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Do elected officials serve the poor on health care? Evidence from a field experiment on members of congress and state legislators

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ABSTRACT

To what extent do legislators respond to the poor? While extensive research demonstrates the poor are largely ignored in legislators' policy calculations, little research examines the degree to which they discriminate against the poor with respect to providing constituency service. We examine this question using a series of correspondence experiments on both the offices of members of Congress and state legislators on the topic of health care. Consistent with previous studies we find no evidence that members of Congress discriminate by economic class and only mixed evidence that state legislators discriminate along these lines. We also find limited, but potentially important, evidence of partisan bias in service responsiveness for state legislators.

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Over seven decades ago, Schnattschneider (1960) famously observed that pluralism's heavenly chorus sings with 'a strong upper class accent' (pp.35). Scholars today explain part of the reason why this bias remains unsurprising: legislators from working class or poor backgrounds have been and continue to be dramatically under-represented in legislatures (Carnes, 2012, 2013; National Conference on State Legislators, 2015). Those from working-class or poor backgrounds are less likely to be recruited to run for office (Carnes, 2018), less likely to gain access to their member (Kalla & Broockman, 2016), and politically participate, in a variety of ways, at lower rates than do those with more resources (Incantalupo, 2011; Verba et al., 1995). Moreover, legislators who come from wealthy backgrounds, and who are inculcated in their social networks, behave differently while in office (Barnes & Holman, 2019; Grumbach, 2015). In short, legislators and their staffs may have less knowledge of and experience with issues that are important to the working class.

This disconnect between the elected and many of their constituents raise questions about the extent to which American democracy meets a fundamental underlying democratic value – that all people are equal before the government (e.g., Dahl, 1973). On a variety of dimensions, elected officials treat different constituents differently. Across a wide range of political contexts (e.g., state, federal, local), issues, and aspects of representation, politicians treat constituents differently based on their race, ethnicity, gender, and income.

The rise in income inequality in recent decades has led scholars to increasingly examine the extent to which economic inequality fosters political inequality. Indeed, studies of policy responsiveness have largely confirmed scholars' expectations – politicians are disproportionately responsive to the wealthy, particularly when their policy preferences differ from those of the poor (Gilens, 2012). More specifically, studies find politicians to be highly responsive toward the wealthy on policy, yet largely unresponsive toward the poor (e.g., Bartels, 2008; Ellis, 2012; Flavin, 2012; Gilens, 2005, 2012; T. J. Hayes, 2013; Lax et al., 2019). These responsiveness gaps have important policy consequences both because they lead to the passage of policies that reinforce the advantages already enjoyed by the

wealthiest members of society, and perhaps even more importantly, they provide wealthy citizens disproportionate ability to influence politics and further enhance their own political power while diminishing the power of those who are less well off (e.g., Bartels, 2008; Gilens & Page, 2014; Jacobs & Skocpol, 2005).

Somewhat less well appreciated is that aspects of responsiveness other than *policy-making* are likely to be important to the poor as well. In particular, the ability of poor and working class citizens to obtain benefits, assistance, or information from their government – a form of representation called service responsiveness – is a central but understudied aspect of representation. Evidence suggests that legislators are more responsive to service than policy requests (Butler et al., 2012) and are, for example, more likely to work or act on requests from constituents that are racially similar to them (Broockman, 2014; Lowande et al., 2019). Assistance and information is especially important when, for example, political actors like the Trump Administration work to impede citizens' ability to access government programs like the Affordable Care Act (e.g., Lovelace, 2018).

Examining service responsiveness allows for examination of the extent to which citizens who may be most reliant on the government for assistance, and least well-able to navigate the rules and institutions, are able to access to those benefits. To date, however, there is relatively little research on service responsiveness toward the poor and the studies that have been conducted generally find little gap in responsiveness (Carnes et al., 2019). Despite the large literature on biased responsiveness in policymaking (e.g., Bartels, 2008; Ellis, 2012; Flavin, 2012; Gilens, 2005, 2012; T. J. Hayes, 2013; Lax et al., 2019) there are perhaps many reasons to expect legislators need not discriminate between the affluent and less affluent when conducting service. Unlike policy-making where taking a position typically requires opposing a competing position, performing service imposes no comparable loss on other constituents (e.g., Butler et al., 2012). Legislators' offices can provide information or assistance to constituents with opposing political preferences. Melinda Ritchie (2018), for instance, shows that cross-pressured legislators will use service, by lobbying the bureaucracy, to satisfy conflicting interests. To the extent that the resources with which Members perform service are constrained, however, they may choose to prioritize servicing some constituents over others. Our mission in this paper is to build on this work and examine the extent to which service responsiveness occurs on an issue of particular importance to the poor and working class – health care.

This paper examines the extent to which legislators provide service to constituents and respond to the poor on the issue of health care. On balance, our results provide further support for the equal responsiveness thesis as we are unable to detect discrimination by economic class. At the Congressional level, we find little evidence that the parties discriminate by class in their degree of responsiveness, as Republicans generally do not discriminate more than Democrats, despite their opposition to the health care law. We do uncover biases in responsiveness by party for state legislators, however, as Democrats are more responsive to middle-income constituents while both parties are biased against the poor.

Responsiveness and legislator service

Scholars have long recognized the importance of constituent service (Clapp, 1980; Fenno, 1978). While somewhat underappreciated in academic treatments of representation, service responsiveness, defined as 'efforts of a representative to secure particularized benefits for individuals or groups in his constituency' provides elected officials an important channel for providing voice and responding to constituents (Eulau & Kars, 1977, p. 241). More specifically, casework typically involves responding to constituents' personal concerns and, using their knowledge, access, and influence to help solve problems constituents face. Service has been a large part of legislator duties (not just in the U.S.) and a role that many describe as increasing over time (Norris, 1997).

Because of its visibility and relevance, legislators see casework as important to reelection (e.g., Mayhew, 1974). Second only to lawmaking, legislators view service as one of the most important aspects of their job (Ellickson & Whistler, 2001; Freeman & Richardson, 1996). Studies find that

along with job performance, the overall amount of casework can strongly influence the chance of reelection (Fiorina, 1978; Serra & Moon, 1994) and larger caseloads are associated with more positive constituent evaluations (Cain et al., 2013; Serra & Cover, 1992). This type of responsiveness may be even more important at the state level, as state legislators do not share the same level of resources as members of Congress (Freeman & Richardson, 1996). Demand for assistance is partly dependent upon the size of the constituency, as citizens in less populous states are more likely to contact a representative for help (Oppenheimer, 1996).

