

**Engendering Support?**  
**The Effects of Gendered Information Cues on**  
**Voters' Policy Preferences**



**DARTMOUTH**

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Dedicated to Senator Elizabeth Warren for inspiring me to dream big, fight hard, and do whatever I can to help others.

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## Abstract

Men and women have had the same political rights in the United States for decades, but there is still gender inequality with respect to representation in government. This pervasive issue raises questions about the extent to which there are perceived differences in men and women's ability to affect political or policy change. There has been abundant research on women's viability as political candidates and how gender can function as an information cue that impacts voters' candidate preferences. But there have been surprisingly limited studies examining the extent to which gendered information cues impact voters' policy preferences. To address this issue, this project uses a pre-registered survey experiment on a national sample of American voters, using hypothetical ballot measures with elite or public cues that encourage study participants support the measures. The results of estimating the impacts of different gendered cues embedded in these ballot measures suggest that the content of the initiative conveying information about policy itself matters more than the cues that aim to impact support. This finding suggests that voters care more about the substance of an issue than additional information provided in its messaging.

# 1 Introduction

Women are more involved in American politics today than at any time in history, but gender inequalities persist. From presidential candidates, to campaign staff, to issue advocates, women make up an increasing proportion of influential political actors in the United States.<sup>1</sup> Nevertheless, even as the number of women in political office and other political positions increases, gender inequality persists in politics.

To address this issue of women’s under-representation in politics, gender and politics research has largely focused on how gender-related factors impact voters’ support for women candidates. From political candidates’ traits to the issues they focus on, these factors have been the subject of much important political science literature. However, support (or lack of) for candidates is not the only way in which gender bias may manifest, and the question of how gender-related factors impact voters’ support for *policy* has been overlooked.

In this thesis, I contribute to this overlooked sector of gender and politics literature, as well as to growing literature on information cues, and pose the following question: how do gendered cues affect voters’ support for policy? To answer this question, I conducted a survey experiment using hypothetical ballot initiatives to estimate the effects of several gendered cues on voters’ support for the initiatives.

This study contributes to existing literature in three ways. First, it contributes to gender and politics literature by analyzing the effects of gendered cues in a novel way, i.e., in terms of the effects of gendered cues on support for policy rather than support for candidates. Much of existing gender and politics literature importantly considers factors that affect women candidates, but gendered judgments and biases may exist in other ways beyond evaluation of candidates. Second, this research contributes to scholarship relating to information cues. This scholarship has seldom included studying the effects of gender isolated from partisan

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<sup>1</sup>The Wall Street Journal, “Women Have Most of Top Roles in Campaigns for Leading 2020 Democrats,” <https://www.wsj.com/articles/women-have-most-of-top-roles-in-campaigns-for-leading-2020-democrats-11558690201> (last accessed on May 20, 2020).

affiliation; this makes it difficult to assess the actual impact of gender because partisanship presents a powerful and often overwhelming information cue. Finally, this study contributes to the growing body of survey experimental research that examines gender-related effects in politics and political behavior. Observational data, e.g., data from past elections, cannot separate gender from other attributes of candidates, such as political party, race, and experience. As such, it is necessary to use a survey experimental design to determine gender-related effects isolated from other possible information cues.

In addition to making contributions to academic literature, this study also enhances our understanding of factors that may influence American voters' support for policies. Politicians invoke gender in different ways to signal their position on various issues and to inspire voters to support them or the policy. Campaigns are becoming increasingly focused on issues rather than on symbolic appeals to groups of voters (Bystrom 2018), and as such, the ways in which politicians and issue advocates cultivate support for policies warrant greater attention and analysis.

In this study, specifically, I estimate the effects of "elite" and "public" gendered information cues on support for two different policies. One policy addresses a "gendered issue" and the other addresses a "non-gendered issue." With a survey sample size of over 3,000, I use a series of ordinary least squares (OLS) models to analyze the effects of gendered information cues on support for these two policies and conclude that the policy being evaluated matters far more than gendered cues in terms of the effects on voters' support. These results suggest that gendered cues may be ineffective to influence voters' support for policies, as the content or nature of the policy seems to matter more in influencing voters' opinions.

This introduction describes the importance and novelty of this research as well as its contribution to existing literature. The rest of this paper is laid out as follows. In Section 2, I provide an overview of the existing literature and describe how this research contributes to it. In Section 3, I outline my theory and hypotheses. In Section 4, I describe my research design, namely my survey experiment and statistical methods. In Section 5, I describe my

results, discuss their implications, and comment on some limitations this study incurred. In Section 6, I summarize the findings and provide recommendations for future research.

## **2 Evaluating Gender as a Cue for Voter Behavior**

There are three bodies of literature that inspire and inform this research, and I discuss each in this section. First, I discuss gender and politics literature with a focus on factors that impact support for women candidates. Second, I consider research relating to information cues and political messaging. Third, I address the increasing body of scholarship that uses survey experiments to test gender-related effects. These three fields provide important context and support for my theory, hypotheses, and results.

### **2.1 Women’s Representation in Politics**

Women have been historically underrepresented in American politics, but women’s increased presence has demonstrably changed the focus and impact of politics and policy. “Whether it is in their pursuit of issues that differentially affect women (abortion, sexual harassment, pregnancy) or policies on which women place greater emphasis than men (education, welfare, health care), women’s presence has been shown to make a difference in the way government works and the outputs government provides” (Dolan 2014*b*). There are two primary gender-related effects from the broad literature on women’s representation in politics that are relevant to this thesis: gender affinity effects and issue ownership effects.

#### **Gender Affinity Effects**

As a result of—or perhaps in search of the effects of—women’s presence, Sanbonmatsu (2003) suggests that women are more likely than men to be predisposed to support women candidates. This predisposition and general desire for greater women’s representation may reflect “gender affinity” effects, whereby “women voter’s political participation is affected by



the presence of women candidates” or elected officials (Sanbonmatsu and Dolan 2012).

