffrey, Brett, Brendan, Greg, Matthew, Jay, Brad (White/male); Rasheed, Tremayne, Kareem, Darnell, Tyrone, Hakim, Jamal, Leroy, Jermaine (African-American/male). Additional analysis of variation between cues *within* groups is warranted.

Valedictions

- Sincerely,

- Thanks,

- Best,

Separators

- Line break

- Space

- Two line break

APPENDIX E

Table 4: Responses for Each Question and Racial Cue Combination

	White Reply	Black Reply	Hispanic Reply	Asian Reply
How can I track the progress of a bill?	114	100	80	78
Who can I contact if I have a problem with a state agency?	108	98	96	96
Where can I find information on touring the Capitol?	112	126	103	84
I'm having problems with the local government. Can you help?	82	66	59	56
How can I get a copy of the state budget?	104	96	93	91

Table 4 presents responses for each question and racial cue combination.

Table 5: LPM model

	Email Response
Black Cue	−0.031*
	(0.018)
Hispanic Cue	−0.068***
	(0.018)
Asian Cue	−0.092***
	(0.018)
Votes Cue	0.028*
	(0.016)
No Vote Cue	0.012
	(0.016)
Foreigner Cue	−0.067***
	(0.016)
Native Cue	−0.080***
	(0.016)
N	4,963

*p < .1; **p < .05; ***p < .01

Table 5 presents results from an LPM model. Cells contain estimated coefficients. Robust standard errors are in parentheses. The reference category is a white constituent who does not signal nativity or voting status. The model contains blocking covariates and fixed effects for waves, questions, valedictions, and dividers. We omit estimates for blocking covariates and various fixed effects, since we are not theoretically interested in these quantities. See text for more details about the data and model.

Table 6: LPM CATE Model

	Email Response
Black Cue	−0.013
	(0.028)
Hispanic Cue	−0.018
	(0.028)
Asian Cue	−0.091***
	(0.028)
Votes Cue	0.024
	(0.024)
No Vote Cue	0.021
	(0.024)
Foreigner Cue	−0.090***
	(0.024)
Native Cue	−0.078***
	(0.024)
Republican Leg.	−0.003
	(0.037)
Asian Cue x Republican Leg.	−0.091**
	(0.037)
Hispanic Cue x Republican Leg.	−0.035
	(0.037)
Black Cue x Republican Leg.	0.009
	(0.032)
Votes Cue x Republican Leg.	−0.014
	(0.032)
No Vote Cue x Republican Leg.	0.042
	(0.032)
Foreigner Cue x Republican Leg.	−0.003
	(0.032)
Native Cue x Republican Leg.	0.094
	(0.074)
N	4,963

$^{*}p < .1$; $^{**}p < .05$; $^{***}p < .01$

Table 6 presents results from an LPM model. Cells contain estimated coefficients. Robust standard errors are in parentheses. The reference category is a white constituent who does not signal nativity or voting status. The model contains blocking covariates and fixed effects for waves, questions, valedictions, and dividers. We omit estimates for blocking covariates and various fixed effects, since we are not theoretically interested in these quantities. See text for more details about the data and model.

Table 7: LPM Model with Constituent Assistance

	Email Response
Black Cue	−0.029
	(0.019)
Hispanic Cue	−0.067***
	(0.018)
Asian Cue	−0.091***
	(0.018)
Votes Cue	0.028*
	(0.016)
No Vote Cue	0.012
	(0.016)
Foreigner Cue	−0.066***
	(0.016)
Native Cue	−0.079***
	(0.016)
Constituent Assistance	−0.040***
	(0.013)
N	4,963

*p < .1; **p < .05; ***p < .01

Table 7 presents results from an LPM model. Cells contain estimated coefficients. Robust standard errors are in parentheses. The reference category is a white constituent who does not signal nativity or voting status. The model contains blocking covariates and fixed effects for waves, questions, valedictions, and dividers. We omit estimates for blocking covariates and various fixed effects, since we are not theoretically interested in these quantities. See text for more details about the data and model.