There is good reason to expect, as Butler et al. (2012) find, that legislators might be more responsive to requests for service than for policy. Legislators see service as a way to help constituents with shared group attributes (Lowande et al., 2019) and reconcile the conflicting preferences of subconstituencies, donors, and party leaders (Ritchie, 2018). While decades of scholarship examine the extent to which policy responsiveness to different groups varies based on race, ethnicity, and gender, scholars have only recently begun examining these differences with respect to service.

Significant bias in representation can be traced to the information, opinions, and attitudes that politicians bring to office (Costa, 2017). State legislators who are white are less likely to respond to a request from African-Americans, or to Latinos requesting information on voter identification laws (Butler & Broockman, 2011; Butler & Crabtree, 2017; Mendez & Grose, 2014). Similarly, bureaucrats serving as local election administrators also discriminate against Latinos requesting information (White et al., 2015). With respect to wealth, legislators, and key staff are willing to meet with those who that indicate they are willing to donate to the campaign (Kalla & Broockman, 2016). On the other hand, however, examining simple service requests seeking information about voting or an in-person meeting to state, local, and school officials Carnes et al. (2019) find little evidence that legislators are less likely to respond to simple service requests regardless of constituent social class.

Like policy responsiveness, decisions about service responsiveness may also be driven by strategic attempts to pursue their goals. Members of Congress (MCs) are motivated by the desire for reelection, to make good public policy, and to attain power in the Congress (Fenno, 1978). Most directly, helping constituents are an effective and inexpensive way to curry favor in the next election. To the extent that legislators seek to make good public policy to improve society or help people, providing constituents with information or service needed to use those policy advances, may help legislators fulfill their mission. Finally, to the extent that providing service helps legislators improve their electoral prospects, develop a reputation on particular issues, or even fundraise among those they have helped, then constituent service may in some cases help them improve their stature in the chamber by making them appear effective and well resourced.

Service responsiveness differs strategically from policy responsiveness. Unlike sponsoring or casting roll call votes – perhaps the most commonly cited example of policy responsiveness – service responsiveness is not zero-sum. Unlike voting for a bill, legislators that provide service to a constituent are unlikely to alienate or anger other constituents. Taking unpopular positions on policy issues, acts of service are seldom publicized by instigators (e.g., Arnold, 1990), and even if noticed by opponents, are seldom criticized. Casework or particularized benefits, in contrast, deliver easily recognizable aid to constituents on issues constituents themselves have deemed sufficiently important so as to request assistance. Moreover, to the extent that the constituent who is served shares that information with friends and family, the legislator may reap further benefits from the service. Consequently, while legislators may be constrained by a variety of influences in their public policy actions (e.g., party leaders, contributors, interest groups, or even a desire to maintain consistency with previous positions), there is little fear of reprisal for helping a constituent in the way that there might be for publicly changing a position on an issue.

Service responsiveness on health care

In order to examine the extent to which class bias effects service responsiveness, we study health care, an important and complex issue on which, following the passage of the Affordable Care Act

(ACA), low- and middle-income Americans became especially likely to need information and assistance. As the only advanced industrial nation without universal health care (Hacker, 2010) a large portion of the U.S. population lacks health care coverage, a group disproportionately made up of less affluent citizens. One of the primary aims of the ACA, passed in 2010, was to decrease the number of people without access to coverage (the CBO estimated passage of the bill would eventually cut the uninsured population in half).¹ More specifically, the ACA reduced the uninsured population by requiring enrollment and by expanding the number of Americans eligible for Medicaid (which provides health care to the poor), and providing subsidies for many of low income who were not Medicaid eligible. As those who had health care plans that met a minimum care standard were generally allowed to keep them, those who did not have health insurance were mandated to purchase it (or pay a fine) and those who previously lacked coverage were most likely to request assistance since they were required to obtain health insurance. While low-income earners saw the largest reduction in the uninsured population after the law's passage (the bottom quintile of earners dropped 8.9%), there was a 4% drop among the uninsured for the second quintile, or those just above the median.²

Passage of the ACA occurred along clear partisan lines, as not a single Republican legislator voted in favor of the bill's implementation and the Republican Party worked to repeal the law thereafter. Consequently, the issue of health care allows us to test a series of expectations about the degree to which elected officials respond differently to constituents in various economic circumstances on an important issue as well as the extent to which partisan differences in responsiveness may occur on a divisive issue.

Expectations and hypotheses

Building on studies showing that legislators favor the preferences of upper rather than lower-income constituents when they conflict (e.g., Bartels, 2008; Ellis, 2012; Flavin, 2012; T. J. Hayes, 2013), we might also expect legislators to discriminate against service requests from low-income constituents. This discrimination might arise from sources such as unfamiliarity with their issues or concerns, as most legislators do not come from low income or working class backgrounds (e.g., Carnes, 2012, 2013), or the fact that the poor participate in political affairs (e.g., vote or donate) at much lower rates than do wealthier Americans (e.g., Verba et al., 1995). These studies showing unequal responsiveness to the wealthy focus overwhelmingly on policy, however, typically by examining roll call voting behavior. Another possibility is that legislators or their staffs discriminate against lower-class individuals when class is clearly signaled, such as through economic status, occupation, or the nature of a request (e.g., food stamp requests versus environmental policy requests). This might be especially salient for legislation that contains income thresholds to qualify, such as the Affordable Care Act. Therefore, we test the *Unequal Service Responsiveness Hypothesis*, which predicts that MCs will be less likely to respond to requests from low-income constituents.

One important finding in the research on policy responsiveness is that, while there is significant disagreement on many issues (Gilens, 2009), opinion differences between the rich and poor are not always large (Soroka & Wlezien, 2008) and tend to manifest on issues in which there can only be one winner. Even though legislators might be limited in resources (Maestas, 2003), unlike policy behavior, service responsiveness is not zero sum in that helping one person does not diminish a legislator's ability to help someone else. In some cases, legislators might be limited by their administrative capacity to provide service, however, this limitation does not pose costs that are

¹Since the implementation of the ACA, the number of people without health care has fallen considerably, as a report in 2014 showed a decrease of 8 percent of the uninsured population from the previous year (Tavernise, 2014). Recent estimates show the non-elderly uninsured population has dropped to around 10% in 2017 from 18% in 2010 (Kaiser Family Foundation [KFF], 2017).