Furthermore, as more women run for elected office at various levels, there has been a growing focus on differences between men and women’s political campaigns and differences in efforts made to win over women voters. Bystrom (2018) importantly identifies a shift in campaign strategy among presidential candidates from 2012 to 2016, namely that campaigns increased their focus on issues rather than identity of prospective voters. Carroll and Fox (2018*a*) additionally suggests that the 2016 election showed less reliance on symbolic appeals to women and greater emphasis on issue-based appeals to women voters. Lawless (2004) suggests that when “men’s issues,” such as national security and the economy, dominate the political agenda or campaign cycle, female candidates receive lower levels of support than men. This increased focus on issues raises questions about the impact of gender on how these issues are marketed to voters in terms of their importance as well as in terms of their potential solutions.

### **Issue Ownership Effects**

The presence of women candidates has been demonstrated to inspire greater women voters’ electoral engagement as well as greater emphasis on “women’s issues.” Such issues include health care, education, welfare, and women’s rights (Carroll and Fox 2018*b*). Women candidates may have a strategic advantage when they run “as women” and focus on such issues that voters associate favorably with female candidates (Herrnson, Lay, and Stokes 2003). Issue ownership (or perceived issue ownership) is thus a relevant factor that affects support for women candidates.

Elections outcomes typically depend on which candidate is perceived to be better able to handle voters’ concerns regarding pressing issues (Petrocik 1996). Women are often presumed to have greater interest in and to be better equipped to deal with women’s “issues such as child care, poverty, education, health care, women’s issues, and the environment than are men, while men are thought to be more competent at dealing with economic development,

military, trade, taxes, and agriculture” (Dolan 2010). However, Dolan (2014*b*) suggests that as more women run for office, the unique effects that gender may have on voter preferences wane. Even if these effects do start to wane as more women run for and occupy political office, women candidates are still likely to be more positively associated with these “women’s issues” than men candidates, which suggests that issue ownership effects will continue to merit attention and analysis.

## 2.2 Information Cues

The second important field that informs this research relates to how voters receive and perceive information from policy messages. This work is largely focused on evaluating the strength of different cues in relation to the substantive content in a message. This ongoing debate is centered around the relative importance of the substantive information as compared to information cues (or shortcuts) in explaining voters’ opinions, e.g., on support for candidates, policies, etc.

A cue is “a piece of information that allows individuals to make inferences without drawing on more detailed knowledge” (Druckman et al. 2010). Cues coming from elites, e.g., political leaders or candidates, have been shown to impact voters’ preferences and lead them to adopt the given elite’s position. Broockman and Butler (2017) provide an example of this and suggest that voters often defer to their legislators’ policy-related judgments, even if those judgments are contrary to voters’ original opinions. Some studies have tested the effects of elite cues, such as the president’s position on a particular policy, on voters’ support for that policy (e.g., Mondak et al. 2004).

Candidates, as elites, may provide different cues and impact how voters perceive them and their policies. The cues associated with candidates are predominantly gender or party. With respect to gender, a candidate’s gender may suggest that the candidate is of a particular ideology or partisan affiliation without other information having been provided to voters. McDermott (1997) suggests that women candidates’ gender signals that they are

more liberal than their male counterparts in the same political party. Transgender candidates are also perceived to be more liberal without providing additional information that would confirm their ideology; this suggests that voters infer significant information from a political candidate’s gender (Jones and Brewer 2019). Based on these stereotypes and related cues, “[t]he challenge for researchers is to [...] examine whether and how voters use gender stereotypes when they are evaluating and choosing among women and men candidates in actual elections” (Dolan 2014*a*).

In addition to “elite” cues from political leaders, information cues may come from demographic subgroups, signalling a group’s support or opposition for a particular candidate or policy. For example, Boudreau and MacKenzie (2018) use “members of California’s Democratic Party” and “members of California’s Republican Party” as two groups that support and oppose a tax policy, support for which being their primary outcome variable in their investigation of how voters respond to different information cues. These “public” cues can help analyze the extent to which people are influenced by groups’ support or opposition for something, e.g., for a tax policy. Additionally, as in the case of Boudreau and MacKenzie (2018), these “public” cues can be used to assess whether shared attributes between a respondent and a particular group impacts his or her support for policy.

In terms of impacting voters’ behavior, attribute-related cues may be competing with other cues or with substantive information. For example, cues suggesting partisan affiliation generally overwhelm gender cue (Dolan 2010, 2014*a*; Hayes 2011). Additionally, Bullock (2011) suggests that party cues may not impact voters’ preferences for policy when exposed to substantial information about that policy; “when people [have information about policy] their attitudes seem to be affected as least as much as by that information as by cues from party elites.” Cues may be less effective depending on the salience of the information provided to voters; Ciuk and Yost (2016) suggest that increased issue salience makes people more likely to actively process information rather than rely on cues. Mummolo, Peterson, and Westwood (2018) find similar results and show that party cues are less effective when highly salient or

contentious issues are used to test them. Additionally, Boudreau and MacKenzie (2018) find that voters may even vote in opposition to their party when presented with compelling and non-partisan evidence.

Importantly, no study has examined the extent to which gendered cues, isolated from cues related to partisanship, impact support for policy. To the best of my knowledge, the existing research on gender and politics also do not investigate the effects of “public” cues.

### **2.3 Survey Experiments and Gender**

While gender bias has decreased as more women have run for and entered political office, it has not disappeared entirely, and in many cases, gender biases or related effects are subtle and hard to measure (Carroll 2018). However, survey experiments have been increasingly utilized to test various gender-related effects relating to politics and political behavior. This is largely due to the fact that estimating the effects of gender using observational data (e.g., candidate-level election results) is highly difficult. This difficulty lies in the fact that candidates’ gender is correlated with many other factors, e.g., partisan affiliation, education, occupational backgrounds, and so on. “Existing research using observational data is usually unable to disentangle the attributes of interest from other attributes possessed by a given candidate” (Horiuchi, Smith, and Yamamoto 2018). As such, experimental methods are necessary to test the effects of gender because they allow for the isolation of gender-related effects.

