Citizen Demand for the Dimensions of Political Representation*

Preanalysis Plan

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Contents

1 Summary **1**

2 Background **2**

3 Research Design **3**
3.1 Conjoint Experiment 3
3.1.1 Hypotheses 5
3.2 Direct Questioning 7
3.2.1 Hypotheses 8

4 Substantive Significance **9**

5 Updates **9**

1 Summary

This research will explore constituent demand for several key elements legislators' jobs—which Harden (2016) refers to as the *dimensions of representation*. In particular, we will focus on citizens' preferences over how legislators should prioritize activities related to policy issues, constituent service, allocation, and descriptive representation. We plan to employ novel survey

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experimental and direct questioning data from the 2018 Cooperative Congressional Election Study (CCES) to test several expectations.

2 Background

In recent years the study of representation in American politics has undergone a major expansion. In addition to "traditional" studies that focus on legislators' behavior, researchers have become increasingly interested in understanding constituents' perspectives on representation.[1] One key question from this line of inquiry centers on how citizens think legislators should spend their time and energy in office (e.g., Griffin and Flavin 2011; Vivyan and Wagner 2016). In a comprehensive treatment of this question, Harden (2016) studies constituent preferences for four dimensions of representation—policy, service, allocation, and descriptive representation—using survey data and experiments. Results indicate that the public does exhibit systematic preferences for representation. Moreover, some of these patterns—such as the relative preference for service among the economically disadvantaged and for policy among the advantaged—may perpetuate political inequality (Harden 2016, see also Harden 2013). While this work provides important advances in scholarly understanding of representation in American politics, Harden's (2016) analyses also exhibit some limitations, two of which we plan to address in the current research.

First, we plan to improve upon Harden's (2016) main survey experiment on preferences for the four dimensions. That experiment presented respondents with brief text about a hypothetical state legislator that included information on their "reputations" as they relate to performance in the domains of policy, service, and allocation. The legislator's name was also manipulated with male and female names to assess preferences for descriptive representation. While this design is simple and straightforward, the text itself was highly artificial, communicating no other context or information about the hypothetical legislator. Thus, the experiment yields insight into the relative preference ordering of policy, service, and allocation among the public, but not much more. In the planned research we seek to build on this work by placing preferences for representation in

[1] Examples of this work include Griffin and Flavin (2011), Grose, Malhotra, and Van Houweling (2015), Christenson and Makse (2015), Harden and Clark (2016), Vivyan and Wagner (2016), Wolak (2017), Harden and Kirkland (2018), Costa, Johnson, and Schaffner (2018), and Werner (2018).

the context of citizens' overall evaluations of elected officials using a conjoint experiment. This design allows us to compare the effects of factors such as shared partisanship or religion with those of legislators' priorities in office in determining citizens' attitudes toward their representatives.

An additional question that Harden (2016) analyzes asked respondents to rank three jobs of legislators, corresponding to the three dimensions of policy, service, and allocation. As in the experiment, this question design elicits respondents' relative ordering of the different options. However, it does not convey information about the magnitude of the rankings; we do not know how much more a respondent prefers the first choice over the second or third. Moreover, asking a relative ordering question does not adequately convey a key element of Harden's (2016) theoretical framework: legislators must tradeoff when allocating effort to each dimension. A more realistic approach to asking this question would make clear to respondents that an increase in effort on one dimension necessarily means effort on one or more of the other dimensions must decrease. The survey question described below asked respondents to directly allocate a specific percentage of legislator time to each of five possible options: the policy, service, and allocation dimensions plus two other potential jobs ("preparing to campaign" and "meeting with interest groups"). Because the total time spent must sum to 100%, this approach will improve external validity.

3 Research Design

Our planned analyses come from two items on the University of Notre Dame CCES module administered in October 2018 (conjoint experiment) and November 2018 (direct questioning).[2] We discuss each item here along with hypotheses we plan to test.

3.1 Conjoint Experiment

Our choice-based conjoint experiment allows for comparison of the effects of many manipulations on the same scale, all in one experiment (see Hainmueller, Hopkins, and Yamamoto 2014). We presented respondents with five pairs of profiles of two hypothetical legislators. The profiles listed several different characteristics of the two legislators being compared, presented side-by-

[2]The same sample of respondents completed both items. However, we do not expect that the conjoint experiment influenced responses in the direct questioning because they were administered approximately one month apart.

side in a table and in random order. The specific traits for each legislator varied randomly such that the two legislator profiles a respondent viewed usually differed on multiple dimensions.[3] We then asked respondents to select which of the two legislators they would vote for in an election.