²See 'Obama's Health Law: Who Was Helped Most' <http://www.nytimes.com/interactive/2014/10/29/upshot/obamacare-who-was-helped-most.html>

Table 1. List of hypotheses tested.

Hypothesis	Prediction
Unequal Service Responsiveness	Legislators will be less likely to respond to requests from low-income constituents.
Equal Service Responsiveness	Legislators treat all requests equally.
Party Constituency	Democrats will be more likely to respond to service requests about health care than Republicans.

attributable to other constituents with whom one disagrees. Importantly, because responding to a request for service is typically a more private act and hence not visible to the general public, providing service might function as a low-cost way for legislators to curry favor with potential voters that lie beyond the groups to whom they typically appeal. Furthermore, as Carnes et al. (2019) point out, a growing number of studies show that wealthier individuals have more clearly formed policy preferences, while lower-income individuals may care more about day-to-day life demands. Thus, it is possible that legislators recognize this and care more about responding equally to all service requests as they come in. Therefore, the *Equal Service Responsiveness Hypothesis* holds that legislators treat all requests equally since they may not be able to easily distinguish potential supporters from opponents and even responding to the latter may have value.

The issue of health care is particularly appropriate for evaluating these hypotheses as in addition to being relevant to lower and middle-income constituents the issue was highly polarized along partisan lines. Consequently, we might expect differential responsiveness to requests for assistance by legislator party. Two rationales, subconstituency politics, and issue ownership might explain such behavior. First, legislators with constrained resources might choose to allocate them to voters they see as key parts of their re-election constituency (e.g., Clausen, 1973; Fenno, 1978) since they are unlikely to get votes from opposing partisans (e.g., B. Bishin, 2009; B. G. Bishin, 2000; Hayes & Bishin, 2012). To the extent that the active subconstituency is partisan, we might expect different responsiveness by legislator party. Thus, in terms of responses to service requests, while we do not expect the GOP to be entirely unresponsive on the issue, Democrats should be more responsive as they may ‘own’ the issue and support the policy change, while Republicans are seen as opposing the policy (Hayes, 2005; Petrocik, 1996; Petrocik et al., 2003) and supporting partisans among the Democratic Party are more likely to favor the change in the law. This is especially true in an era of high political polarization, as the differences between the parties have increased over time (e.g., Garand, 2010; McCarty et al., 2006). Republicans in Congress were not just unanimously opposed to the health care policy change put forth by the Obama administration, but many Republican-led states rejected funding for the program. This public opposition might cause Republican legislators to discount or ignore such requests. Thus, the *Party Constituency Hypothesis* reflects this theory and predicts Democrats will be more likely to respond to service requests about health care than Republicans.

A summary of the expectations of each hypothesis is seen in Table 1. In the next section, we describe our experiments, which are specifically designed to test the *Unequal* and *Equal Responsiveness* hypotheses. As there is no partisan content in our experimental design, we test the *Party Constituency Hypothesis* by observing the extent to which there are partisan differences in responsiveness in the data.

Data and methods: An experimental design to study service representation

In order to examine the effect of constituents’ income on legislators’ propensity to respond, we conducted three separate field experiments in which a constituent requests assistance in complying with the ACA. Building on the work of Putnam (1993) and Butler and Broockman (2011), we contact public officials directly to measure the degree of responsiveness they provide to constituents. Specifically, we create a fictitious constituent who contacts legislators requesting information about

Table 2. Experimental treatment conditions.

Control From: [Amy Johnson] To: [Legislator's Email Address] Subject: A Question on Health Care Dear [Representative/Senator] [Legislator's Last Name], My name is Amy Johnson and I'm trying to figure out how to register for the new health care program. I'm a little confused about the new law and need some help as I heard it depends on your income. Can you help me find information about the new health care law? Will I qualify? Who should I call in order to sign up? Thanks, [Amy Johnson]
Low Income Treatment From: [Amy Johnson] To: [Legislator's Email Address] Subject: A Question on Health Care Dear [Representative/Senator] [Legislator's Last Name], My name is Amy Johnson and I'm trying to figure out how to register for the new health care program. I'm a little confused about the new law and need some help as I heard it depends on your income. I make about \$20,000 per year, my husband just lost his job, and I sometimes struggle to put food on the table for my two children (ages 5 and 8). Can you help me find information about the new health care law? Will I qualify? Who should I call in order to sign up? Thanks, [Amy Johnson]
Middle Income Treatment (For Studies 1 and 3) From: [Amy Johnson] To: [Legislator's Email Address] Subject: A Question on Health Care Dear [Representative/Senator] [Legislator's Last Name], My name is Amy Johnson and I'm trying to figure out how to register for the new health care program. I'm a little confused about the new law and need some help as I heard it depends on your income. I make about \$61,000 per year, my husband just lost his job, and I sometimes struggle to put food on the table for my two children (ages 5 and 8). Can you help me find information about the new health care law? Will I qualify? Who should I call in order to sign up? Thanks, [Amy Johnson]

how to enroll in coverage under the new health care law. The first and second experiments were only conducted on members of Congress, while the third was conducted on members of state legislatures.³

In our first experiment, we test differential responsiveness by randomly assigning a legislator to receive a request for information about a change in the health care law from a fictitious constituent with one of the three conditions (low-income, middle-income, control).⁴ In each condition, seen in Table 2, the constituent indicates that they are confused about the change in the law and whether they qualify.

In order to test the *Unequal* and *Equal Service hypotheses* the treatment conditions vary by income. The first treatment condition (low-income condition) highlights the constituent's yearly salary (\$20,000), which is approximately the federal poverty level for a family of four. The constituent indicates that her husband recently lost his job and that the family has two children (ages 5 and 8). The email ends with the constituent asking for information about their eligibility and for assistance in finding information about the new health law. The second treatment condition (middle income condition) differs only in that the income of the constituent is now 60,000 USD (just above the household median income in 2014). In the control condition, there is no mention of the specific income earned or family status.