Several very recent studies highlight how survey experiments have been used to measure gender-related effects. Madsen (2019) used a survey experiment to evaluate how persuasive voters perceive candidates to be; his results suggest that women candidates are perceived by men voters as less trustworthy than men candidates. Schwarz and Coppock (2020) conducted a meta-analysis on the growing body of candidate choice survey experiments (e.g., conjoint or vignette experiments) and conclude that the average effect of a candidate being a woman is a gain of 2 percentage points. Their findings suggest that voter preferences for

a particular gender may not be a major factor in explaining why there are still “persistently low rates of women in elected office” in the United States. The pursuit of these types of survey experiments affirm that gender-related effects may be detectable through these various methodologies, which suggests that conducting a survey experiment is appropriate to use in addressing my research question: how do gendered cues impact voters’ support for policy?

### 3 Hypotheses

The existing scholarship detailed above suggests that there are two primary theories regarding whether gendered cues impact voters’ support for policy. One theory—an alternative “null” theory for my research—is that gendered cues do not affect voters’ support for policy. Some empirical evidence suggests that gender cues can be overwhelmed by other information or heuristics, as in the case of political party (Dolan 2014*a*, 2010; Hayes 2011) or highly detailed or contentious information (Bullock 2011; Ciuk and Yost 2016). Additionally, as Schwarz and Coppock (2020) suggest, voter preferences may not be the dominant factor behind unequal gender representation today; if this is true, voters may not be affected by gendered cues in terms of their support for policy.

The second possible theory, which I find more compelling, is that gendered cues *do* affect support for policies. I find this theory more compelling for the following reasons. First, women voters’ political participation is often affected by the presence of women candidates; these “gender affinity” effects are associated with stronger preferences for women’s representation (Sanbonmatsu and Dolan 2012). Although campaigns are increasingly focusing more on issues than on symbolic appeals to women, women candidates’ presence continues to engage women voters in the political process at higher rates than men voters (Sanbonmatsu and Dolan 2012). Furthermore, women candidates have been observed as being successful when they focus on “women’s issues” and display strong issue ownership over such issues (Herrnson, Lay, and Stokes 2003; Schaffner 2005). As such, I contend that emphasizing how

a policy might explicitly affect women highlights the different ways in which men and women could be affected by that policy, thereby incentivizing support from voters who feel “affinity” by that policy or its supporters, i.e., women. Additionally, emphasizing that a policy is a “women’s issue” or “gendered issue” through gendered cues might encourage greater support for the policy than for an issue that women do not “own.” Drawing from the information cue-related literature, I contend that these policies, to inspire the effects I describe above, ought to be relatively low salience and relatively non-partisan.

To test this theory, I use hypothetical ballot initiatives to expose survey respondents to gendered cues and to measure their support for the proposed policy.<sup>2</sup> I operationalize three gendered cues that may influence voters’ support for policy, measured through support for a hypothetical ballot initiative: (1) whether a woman sponsors an initiative; (2) whether the reasoning provided in support of the policy emphasizes how women may be impacted differently than men; and (3) whether the policy is supported by a majority of women. Accordingly, I pose and examine the following hypotheses:

**Hypothesis 1a.** *The gender of a ballot initiative’s sponsor (specifically, a woman as compared to a man) has a positive effect on support for the initiative among women but not among men.*

**Hypothesis 1b.** *The gender of a ballot initiative’s sponsor (specifically, a woman as compared to a man) has a positive effect on support for the initiative for a gendered issue but not for a non-gendered issue.*

**Hypothesis 2a.** *The gendered justification in support of a ballot initiative has a positive effect on support for the initiative among women but not men.*

**Hypothesis 2b.** *The gendered justification in support of a ballot initiative has a positive effect on support for the initiative for a gendered issue but not for a non-gendered issue.*

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<sup>2</sup>I describe my use of hypothetical ballot initiatives in greater detail in Section 4.

**Hypothesis 3a.** *Information that a ballot is supported by a majority of women (as compared to a majority of men) has a positive effect on support for the initiative among women but not men.*

**Hypothesis 3b.** *Information that a ballot initiative is supported by a majority of women (as compared to a majority of men) has a positive effect on support for the initiative for a gendered issue but not for a non-gendered issue.*

Hypothesis 1a and Hypothesis 1b grapple with the first possible source of gendered cues. These hypotheses predict that a woman sponsor for a ballot initiative will positively affect voters' support for the initiative when the voters are women or when the policy is gendered, respectively.

Hypothesis 2a and Hypothesis 2b address the second possible source of gendered cues. These hypotheses predict that invoking a gendered justification to support a ballot initiative will positively impact voters' support for the initiative when the voters are women or when the policy is gendered, respectively.

Hypothesis 3a and Hypothesis 3b are concerned with the third possible source of gendered cues. These hypotheses predict that highlighting that a ballot initiative is supported by a majority of women will positively affect voters' support for the initiative when the voters are women or when the policy is gendered, respectively.

In each pair of these three hypotheses (1, 2, and 3), one hypothesis (labelled with "a") involves gender cues that appeal to women on the basis of gender affinity. Differentiating itself from much existing research, this study focuses on how these effects are predicted to inspire support of policy rather than support for a candidate. The second hypothesis in each pair (labelled with "b") involves gender cues that indicate women's issue ownership over the gendered issue. Respondents are predicted to perceive a woman sponsor, gendered justification, and broad women's support for the ballot initiative as indicators of women's issue ownership in the case of the gendered issue, but not for the non-gendered issue.

## 4 Research Design

In this section, I describe the design for my survey experiment as well as the statistical methods used to analyze my results.

### 4.1 Survey Experiment

To examine the effects of different gendered cues on voters' support for policy, I conducted a survey experiment administered to 3,052 respondents via Lucid Theorem between April 7 to April 10, 2020. Of the 3,052 respondents, 1,487 were men, and 1,565 were women, per their registration on Lucid Theorem.<sup>3</sup> Lucid Theorem uses quota-based sampling which yielded a relatively demographically representative sample of American voters.<sup>4</sup> Recent research suggests that “that demographic and experimental findings on Lucid track well with US national benchmarks” (Coppock and McClellan 2019).