The key trait of interest is the dimension of representation that a legislator emphasizes, which we listed as "Believes their primary job is." This trait can take on one of four values:

- Learning constituents' opinions on policy issues in order to better advocate for them.
- Helping constituents who have personal problems with government agencies.
- Making sure the district gets its fair share of government money.
- Serving as a role model for Americans.

This text is internally valid because it communicates the core concept behind each dimension of representation, but maintains as much external validity as possible by describing them without specialized terminology. The final value—serving as a role model—conveys a symbolic role for elected officials. When combined with the legislator's gender or race, it is intended to signal descriptive representation. Importantly the experiment also included several other characteristics, which we list below.

- Religion
  - Catholic
  - Evangelical Protestant
  - Baptist
  - African Methodist Episcopal (AME)
  - Mainline Protestant
- College education
  - Degree from a state university
  - Degree from a historically black university
  - Degree from an Ivy League university
- Profession
  - Lawyer
  - High school teacher
  - Business owner

[3]This feature is also useful in reducing social desirability bias and/or the possibility of respondents learning the aims of the study (Hainmueller, Hopkins, and Yamamoto 2014).

    - Medical doctor
    - Car dealer
- Military service
    - Served in the military
    - Never served in the military
- Gender
    - Male
    - Female
- Racial/ethnic background
    - Black
    - White
- Party
    - Republican
    - Democrat
    - Independent

The key quantity of interest in the analysis of the experiment is the Average Marginal Component Effect (AMCE), which Hainmueller, Hopkins, and Yamamoto (2014) define as the marginal effect of a changing a particular attribute (e.g., male to female) on the choice respondents make, averaged over the joint distribution of the other attributes in the experiment (10). We are particularly interested in *conditional* AMCEs, which represent how the AMCE changes according to respondent characteristics (Hainmueller, Hopkins, and Yamamoto 2014, 13).

3.1.1 Hypotheses

We plan to test two sets of expectations with data from the conjoint experiment. First, we will assess how the AMCEs for each dimension of representation compare to a key benchmark: party affiliation. Political scientists have known for decades that partisanship is a major determinant of vote choice in American politics. We will leverage this finding as a tool to measure the substantive strength of the role of the various dimensions. We will first estimate the conditional AMCEs of switching a hypothetical legislator from an independent to a Republican or Democrat among both Republican and Democratic respondents. We expect that shared partisanship will increase partisan AMCEs; that is, the AMCE for Republican (Democratic) legislators is larger among Republican

(Democratic) respondents compared to Democratic (Republican) respondents. We will generate our shared partisanship "benchmark" by computing the average of these two conditional AMCEs.

Next, we will estimate the unconditional AMCEs for policy, service, and allocation, and two conditional AMCEs for the "role model" trait—its AMCE for a female legislator among female respondents and its AMCE for a black legislator among black respondents. Our objective is to statistically and substantively compare these five quantities to our shared partisanship benchmark. Doing so will provide insight into the importance of the dimensions of representation for citizens evaluating candidates.

Given the dominance of partisanship in American political behavior, we expect these quantities to be smaller than the party effects. However, in light of past research (e.g., Griffin and Flavin 2011; Harden 2016) we also expect the dimensions to have some non-zero influence over vote choice. To balance these competing pressures on our expectations, we will consider 25% of the shared partisanship benchmark as our null hypothesis. This choice is, of course, somewhat arbitrary. However, we can credibly claim that it is not influenced by the data, because the data were not yet available when this preanalysis document was publicly posted (February 12, 2019).[4] Specifically, our research hypothesis is as follows.

H1 The dimensions of representation influence citizens' evaluations of legislators by more than 25% of the effect of shared partisanship.

- (a) The policy AMCE is larger than 25% of the shared partisanship benchmark.
- (b) The service AMCE is larger than 25% of the shared partisanship benchmark.
- (c) The allocation AMCE is larger than 25% of the shared partisanship benchmark.
- (d) The shared gender AMCE is larger than 25% of the shared partisanship benchmark.
- (e) The shared race AMCE is larger than 25% of the shared partisanship benchmark.