³While our study builds on the work of Carnes et al. (2019) our experimental design differs in important ways. First, Carnes et al. (2019) use confederates living in local areas to send requests to their elected officials. Our study instead relied upon the use of fictitious addresses. Second, while Carnes & Holbein contact local officials such as school principals and mayors, as well as state legislators, our studies focus on the state (state legislators) and federal level (Congress). Third, Carnes & Holbein's use occupational background as a signal for class status. Our experimental design explicitly mentions constituent income.

⁴We chose the very common name Amy Johnson so as not to prime any racial characteristics. Use of a common name might also make it more difficult for legislators to search the voter rolls to obtain additional information about our fictitious constituent.

To ensure the robustness of our analysis, we conducted two additional studies. For the first follow-up experiment, we sought to increase the number of observations per condition and thus members of Congress were randomly assigned to one of the two conditions (low-income and control).⁵ In the third experiment, we study state legislators who were randomly assigned to one of the three conditions (low-income, middle-income, control).⁶

One concern with our study is that, unlike the process of casting roll call votes, legislators seldom provide constituent service by responding to emails themselves. While strictly true, legislators are clearly in charge of running their offices and setting priorities both in terms of policy and constituency interaction. Therefore, it is important to keep in mind that our claims about responsiveness pertain to legislators' offices as a reflection of legislators' priorities.

Legislator sample and experimental implementation

In our first experiment, we sent an email message (assigned randomly to one of the three conditions) to all members of Congress in October 2014.⁷ Most members' websites now require (and have software to verify) that constituents reside within their state or district, which restricts those from outside the state or district from sending them email communications. To overcome this limitation, we collected address data for a Starbucks location in each state or district. Entering this information allowed us to then submit a request to the individual MC through their website.

For the first experiment, we contacted legislators between October 20–28, 2014, and then recorded all responses using an email address for the fictional constituent (Amy Johnson) until the end of the year (December 31). For the second experiment, we contacted legislators beginning on November 16, 2015 and recorded all responses until January 31. We received many types of responses ranging from standard form responses (indicating the legislator had received the message) to more lengthy and meaningful responses. As we were mainly interested in whether the legislator (or staff) provided our fictional constituent with substantive help and not just a form response, we coded for responses that provided some information in direct response to the constituent request. These responses provide some type of information about the health care law, where to find information about the law (e.g., healthcare.gov website), or a personalized response from either the MC or staff member.

For our third experiment, we sent assistance requests to state legislators. Recent surveys of audit studies (e.g., Butler, 2019) point out that such experiments are important at the subnational level as they allow for testing of theories that might otherwise provide a null result when only focusing on national-level politics (e.g., Congress). For this experiment, a team of research assistants sent emails to state legislators in 47 states between December 2015 and April 2016.⁸ Substantively similar to the previous studies, a legislator received an email from a constituent asking for clarification and help on the new health care law where the income of the constituent is varied by 20,000 USD (low-income), 61,000 USD middle, or control (no mention of income).

⁵In our follow-up experiment on members of Congress (November 2015), the emails were sent a year after the first audit study (October 2014). This long period of time between studies makes it unlikely legislators or their staffs were aware of the study. We did not receive any indication in the responses that anyone became aware of our audit study.

⁶An analysis examining the ability to detect a difference in response rates of 10 points shows that the statistical power increases from .55 to .73 for the low-income condition between studies 1 and 2. The statistical power increases dramatically when moving from the first two studies to the examination of state legislators (.99). The full results for this analysis can be seen in Appendix A. Additionally, we pool all studies and employ a fixed effects regression as another way to increase sample size. The results of this analysis, found in Appendix C, show no statistically significant differences in responsiveness between the low-income and control conditions.

⁷The NJ 1st, NC 12th, and VA 7th seats were vacant and therefore we did not email these districts.

⁸At the time of the experiment, Tennessee and Pennsylvania did not publicly list email addresses for state legislators and thus were left out of the experiment. A state legislator in Wyoming responded that they were aware this was part of an experiment and would take active measures to distort our number of responses. Thus, this state is also excluded, as it is possible this would bias the results. The results, however, are unchanged when Wyoming is included in the analysis.

Table 3. Legislator response rate by field experiment.

Study	Total Number of Legislators Contacted	Meaningful Responses	
		Received	Overall Rate of Helpful Response
Congress #1	532	273	51%
Congress #2	529	241	45.5%
State Legislators #3	7,143	1,536	21.5%

Overall, we received response rates (seen in Table 3) very much in line with other field experiments on elites (Costa, 2017). The first survey received the highest response rate (51%) while the second received a slightly lower response rate (45.5%). The third experiment on state legislators led to the lowest response rate (21.5%). However, as many state legislators do not have full-time staff members, we expected the response rate to be lower for this experiment.

Ethical considerations

In designing our experiment we took care to consider the potential ethical issues involved in elite field experiments (e.g., Desposato, 2015; Grose, 2015) and followed the standard practice of other studies in this regard. It is important to point out that we engaged in a public act that legislators themselves are already engaged in (in public view) as written or electronic communication by elected officials is considered public information. Responses to constituents are often conducted by interns and are not financially costly to legislators. While we received IRB approval before conducting the experiment, we address several potential issues.

One concern was to minimize the burden placed on legislators (most specifically their staffs), which are often inundated with emails and requests for help. While there is minimal risk of financial burden, such requests do take up a valuable resource – legislator/staff time. This might be especially true for state legislators, who may have limited resources to conduct casework. To minimize this burden, we only sent one email (per experiment) and did not follow up with any additional requests. We also requested information that was easy to provide, as a web link was sufficient to provide a helpful response. Generally, we received very short replies, though some cases provided lengthier answers to our request for help. A second concern is that in contacting legislators using a fictional alias, we used deception. We recognize that in general, deception should be minimized as a potential downside could be decreased trust by elected officials that the constituent requests they are receiving are in fact real. However, as all legislators now have software on their website that requires full contact information in order to receive a response, deception (e.g., Starbucks address) was necessary in order to receive any response from these public officials. While other audit studies have used confederates who might live in the representatives constituency (e.g., Carnes et al., 2019), this practice also has downsides as those confederates sending requests would likely not have otherwise done so. Finally, we faced the issue of the potential harm our experiment could cause. Following the lead of Butler (2014) and Butler and Broockman (2011), we worked to keep the anonymity of legislator responses so they are not used to smear any particular legislator (or staff member). Keeping legislators anonymous is also an important way to retain trust. While we think all of these issues were important when conducting a field experiment, we felt the overall benefits of the study outweighed any potential negatives in that this provides an important examination of legislator responsiveness. Audit studies provide an important test of this responsiveness.