All respondents were asked to participate in two studies (Study 1 and Study 2) in a random order (at the level of respondent). They were exposed to “elite cues” (Study 1) and “public cues” (Study 2) in support of two hypothetical ballot initiatives (one “gendered” issue and one “non-gendered” issue). Elite cues have been used in existing scholarship, often in the context of estimating effects of partisan cues for support for policy (Broockman and Butler 2017; Mondak et al. 2004; Jones and Brewer 2019; McDermott 1997). While public

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<sup>3</sup>In addition to registering their gender on Lucid Theorem, respondents were also asked about their gender identity in the demographic questions section of my survey. This question yielded 1,471 men, 1,574 women, and 7 respondents who identified as “other.” I do not intend to contribute to efforts made to erase non-binary perspectives, but the number of respondents who selected “other” was insufficient to achieve sufficient statistical power to detect the effects of this specific subgroup; consequently, these seven respondents were excluded from analysis.

<sup>4</sup>Lucid Theorem balances participants based on age, race/ethnicity, gender, and region. See <https://lucidtheorem.com/faq> for more information about Lucid Theorem's sampling practices. See Table A.1 in the Supplementary Materials for more on the demographic data from this survey.



cues are less frequently used, they, too, are used in the context of measuring effects of partisan support for a particular issue (Boudreau and MacKenzie 2018). Including both “elite” and “public” cues in this research allows me to consider the relative effectiveness of gendered cues, i.e., whether they are more effective when the cue stems from a perceived elite, such as an issue sponsor, or reflects public opinion. Existing literature does not suggest whether “elite” or “public” gendered cues are more effective, so I developed no hypothesis regarding any differences in effectiveness between the two types of cues. As previously discussed, much of the literature in gender and politics is focused on evaluating support for candidates rather than support for policy; this may be in part attributable to difficulties associated with measuring support for policy while testing gender-related effects. Consequently, to measure support for these policies given particular gendered cues, I use hypothetical ballot initiatives to present respondents with these issues as well as a brief “analysis in support” of the proposed initiatives, as one might see in the case of a real ballot initiative. Ballot initiatives are mechanisms by which voters “can bring about a public vote on a proposed statute or constitutional amendment”.<sup>5</sup> After being petitioned onto the ballot by registered voters, initiatives may be placed on a ballot and voted into law or state constitutional amendment by voters. Several recent survey experiments have effectively used hypothetical ballot initiatives to investigate effects of issue-framing or other advocacy tactics on support for various initiatives (Hastings and Cann 2014; Dyck and Pearson-Merkowitz 2019), though none have used this framework to test information cues on support for policy to date.

While several recent studies have used conjoint experiment methods to evaluate how voters perceive different traits of candidates or political officials, such as gender (Bansak et al. 2019; Horiuchi, Smith, and Yamamoto 2018), a conjoint experiment would not be appropriate here. Using a conjoint experiment would make it difficult if not impossible to measure support for policy rather than support for a person or candidate. This is because it is difficult to combine both gendered cues and policy content with attributes listed in a table

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<sup>5</sup>The source of Ballotpedia is <https://ballotpedia.org> (last accessed on May 19, 2020).

format, as conjoint experiments frequently utilize. More importantly, conjoint experiments are not aimed to measure the support for policies. While a conjoint survey design may be great for evaluating relevant attributes of a candidate, it would not function well here. As such, using a hypothetical ballot initiative allows for measuring support of a policy directly, and it also provides space to include gender (or other information) cues.

After consenting to take the survey, respondents saw the following prompt:

*Ballot initiatives give citizens of a state the opportunity to vote on a proposed statute or state constitutional amendment. Not all states allow ballot initiatives, but many do. Ballot initiatives allow voters to decide whether they want to accept a new policy in their state or locality. On the next screens, you will read several hypothetical state ballot initiatives that have been put on a ballot for voters to consider. Please read the scenarios carefully, and answer the corresponding questions to the best of your ability.*

Following this prompt, respondents were asked to see and respond to two hypothetical ballot initiatives for each study. One initiative highlighted a gendered issue while the other highlighted a non-gendered issue. The order of the two ballot initiatives within each study was also randomized at the level of each respondent. To avoid cognitive burden, the order in which the issues were presented was fixed between the two studies for each respondent.

To determine which issues to use to test my hypotheses, I rely on two criteria. First, the issues needed to have reasonably widespread support. This is in response to existing literature regarding effects of party cues and issue salience. Mummolo, Peterson, and Westwood (2018) find party cues to be most effective when low-salience issues were in play. Second, the issues needed to be relatively bipartisan. These criteria reflect past scholarship on effectiveness of party cues. The second criterion proved more difficult than the first, as many women's issues are traditionally perceived as more liberal issues and as "owned" by the Democratic party (Schaffner 2005). In selecting the issues for this survey experiment, I conducted several

pre-tests to narrow down the possible issues to evaluate how voters' might perceive them in terms of partisan affiliation and importance.

For the gendered policy, I use *increasing public school teachers' salaries* (hereafter, "teachers"). Education-related issues are considered by many as a women's issue (Schwindt-Bayer 2006; Carroll and Fox 2018*b*). Furthermore, public school teachers in the United States are predominantly women. The National Center for Education Statistics reported that as of 2016, 89 percent of elementary public school teachers and 64 percent of secondary public school teachers were women.<sup>6</sup> Increasing public school teachers' salaries additionally has broad public support. Education Next reports that the 72 percent of Americans support increasing teachers' salaries when asked whether they think public school teachers' salaries should increase, decrease, or stay the same.<sup>7</sup> While a slightly higher proportion of Democrats (83 percent) and a slightly lower proportion of Republicans (60 percent) support such an increase in teachers' salaries, prominent members of both parties have recently spoken out in support of increasing teachers' pay. At least nine of the 2020 Democratic Presidential Primary candidates were highly supportive of boosting teachers' salaries,<sup>8</sup> and seven Republican governors included this issue on their initial priorities for 2020.<sup>9</sup>

For the non-gendered policy, I use *establishing an independent commission to draw Congressional district lines* to combat partisan gerrymandering (hereafter, "redistricting"). This policy is non-gendered because the issue that it aims to address does not explicitly affect

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<sup>6</sup>The National Center for Education Statistics, "Characteristics of Public School Teachers," [https://nces.ed.gov/programs/coe/indicator\\_clr.asp](https://nces.ed.gov/programs/coe/indicator_clr.asp), (last accessed on May 19, 2020).