We will also examine the role of self-interested reasoning in shaping demand for legislators' representational priorities. Harden (2016) contends that self-interest is a major determinant of

[4] According to correspondence with YouGov, which administered the CCES, the data will be available to research teams in late February 2019. See section 4 for more details on our expectations regarding effect size.

these preferences. His experiments show that economically-disadvantaged constituents tend to prefer the "district-centric" dimensions of service and allocation relative to their preferences for policy and compared to economically-advantaged constituents' preferences for service and allocation. In contrast, the advantaged tend to prefer policy over district-centric representation. However, in a conjoint experiment administered to British citizens, Vivyan and Wagner (2016) find that self-interest does *not* explain preferences for how much members of Parliament should spend on service over national policy concerns. Our own conjoint experiment will yield further insight into this question. More specifically, we will assess how economic status—as measured by respondents' self-reported income[5]—conditions the marginal effects of the policy, service, and allocation dimensions on representative evaluation.

H2 Demand for district-centric representation decreases and demand for policy-based representation increases in economic status.

(a) The policy AMCE increases as respondent income increases.

(b) The service AMCE increases as respondent income decreases.

(c) The allocation AMCE increases as respondent income decreases.

3.2 Direct Questioning

Harden (2016) employs a direct question about preferences for representation as a means of balancing potential external validity concerns inherent in a survey experiment. We follow this same logic with an improved version of his questioning strategy. Our direct question about preferences for representation included the following initial text.

> Members of Congress take on many different roles in their jobs. Consider only the tasks listed below. How much of a Congressperson's time should be spent on each of these tasks? Record your answer on the rulers below by selecting a percentage for each task. Make sure that the percentages you choose add up to a total of 100%.

[5]In addition to income, we will check the robustness of our results with education and employment status (see Harden 2016). Vivyan and Wagner (2016) employ social grade—which is unique to British citizens—as well as income to measure economic status.

The five tasks listed were:

- Learning and advocating for constituents' policy interests.
- Helping constituents who have problems with government agencies.
- Making sure his or her district gets its fair share of government money and projects.
- Preparing for the next election campaign.
- Meeting with interest groups and lobbyists.

Each item was accompanied by a 0–100 slide ruler widget and the survey logic forced respondents to choose entries that summed to 100. This approach emphasized that legislators must make trade-offs when deciding how to distribute their time and energy to the job. We will employ a regression framework to model responses to each of these five items as a function of demographic, political, and economic covariates. We will consider two modeling strategies that allow for correlation between the outcomes: seemingly unrelated regression (SUR, see Zellner 1962) and copulas (Pitt, Chan, and Kohn 2006). The former is similar to estimating a set of standard regression models for each outcome (responses to the five tasks listed above), but allows the error terms to correlate. Copulas also provide a framework for modeling correlated outcomes, but are more flexible in several respects compared to SUR.

3.2.1 Hypotheses

The key variables of interest in these models will be the economic variables mentioned above—primarily income, but also employment status and education. We plan to include these variables along with several other covariates that Harden (2016, 80) uses in modeling of his ranking question: self-reported ideology, partisanship, attention to politics, gender, and race. We will use these models to conduct another test of H2—that demand for policy increases in economic status while demand for service and allocation decreases. This analysis will provide additional evidence—collected outside the context of a survey experiment—to inform the debate in the literature over whether self-interest influences what citizens think their legislators should be doing in office (cf. Harden 2016; Vivyan and Wagner 2016).

4 Substantive Significance

In recent years political scientists have emphasized the importance of discussing the substantive significance of an estimate alongside its statistical significance. This shift in focus includes the advice to provide a definition of a substantive versus a "negligible" (essentially zero) effect (e.g., Rainey 2014; Gross 2015; Hartman and Hidalgo 2018). We do so here following the framework of Rainey (2014). As with our discussion of the correct null hypothesis for H1 (see above), this choice is somewhat arbitrary. However, as we discuss above it is at least chosen without information from the data because we do not yet have access to the data.

Rainey (2014) suggests choosing a value m for a hypothetical quantity of interest to represent the "smallest substantively meaningful effect" (1085). Estimates that fall below m in absolute value are considered as good as zero (i.e., substantively negligible) while estimates greater in absolute value are considered substantively meaningful. For our conjoint experiment, we will again use the effect of shared partisanship computed to test H1 as a benchmark. In this case, we will define m as 10% of the marginal effect of shared partisanship (averaged over the two parties). Similarly, for our models of direct questioning, we will set m to 10% of a standard deviation of the outcome variable. That is, we will consider a coefficient estimate negligible if its absolute value is less than one-tenth of the outcome variable's standard deviation.

5 Updates

The original version of this plan was deposited on February 12, 2019. We plan to update it as needed over the course of the project. If we make any changes to our analysis after depositing this document, we will explain and justify those changes here. If we make any changes to our analysis after the CCES data become available, we will explain and justify those changes in the paper.

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