Results

We begin our analysis by examining the differences in responsiveness to requests for help navigating the ACA by people of different income levels across three studies. The dependent variable measures whether an MC provided a *Helpful Response* to the constituent's request for information about the

change in the health care law. The variable is coded dichotomously, where a 1 indicates any helpful response to the constituent's request. Form responses indicating that the legislator had received the email request, and position statements (for or against the health care law), as well as responses such as one that read 'if you have internet access I suggest you look it up,' were not coded as helpful responses – mainly because such responses did not provide service to a constituent with a specific request. Thus, non-helpful responses as well as non-responses were coded as 0. Aggregating across our samples, these responses indicate the percentage of legislator offices providing helpful responses to their 'constituents'.

In order to assess whether differences in legislator responses to constituents in low and middle-income groups are statistically significant, we conducted a simple difference in means test between the *Meaningful Responses* from each treatment condition and the control for each experiment. Figure 1 displays the difference in the proportion of helpful responses between the treatment condition and control (dot), while the bars above and below represent the 95% confidence intervals. Negative values indicate that legislators' offices were less responsive to constituents in the treatment condition, while positive responses indicate they were more responsive.

Study #1: Congress with three conditions

In the first experiment, we vary the income of the constituent requesting information about the change in the recent health care law. At first glance, members of Congress appear slightly *more* responsive (7%) to those in the low-income condition. However, as the error bars cross zero, there is no detectable difference between the middle-income condition and the control. Moreover, closer examination suggests that we are unable to detect a statistically significant difference between the low- and middle-income conditions.

Error bars represent 95% confidence intervals

Figure 1. Difference in percent of helpful responses across income conditions.

Study #2: Congress with two conditions

One possibility given the positive but non-significant finding in this study is that our result is an artifact of insufficient power to detect a small result. The power of our test to detect a difference as large as 10 points in the first study is only .55, well below the standard convention of .8. One limitation of studying the US Congress is that we are restricted in the number of possible cases on which we can collect data, to 535, the number of members. To investigate this possibility we repeated our study a year later. Specifically, we increased the power to detect a 10-point shift in service responsiveness to the poor by .73 by reducing the number of conditions from three to two (low-income constituent and control) and thereby increasing the size of the sample in each of the two conditions. These results are seen in panel 2. Despite increasing the size of the treatment group from 184 to 273 we observe no statistically significant difference between the control and low-income condition.⁹

Study #3: State legislatures with three conditions

The results to this point raise two questions: First, are the findings of no difference between groups a true reflection of support for the equal service hypothesis or do they reflect the relatively small samples in each condition? The repeated small effect sizes across studies one and two are suggestive: if responsiveness to the poor varies, it does not seem likely to do so by much. Second, the results raise the question about the extent to which they are generalizable to legislative representation more broadly, and in particular, across the states. To examine these questions we conducted an experiment in which we surveyed legislators from 47 states. Owing to the large potential sample of legislators, this study employs the three treatment conditions employed in Study #1. Specifically, we administer treatments for a low- and middle-income constituents inquiring about the change in the health care law. Accordingly, our power to detect a difference even as small as five points is very high (.99). The results are seen in the right-most panel. Here, we observe discrimination in service responsiveness, as both the low- and middle-income conditions are negative and statistically different from zero. For the low-income condition we see a negative shift of 2.5 points while for middle-income condition we observe a 3.9-point shift. However, the overall differences are tiny and we are unable to distinguish between the low- and middle-income conditions, as the difference between conditions is not statistically significant.¹⁰

One challenge in testing a hypothesis that asserts a null effect is that traditional tests of significance do not allow for such a result to be tested directly (i.e., an effect of zero cannot be statistically significant). As a final assessment of the *Equal Service Hypothesis* we employ the framework advanced by Rainey (2014), which examines the substantive meaningfulness of observed values from a 90% confidence interval around the estimated effect. Following this practice, we seek to examine whether the size of possible bias observed in our data are consistent with bias against the poor. We set a meaningful estimate of bias to be a difference in response rates of more than 5 points. Our results indicate they are not. Specifically, following Rainey (2014) we create 90% confidence intervals around the difference in means between the low income and the control condition and then

⁹When pooling the results for studies #1 and #2 we observe no statistically significant difference between conditions as well.

¹⁰One concern is that our treatment conditions are heterogeneous as cost of living varies greatly by state. In poorer states such as Alabama, for instance, \$60,000 may be well above middle income. The possibility exists that our middle-income treatment may not prime attitudes toward middle-income constituents in such cases. This is perhaps less of a concern for the low-income condition as \$20,000 in most states is considered quite low. To address the concern that our results are biased against low-income areas, however, we conducted difference in means tests for states in the middle half of the income distribution. While the results are substantively similar for Congress (study 1), there is one important difference in results for state legislators (study 3). Here, state legislators are found to be significantly less responsive to the middle-income condition (compared to the control) and less responsive to the middle-income compared to the low-income condition. We also examined this issue at the state legislative level by splitting the sample by median income (household and family) for state senate districts using data from the 2014 Census. Here we find no statistically significant differences in responses for state legislators by income.

take the lower boundary (3 points) as the most extreme reasonable estimate of bias. Based on this procedure we conclude that the data best support the *Equal Service Hypothesis*.

Overall, we are unable to detect much evidence that either members of Congress or state legislators (or their staffs) discriminate against low-income constituents when income is specifically mentioned in an email request for assistance on health care. While we lack the ability to definitively accept zero difference, the repeated null findings and very small coefficients are consistent with the *Equal Service Hypothesis* and provide little support for the *Unequal Service Hypothesis*.

Examining the effect of partisanship

Next, we turn to examine the role party plays in legislators' responsiveness on health care. Recall, the debate over the ACA was highly polarized along party lines both before and after the bill became law. Here we examine the extent to which we see differential responsiveness by legislators from the different parties. Recall that Democrats overwhelmingly supported the ACA while Republicans were unanimous in opposition. Because one of the primary purposes of the ACA was to expand access to health insurance for millions of people, particularly those of lower income or who could not obtain it through their employers, or who did not have it, responsiveness to low- and middle-income constituents were important to the successful implementation of the law (Leonhardt, 2010). Therefore, the *Party Constituency Hypothesis* holds that Democratic legislators will be more likely to provide helpful responses to low-income constituents' requests because Democrats support the policy and want to publicize their support by servicing those constituents. In order to test the *Party Constituency Hypothesis*, we conduct identical tests as before, but now separated by party.