<sup>7</sup>Education Next, "Teacher Pay and Personnel Policies," <https://www.educationnext.org/school-choice-trump-era-results-2019-education-next-poll/#teacherpay>, (last accessed on May 19, 2020).

<sup>8</sup>Politico, "Teacher Pay," <https://www.politico.com/2020-election/candidates-views-on-the-issues/education-reform/teacher-pay/>, (last accessed on May 20, 2020).

<sup>9</sup>NBC News, "How Higher Salaries for Teachers Became a Republican Cause," <https://www.nbcnews.com/news/education/republican-governors-are-giving-teachers-raises-some-teachers-want-more-n1117351>, (last accessed on May 20, 2020).

women. Gerrymandering generally is “describes the intentional manipulation of district boundaries to discriminate against a group of voters on the basis of their political views or race.”<sup>10</sup> The aim of using an impartial, independent commission in drawing district lines is to prevent one group, e.g., of the same political party or race, from drawing district lines to the disadvantage of those not part of that group. As the demographic composition of women and men is approximately evenly split, women, as a non-uniform voting bloc, are not expressly disadvantaged as a group by gerrymandering.

Regarding my selection criteria, preventing partisan gerrymandering is a bipartisan issue, and this has been demonstrated in a few ways. First, analysis from the Brennan Center shows that 65 percent of Democrats and 59 percent of Republicans, respectively, disapprove of partisan gerrymandering.<sup>11</sup> The Supreme Court has seen multiple partisan gerrymandering cases in recent years, with both Democratic- and Republican-drawn maps under scrutiny, and the Court concluded that the federal courts cannot determine whether partisan gerrymandering is permissible.<sup>12</sup> As such, several states have taken matters into their own hands to preclude partisan gerrymandering from altering district lines further. For example, voters in Missouri and Michigan passed ballot initiatives in their respective states to assign redistricting to a nonpartisan entity; however, state legislators are curbing the initiatives from taking effect by bringing a lawsuit in Missouri’s case and regulating the nonpartisan commission’s power in Michigan, thus stymieing efforts made to curb the issue of partisan gerrymandering.<sup>13</sup>

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<sup>10</sup>Brennan Center, “What is Extreme Gerrymandering?”, <https://www.brennancenter.org/our-work/analysis-opinion/what-extreme-gerrymandering>, last accessed on May 20, 2020.

<sup>11</sup>Brennan Center, “Americans Are United Against Partisan Gerrymandering,” <https://www.brennancenter.org/our-work/research-reports/americans-are-united-against-partisan-gerrymandering>, last accessed on May 20, 2020.

<sup>12</sup>New York Times, “What Is Gerrymandering? And Why Did the Supreme Court Rule on It?”, <https://www.nytimes.com/2019/06/27/us/what-is-gerrymandering.html>, last accessed on May 20, 2020.

<sup>13</sup>Washington Post, “Analysis — Here’s how to fix partisan gerrymandering, now that the

While I classify “redistricting” as a non-gendered issue, pursuing such an initiative could be beneficial for women running for office, though these benefits are not frequently discussed. For example, in states in which redistricting lines have been drawn by Republican legislators, Congressional elections may be harder for Democratic candidates to win. From 1990 through 2018, Democratic women have run and occupied Congressional seats at higher rates than Republican women.<sup>14</sup> As such, reducing partisan gerrymandering, at least in states where district lines have been drawn by Republican legislators, could improve, at least potentially, women candidates’ chances at winning Congressional races. I use this information in the gendered justification for redistricting. Because this issue is not overtly gendered, and the benefits that independent and non-partisan redistricting accrue for women are not frequently touted in support of such a policy, I do not anticipate that invoking this gendered benefit would incur any unwanted effects; specifically, effects of priming partisanship.

In Study 1, respondents read the hypothetical ballot initiative for each policy as well as a statement in support of the ballot from a hypothetical sponsor. The gender of the sponsor was randomized (at the level of each ballot initiative for each respondent) and is conveyed by the name listed. The names come from a list compiled by (Butler and Homola 2017) and were randomly generated so that each respondent never sees the same name twice, although the two hypothetical sponsors’ gender could have either been the same or different.<sup>15</sup> The possible names were exclusively the “white-sounding” names from Butler and Homola’s list for two reasons. First, most political officials currently serving in the United States are white. Second, this served to reduce respondents’ potential biases based on names that connote a particular race. For example, respondents may make the assumption that a black

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Supreme Court kicked it back to the states,” <https://www.washingtonpost.com/politics/2019/07/02/heres-how-fix-partisan-gerrymandering-now-that-supreme-court-kicked-it-back-states/>, last accessed on May 20, 2020.

<sup>14</sup>Center for American Women and Politics, “The Current State of Republican Women and What Might Happen in 2020,” <https://cawp.rutgers.edu/Republican-women-in-2020>, last accessed on May 20, 2020.

<sup>15</sup>See Table A.2 in the Supplementary Materials for the list of names.

**Proposition:**

Increases salaries for public school teachers within the state.

**Analysis in support:**

*"Increasing public school teachers' salaries would help reduce the gender pay gap, as public school teachers are disproportionately women."* – Carly Smith, Initiative Sponsor

Figure 1: Example of survey question from Study 1 with gendered issue (“teacher”), a woman sponsor, and a gendered justification

spokesperson is more liberal than a white spokesperson, depending on the respondents’ demographics (Ahler and Sood 2018; Valentino and Zhirkov 2018). As such, I used the white names from Butler and Homola in an effort to preclude respondents from making additional judgments about the hypothetical initiative sponsor based on solely knowing his or her name. See Figure 1 for an example of what the hypothetical ballot initiative looked like for respondents answering Study 1 questions. Another example of a ballot initiative used in Study 1 can be found in Figure A.1 in the Supplementary Materials.

The statement in support of the ballot initiative either contained gendered or non-gendered reasoning. For “teachers,” respondents would see one of the following:

- “Increasing public school teachers’ salaries would help reduce the gender pay gap, as public school teachers are disproportionately women.” (*gendered justification*)
- “Increasing public school teachers’ salaries would help reduce turnover and increase teacher retention in public schools.” (*non-gendered justification*)

For “redistricting,” respondents would see one of the following:

- “Having a non-partisan and independent commission draw Congressional district lines

would prevent gerrymandering and give a fairer chance to political candidates who have been historically excluded from political offices, such as women candidates.” (*gendered justification*)

- “Having a non-partisan, independent commission draw Congressional district lines would prevent gerrymandering and give a fairer chance to political candidates.” (*non-gendered justification*)

In Study 2, respondents read the hypothetical ballot initiative for each issue as well as a statement indicating that the majority of some population supports the ballot initiative. The populations used were “women” and “men,” one of which was randomly assigned at the level of each ballot initiative for each respondent.<sup>16</sup> The percentage used to convey support was either 71% or 73%, which was randomized between the issues at the level of each respondent. (Each respondent saw either 71% and 73% in a random order.) This randomization was not part of the hypotheses, and the values of the percentages were chosen as being approximately reflective of support of these issues among the general public. See Figure 2 for an example of what the hypothetical ballot initiative looked like for respondents answering Study 2 questions. Another example of a ballot initiative used in Study 2 can be found in Figure A.2 in the Supplementary Materials.

For both Study 1 and Study 2, following the hypothetical ballot initiative for the gendered issue, respondents were asked: *Would you approve a new statute that would increase public school teachers’ salaries?* For the initiative for the non-gendered issue, respondents were

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<sup>16</sup>The first 200 responses collected in this survey served as a soft launch, and the respondents from the soft launch were subject to a slightly different randomization setting in terms of seeing women or men supporters for the analysis in support of the initiative for Study 2. For the first 200 respondents, the possibilities for supporters for the two Study 2 initiatives were {men, women} or {women, men}. After examining the soft launch results, I changed the randomization for the rest of the respondents such that the possible supporters shown for each of the Study 2 initiatives were as follows: {men, women}, {women, men}, {men, men}, or {women, women}. This change was made to better correspond with the sponsor gender randomization from Study 1.

**Proposition:**

Establishes and requires a non-partisan and independent commission to draw Congressional district lines.

**Analysis in support:**

According to recent research from a non-partisan organization, 71% of women support using a non-partisan and independent commission to draw Congressional lines.

Figure 2: Example of survey question from Study 2 with non-gendered issue (“redistricting”) and women supporters

asked: *Would you approve a new statute that would require Congressional district lines to be drawn by a non-partisan and independent commission?* Respondents were asked to respond to this question for each hypothetical initiative by selecting *Yes* or *No*. While these questions appear to be “leading questions” that researchers might ordinarily try to ignore, the wording of these questions reflects how they would appear on an actual ballot asking voters to support an initiative. Furthermore, because I estimate treatment effects by comparing randomly assigned subgroups of respondents, any effects of the “leading questions” would be cancelled out.

In between the two studies, respondents saw the following prompt: *Now, we would like to ask you the same set of questions for the same set of policy issues. But please note that the “Analysis in support” is different.* Subjecting respondents to both studies allowed for the possibility of increasing the number of observations used in my analysis. However, increasing the number of observations would be dependent on not incurring experimenter demand effects, which the prompt between studies might inspire. Experimenter demand effects (“EDEs”) reflect “bias that occurs when participants infer the purpose of an experiment and respond so as to help confirm a researcher’s hypothesis” (Mummolo and Peterson



2019). After asking all respondents to respond to Study 1 and Study 2, with the order of the studies randomized, testing for EDEs would allow me to determine whether or not I could reasonably pool all of my data, thus doubling my sample size and increasing my statistical power. However, because of adding this prompt and having respondents participate in both studies, the main results of my experiment just use the first study that respondents participated in. I discuss the experimenter demand effects and pooled-data results further in Section 5.

## 4.2 Methodology

I run four ordinary least squares (OLS) regression models to estimate the average marginal component effects (AMCEs) and average treatment effects (ATEs). OLS model estimates allow for the direct measure of the quantities of interest, i.e., AMCEs and ATEs, in percentage points. Using OLS models “allows for direct interpretation of the coefficients as probabilities,” making them the most appropriate for this study (Gomila 2020).

To test the hypotheses, I used the first of the two studies each respondent participates in to preclude potential experimenter demand effects. Models A and B are used to evaluate the results from Study 1, and Models C and D are used for the results from Study 2. It is not necessary for these models to include covariates because all treatment variables are assigned randomly.

In Model A, the binary policy support variable is the outcome variable, and the binary sponsor gender variable (woman = 1, man = 0); the binary gender justification variable (gendered = 1, non-gendered = 0); and the binary issue variable (“teachers” = 1, “redistricting” = 0) are treatment variables. To test Hypothesis 1a and Hypothesis 2a, I run Model A for men respondents and women respondents, separately, and use pooled data, in which there are two observations per respondent based on the two issues. The standard errors are clustered by respondents. The quantities of interests are the average marginal component effects (AMCEs; Hainmueller, Hopkins, and Yamamoto 2014), which are the effects averaged

across not only respondents but also all possible combinations of attributes.

In Model B, the binary policy support variable is the outcome variable, and the binary sponsor gender variable (woman = 1, man = 0) are the binary gender justification variable (gendered = 1, non-gendered = 0) are treatment variables. To test Hypothesis 1b and Hypothesis 2b, I run Model B for “teachers” and “redistricting” separately, using all respondents. There is one observation per respondent. Hence, the quantities of interests are the average treatment effects.

In Model C, the binary policy support variable is the outcome variable, and the binary gender support variable (woman = 1, man = 0) and the binary issue variable (“teachers” = 1, “redistricting” = 0) are treatment variables. To test Hypothesis 3a, I run Model C for men respondents and women respondents, separately. I use pooled data, in which there are two observations per respondent. Similar to Model A, the standard errors are clustered by respondents, and I estimate AMCEs.

In Model D, the binary policy support variable is the outcome variable, and the binary gender support variable (woman = 1, man = 0) is the sole treatment variable. To test Hypothesis 3b, I run Model D for “teachers” and “redistricting” separately, using all respondents. Similar to Model B, there is one observation per respondent, and I estimate ATEs.

## 5 Results

In this section, I describe the main results from my survey experiment and find that these results did not support my hypotheses. I also describe additional results regarding experimenter demand effects before discussing the implications of these findings.