Figure 2 displays the mean proportion of helpful responses by economic condition and party of the legislator while the error bars represent the 95% confidence intervals. Higher values indicate a higher likelihood of response.

The results from our first experiment, depicted in the left-most panel examines low and middle constituent requests to members of Congress. Here, we find no significant differences by party for any income group. Moreover, across conditions, we do not observe significant differences across parties. It is important to note, however, that these confidence intervals are relatively large. Similarly, the second experiment, which only contained the low-income condition and the control, depicts no evidence of biased responsiveness, as the differences in response rates are small and not statistically significant.

Figure 2. Meaningful response rate (mean) by party of legislator.

The results for state legislators offices, seen in the right-most panel, differ, however. Democrats are about 2-points more likely to respond to constituents overall. However, this increased responsiveness seems to come at the expense of the low- and middle-income constituents. Democrats are about 6 points less likely to respond to a low-income constituent while Republicans are about 2 points less likely to do so. Similarly, Democrats are about 4 points less likely to respond to a middle-income constituent, while Republicans are about six points less likely to do so. Although the differences are small, both Democrats and Republican state legislators are significantly less likely to respond to low-income constituent requests than to the control (no income) condition.¹¹ Republican state legislators are also significantly less likely to respond to middle-income constituent requests. Finally, comparing across parties, in the right-most plot we see that Democrats are significantly more likely to respond to middle-income requests than are Republicans. Thus, while we do observe party biases in responsiveness, Democrats are only more responsive to middle earners on the issue of health care than are Republicans, lending limited to mixed support for the *Party Constituency Hypothesis*.

Discussion and conclusion

Citizens' ability to gain information or assistance from their elected officials is an important yet understudied aspect of representation. The ability to access such assistance or information is particularly important for those who disproportionately rely on government programs for assistance like the poor and middle class. Past research suggests these groups often go without representation on issues of policy (e.g., Gilens, 2012). We examined the extent to which the poor and middle class are able to obtain service responsiveness by conducting three field experiments that examine the degree to which legislators responded to constituent requests about one of the defining changes to American society in recent times – health care reform.

Our field experiments based on responses from state and federal legislators yielded two central findings. First, our results are most consistent with the *Equal Responsiveness Hypothesis* and the work of Carnes et al. (2019). Specifically, we find virtually no evidence that legislators discriminate against poor or middle-income constituents on health care. While one potential constraint to the studies examining Congress is that we are limited in terms of sample size, this limitation does not apply to the study on state legislators. Of course, if the processes that members of congressional offices employ to respond differ from those of state legislators then it is possible, perhaps even likely, that differences may emerge. Unfortunately, given the limited size of Congress, we are inherently constrained in the number of cases available for study. Thus, while it is possible that we are unable to detect differences in responsiveness in Congress due to low power, the findings from the state legislative study confirm our findings at the federal level and support the *Equal Responsiveness Hypothesis*.

Second, we observe few partisan differences in responsiveness to different income groups on health care by members of Congress. Despite intensive efforts by the Republican Party to both oppose and then repeal the Affordable Care Act, and Democrats overwhelming support for the policy these policy positions seem unrelated to either state or federal legislators willingness to provide assistance to poor or middle-income constituents.

The results differ for state legislators, however. Here we did observe biases in responsiveness by party for state legislators – both Democrats and Republicans are slightly less responsive to the poor and middle-income constituents relative to those who do not identify their economic circumstance. In these cases, it seems the mere mention of income leads to slightly lower levels of responsiveness. Given the potentially catastrophic effects of failing to have health insurance, these effects may be important if people are otherwise unable to sign up for health insurance absent their legislator's office's assistance. The impact of this small level of bias is likely limited, however, in that outside of

¹¹We include a figure with difference in means tests as an alternative way to illustrate these findings in Appendix B.

our experimental condition, few citizens needing information are likely to only approach their state legislator for assistance.

Theoretically, these findings are intuitive. The small effects we observe are so small as to lend confidence that bias against the poor in providing service in health care has minimal substantive effects. Providing assistance or information as legislators typically do in the course of conducting casework is less polarizing than taking a policy stand, especially on a polarizing issue like health care. It is also possible that because the issue of health care is so polarizing and that it is a high-profile issue, legislators likely have prepared answers with helpful information about the law, making communication on this issue even less costly. Perhaps less salient issues would lead to different results, especially when a helpful response would take more time and preparation. Moreover, providing such service can help to alleviate conflicting pressures legislators face (Ritchie, 2018). Unlike policy position-taking, casework does not impose direct and visible costs on other constituents. Consequently, legislators have little reason to deny help to constituents who request it.

As with all experimental manipulations, the issue of external validity is a concern. Our experiment relies upon legislators or staff seeing differences in constituent income as a proxy for class status. Other studies have used occupation (Carnes et al., 2019) or donation amount (Kalla & Brookman, 2016) as an alternative to examine differences in legislator responsiveness. It is certainly a possibility that a stronger manipulation could provoke differences in legislator or staff behavior.

Our findings inform recent scholarship that examines unequal responsiveness and presents opportunities for future research. While many studies document elected officials biased responsiveness toward the wealthy in terms of ideological or policy responsiveness (e.g., Bartels, 2008; Gilens, 2012), our findings suggest this may not occur in all aspects of legislator behavior. Perhaps elected officials view service responsiveness as an opportunity to respond to citizens in a more equal manner. While others find biases in responsiveness of elected officials based on race (Butler & Brookman, 2011; White et al., 2015), our study suggests that legislator's offices may not exhibit the same biases based on class.

Highlights

- We find no evidence that members of Congress discriminate in service responsiveness on health care by economic class
- Only mixed evidence that state legislators discriminate along class lines
- We find limited evidence of biases in responsiveness by legislator party for state legislators.