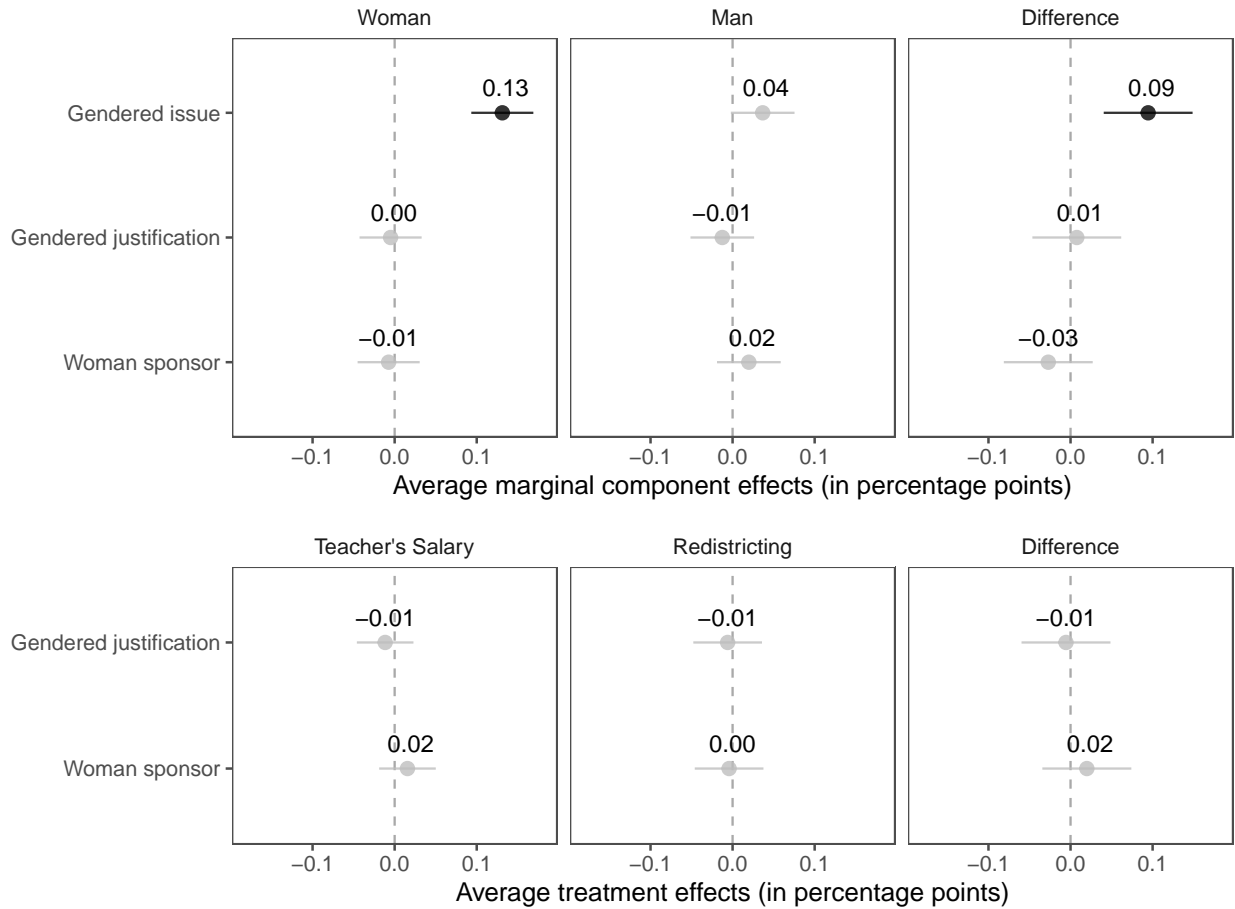


Figure 3: Study 1 Results

## 5.1 Main Results

Figure 3 shows the results for Study 1. The first panel shows the AMCEs for Model A for women and men respondents as well as the difference in the effects between these two groups. The dots represent point estimates, and the horizontal bars show 95% confidence intervals for these estimates. The estimates that are significant at the 0.05 level are highlighted in black. For women, seeing the gendered issue on the hypothetical ballot has a positive and statistically significant effect. Seeing the ballot initiative for the gendered issue increases the likelihood of supporting the policy by 0.13 percentage points. Neither seeing a gendered justification nor a woman sponsor for the ballot initiative has a statistically significant impact on support for the initiative for women respondents. For men respondents, neither seeing a

gendered issue, a gendered justification, nor a woman sponsor has a statistically significant effect on support for the initiative. The difference between women and men in terms of the effect of seeing a gendered issue between women and men respondents is statistically significant and positive, with the difference in AMCEs of 0.09 percentage points. The difference in the other manipulated treatments is not statistically significant.

The second panel of Figure 3 shows the ATEs for Model B, comparing “teachers” and “redistricting.” As in the case of Model A, neither the effect of a woman sponsor nor the effect of using gendered justification are statistically significant; this result is the same for both “teachers” and “redistricting.” As such, the differences in these effects between “teachers” and “redistricting” are not statistically significant.

Consequently, the results from Study 1 suggest that Hypothesis 1a, Hypothesis 1b, Hypothesis 2a, and Hypothesis 2b are not supported, since neither the effect of a woman sponsor nor the effect of using gendered justification were statistically significant, both when isolated by respondents’ gender and when isolated based on the type of issue.

Figure 4 shows the results for Study 2. Again, the dots represent point estimates, and the bars show 95% confidence intervals for these estimates. The first panel of this figures shows the AMCEs for Model C for women and men respondents as well as the difference in effects between these two groups. The effect of seeing the gendered issue, “teachers,” was positive and statistically significant for both women and men respondents, with an AMCEs of 0.15 and 0.04 percentage points, respectively. The difference in this effect between women and men respondents was also positive and statistically significant with the difference in AMCEs of 0.11 percentage points. The effect of using women supporters as analysis in support for the ballot initiative was not statistically significant for women respondents nor men respondents, and the difference between the two was consequently not statistically significant either.