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References

- Arnold, R. D. (1990). *The logic of congressional action*. Yale University Press.
- Barnes, T. D., & Holman, M. R. (2019). Taking diverse backgrounds into account in studies of political ambition and representation. *Politics, Groups, and Identities*, 7(4), 829–841. <https://doi.org/10.1080/21565503.2018.1532916>
- Bartels, L. M. (2008). *Unequal democracy: The political economy of the new gilded age*. Russell Sage Foundation; Princeton University Press.

- Bishin, B. (2009). *Tyranny of the minority: The subconstituency politics theory of representation*. Temple University Press.
- Bishin, B. G. (2000). Constituency influence in congress: Does subconstituency matter? *Legislative Studies Quarterly*, 25(3), 389–415. <https://doi.org/10.2307/440413>
- Broockman, D. E. (2014). Distorted communication, unequal representation: Constituents communicate less to representatives not of their race. *American Journal of Political Science*, 58(2), 307–321. <https://doi.org/10.1111/ajps.12068>
- Butler, D. M. (2014). *Representing the advantaged: How politicians reinforce inequality*. Cambridge University Press.
- Butler, D. M. (2019). Facilitating field experiments at the subnational level. *The Journal of Politics*, 81(1), 371–376. <https://doi.org/10.1086/700725>
- Butler, D. M., & Broockman, D. E. (2011). Do politicians racially discriminate against constituents? A field experiment on state legislators. *American Journal of Political Science*, 55(3), 463–477. <https://doi.org/10.1111/j.1540-5907.2011.00515.x>
- Butler, D. M., & Crabtree, C. (2017). Moving beyond measurement: Adapting audit studies to test bias-reducing interventions. *Journal of Experimental Political Science*, 4(1), 57–67. <https://doi.org/10.1017/XPS.2017.11>
- Butler, D. M., Karpowitz, C. F., & Pope, J. C. (2012). A field experiment on legislators' home styles: Service versus policy. *The Journal of Politics*, 74(2), 474–486. <https://doi.org/10.1017/S0022381611001708>
- Cain, B., Ferejohn, J., & Fiorina, M. (2013). *The personal vote: Constituency service and electoral independence*. Harvard University Press.
- Carnes, N. (2012). Does the numerical underrepresentation of the working class in Congress matter? *Legislative Studies Quarterly*, 37(1), 5–34. <https://doi.org/10.1111/j.1939-9162.2011.00033.x>
- Carnes, N. (2013). *White-collar government: The hidden role of class in economic policy making*. University of Chicago Press.
- Carnes, N. (2018). *The cash ceiling: Why only the rich run for office—and what we can do about it*. Princeton University Press.
- Carnes, N., Holbein, J., & Ha, S. E. (2019). Do public officials exhibit social class biases when they handle casework? Evidence from multiple correspondence experiments. *PloS One*, 14(3), 3. <https://doi.org/10.1371/journal.pone.0214244>
- Clapp, C. L. (1980). *The congressman, His work as he sees it*. Greenwood.
- Clausen, A. (1973). *How congressmen decide*. St. Martin's.
- Costa, M. (2017). How responsive are political elites? A meta-analysis of experiments on public officials. *Journal of Experimental Political Science*, 4(3), 241–254. <https://doi.org/10.1017/XPS.2017.14>
- Dahl, R. A. (1973). *Polyarchy: Participation and opposition*. Yale University Press.
- Desposato, S. (Ed.). (2015). *Ethics and experiments: Problems and solutions for social scientists and policy professionals*. Routledge.
- Ellickson, M. C., & Whistler, D. E. (2001). Explaining state legislators' casework and public resource allocations. *Political Research Quarterly*, 54(3), 553–569. <https://doi.org/10.1177/106591290105400304>
- Ellis, C. (2012). Understanding economic biases in representation: Income, resources, and policy representation in the 110th House. *Political Research Quarterly*, 65(4), 938–951. <https://doi.org/10.1177/1065912911427450>
- Eulau, H., & Karp, P. D. (1977). The puzzle of representation: Specifying components of responsiveness. *Legislative Studies Quarterly*, 2(3), 233–254. <https://doi.org/10.2307/439340>
- Fenno, R. F. (1978). *Home style: House members in their districts*. Harper Collins.
- Fiorina, M. P. (1978). Economic retrospective voting in American national elections: A micro-analysis. *American Journal of Political Science*, 22(2), 426–443. <https://doi.org/10.2307/2110623>
- Flavin, P. (2012). Income inequality and policy representation in the American states. *American Politics Research*, 40(1), 29–59. <https://doi.org/10.1177/1532673X11416920>
- Freeman, P. K., & Richardson, L. E. (1996). Explaining variation in casework among state legislators. *Legislative Studies Quarterly*, 21(1), 41–56. <https://doi.org/10.2307/440157>
- Garand, J. C. (2010). Income inequality, party polarization, and roll-call voting in the US Senate. *The Journal of Politics*, 72(4), 1109–1128.
- Gilens, M. (2005). Inequality and democratic responsiveness. *Public Opinion Quarterly*, 69(5), 778–796. <https://doi.org/10.1093/poq/nfi058>
- Gilens, M. (2009). Preference gaps and inequality in representation. *PS, Political Science & Politics*, 42(2), 335–341. <https://doi.org/10.1017/S1049096509090441>
- Gilens, M. (2012). *Affluence and influence: Economic inequality and political power in America*. Princeton University Press.
- Gilens, M., & Page, B. I. (2014). Testing theories of American politics: Elites, interest groups, and average citizens. *Perspectives on Politics*, 12(3), 564–581. <https://doi.org/10.1017/S1537592714001595>
- Grose, C. R. (2015). Field experiments on elected and public officials: Ethical obligations and requirements. In *Ethics and experiments* (pp. 241–252). Routledge.

- Grumbach, J. M. (2015). Does the American dream matter for members of congress? Social-class backgrounds and roll-call votes. *Political Research Quarterly*, 68(2), 306–323. <https://doi.org/10.1177/1065912915572902>
- Hacker, J. S. (2010). The Road to somewhere: Why health reform happened: Or why political scientists who write about public policy shouldn't assume they know how to shape it. *Perspectives on Politics*, 8(3), 861–876. <https://doi.org/10.1017/S1537592710002021>
- Hayes, D. (2005). Candidate qualities through a partisan lens: A theory of trait ownership. *American Journal of Political Science*, 49(4), 908–923. <https://doi.org/10.1111/j.1540-5907.2005.00163.x>
- Hayes, T. J. (2013). Responsiveness in an era of inequality: The case of the US Senate. *Political Research Quarterly*, 66(3), 585–599. <https://doi.org/10.1177/1065912912459567>
- Hayes, T. J., & Bishin, B. G. (2012, May). Issue salience, subconstituency politics, and legislative representation. *Congress & the Presidency*, 39(2), 133–159. Taylor & Francis Group. <https://doi.org/10.1080/07343469.2011.642058>
- Incantalupo, M. B. (2011). *Estimating the effects of unemployment on voter turnout* [Poster presentation]. Summer Methods Meeting, Princeton, NJ, Princeton University.
- Jacobs, L. R., & Skocpol, T. (Eds.). (2005). *Inequality and American democracy: What we know and what we need to learn*. Russell Sage Foundation.
- Kaiser Family Foundation (KFF) Report. (2017). *Key facts about the uninsured population*. <https://www.kff.org/uninsured/fact-sheet/key-facts-about-the-uninsured-population/>
- Kalla, J. L., & Broockman, D. E. (2016). Campaign contributions facilitate access to congressional officials: A randomized field experiment. *American Journal of Political Science*, 60(3), 545–558. <https://doi.org/10.1111/ajps.12180>
- Lax, J. R., Phillips, J. H., & Zelizer, A. (2019). The party or the purse? Unequal representation in the US senate. *American Political Science Review*, 113(4), 917–940. <https://doi.org/10.1017/S0003055419000315>
- Leonhardt, D. (2010, March 23). In health care bill, Obama attacks wealth inequality. *NY Times*.
- Lewis, D. E., & Wood, A. K. (2012). *The paradox of agency responsiveness: A federal FOIA experiment*. Working Paper. Vanderbilt University. http://www.vanderbilt.edu/csdi/research/CSDI_WP_06-2012.pdf
- Lovelace, J. B. (2018, December 15). Here's how trump hobbled obamacare and drove enrollment down this year. *CNBC*. <https://www.cnn.com/2018/12/15/heres-how-trump-hobbled-obamacare-and-drove-enrollment-down.html>
- Lowande, K., Ritchie, M., & Lauterbach, E. (2019). Descriptive and substantive representation in congress: Evidence from 80,000 congressional inquiries. *American Journal of Political Science*, 63(3), 644–659. <https://doi.org/10.1111/ajps.12443>
- Maestas, C. (2003). The incentive to listen: Progressive ambition, resources, and opinion monitoring among state legislators. *The Journal of Politics*, 65(2), 439–456. <https://doi.org/10.1111/1468-2508.t01-3-00008>
- Mayhew, D. R. (1974). *Congress: The electoral connection*. Yale University Press.
- McCarty, N., Poole, K. T., & Rosenthal, H. (2006). *Polarized America: The dance of political ideology and unequal riches*.
- Mendez, M. S., & Grose, C. R. (2014). Revealing discriminatory intent: Legislator preferences, voter identification, and responsiveness bias. *USC CLASS Research Paper*, pp. 14–17.
- National Conference on State Legislators. (2015). *Who we elect: The demographics of state legislatures*. <http://www.ncsl.org/research/about-state-legislatures/who-we-elect.aspx>
- Norris, P. (1997). The puzzle of constituency service. *The Journal of Legislative Studies*, 3(2), 29–49. <https://doi.org/10.1080/13572339708420508>
- Oppenheimer, B. I. (1996). The representational experience: The effect of state population on senator-constituency linkages. *American Journal of Political Science*, 40(4), 1280–1299. <https://doi.org/10.2307/2111751>
- Petrocik, J. R. (1996). Issue ownership in presidential elections, with a 1980 case study. *American Journal of Political Science*, 40(3), 825. <https://doi.org/10.2307/2111797>
- Petrocik, J. R., Benoit, W. L., & Hansen, G. J. (2003). Issue ownership and presidential campaigning, 1952–2000. *Political Science Quarterly*, 118(4), 599–626. <https://doi.org/10.1002/j.1538-165X.2003.tb00407.x>
- Putnam, R. D. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton, NJ: Princeton University Press.
- Rainey, C. (2014). Arguing for a negligible effect. *American Journal of Political Science*, 58(4), 1083–1091. <https://doi.org/10.1111/ajps.12102>
- Ritchie, M. N. (2018). Back-channel representation: A study of the strategic communication of senators with the US Department of Labor. *The Journal of Politics*, 80(1), 240–253.
- Schnattschneider, E. E. (1960). *The semi-sovereign people*. Holt, Reinhart and Winston.
- Serra, G., & Cover, A. D. (1992). The electoral consequences of perquisite use: The casework case. *Legislative Studies Quarterly*, 233–246.
- Serra, G., & Moon, D. (1994). Casework, issue positions, and voting in congressional elections: A district analysis. *The Journal of Politics*, 56(1), 200–213. <https://doi.org/10.2307/2132353>
- Soroka, S. N., & Wlezien, C. (2008). On the limits to inequality in representation. *PS, Political Science & Politics*, 41(2), 319–327. <https://doi.org/10.1017/S1049096508080505>

Tavernise, S. (2014). Number of Americans without health insurance falls, survey shows. *New York Times*.
Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality: Civic voluntarism in American politics*. Harvard University Press.
White, A. R., Nathan, N. L., & Faller, J. K. (2015). What do I need to vote? Bureaucratic discretion and discrimination by local election officials. *American Political Science Review*, 109(1), 129–142. <https://doi.org/10.1017/S0003055414000562>

Appendix A. Power analysis of low-income treatment condition

Experiment	N (legislators in low-income treatment group)	Mean (Helpful Response)	SD (Helpful Response)	Statistical Power (Assuming effect size of 10)
Study 1	188	.489	.501	.55
Study 2	273	.442	.497	.73
Study 3	2,397	.213	.409	.99

Appendix B. Difference in means test for Figure 2

Error bars represent 95% confidence intervals

Figure B1. Difference in responsiveness between control and income conditions by party of legislator.

Appendix C. Fixed Effects Regression of Pooled Analyses

Table C1. Fixed effects regression of legislator response (all studies pooled, study fixed effects).

	Legislator Response
Low Income (vs. Control)	−0.0180 (.0114)
Constant	0.274*** (.00808)
Observations	5697

Standard errors in parentheses * $p < .10$, ** $p < .05$, *** $p < .01$