The second panel of the figure shows the ATEs for Model D, again comparing “teachers” and “redistricting.” This model solely looks at the effects of using women supporters in the analysis support for the initiative. For “teachers,” “redistricting,” and the difference

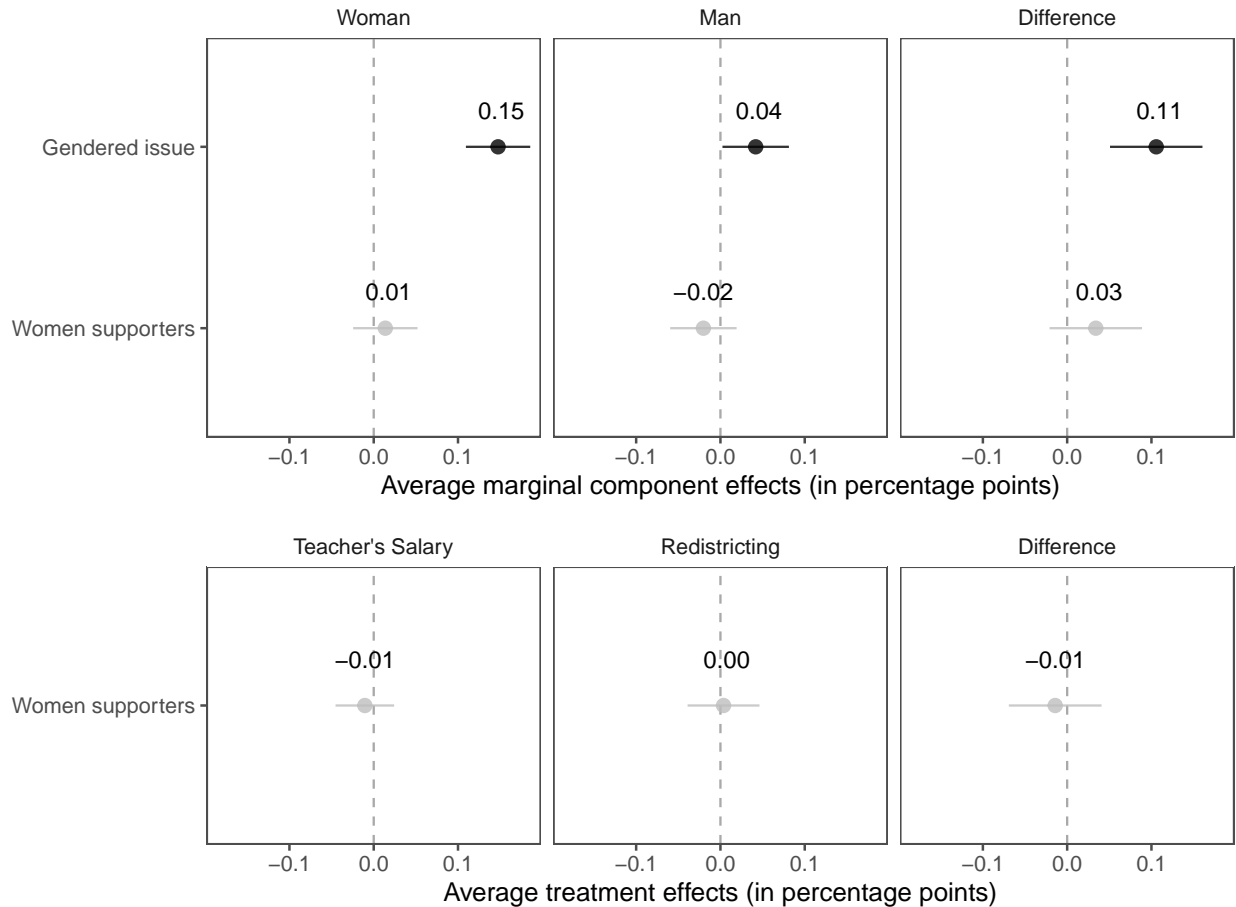


Figure 4: Study 2 Results

between the two, none of the effects for this treatment variable are statistically significant. As such, the results from Study 2 suggest that Hypothesis 3a and Hypothesis 3b are not supported.

## 5.2 Additional Results

In addition to my main hypotheses, my research design allowed me to additionally analyze whether my survey produced any experimenter demand effects. Figure A.3 in the Supplementary Materials shows my survey experiment results using pooled data (i.e., both Study 1 and Study 2 data included for all respondents). The dots again represent average point estimates, and the horizontal bars reflect 95% confidence intervals around these estimates.

In the first panel of the figure, Study 1 results are shown for when Study 1 was shown first, second, as well as the difference between the two orders. When Study 1 was shown first, seeing the gendered issue as opposed to the non-gendered issue yielded a statistically significant and positive AMCE of 0.09 percentage points. When this study was shown second, the gendered issue inspired an AMCE of 0.07 percentage points. The difference between them is small (0.02) and not statistically significant. As such, there were no experimenter demand effects incurred for Study 1.

In the second panel, Study 2 results are shown in the same manner. When Study 2 was shown first, the impact of seeing the gendered issue inspired an AMCE of 0.10 percentage points, which was a statistically significant effect. When Study 2 was shown second, seeing the gendered issue yielded the same statistically significant effect of 0.10 percentage points. Consequently, the difference in effects between the ways in which the studies were ordered is approximately zero for Study 2, making it not statistically significant. Thus, there were no experimenter demand effects incurred for Study 2 either. For both Study 1 and Study 2, the differences between the order of studies did not yield any statistically significant effects. Consequently, I was able to pool my data and test my main hypotheses with twice as many observations.

Figure A.4 and Figure A.5 demonstrate the result of these tests with pooled data, and these pooled data analyses affirm my main results. The only difference between the main results described above and the results using pooled data is in Study 1, in which the effect of seeing the gendered issue was positive and statistically significant for men respondents in addition to women respondents. The difference in these effects when using pooled data was still positive and statistically significant as in the main results.

Furthermore, I use Models A and C to compare respondents based on their partisan identification instead of their gender. In doing this, I reduce the sample size to just include respondents who identified as Democrats or Republicans (thus ignoring Independents or respondents who identified as “Something else”). Included in this analysis, 1,171 respondents

are Democrats, and 1,012 are Republicans, for a total sample size of 2,183. Figure A.6 and Figure A.7 in the Supplementary Materials show the application of these models to the main result data as well as the pooled data. The first panel in Figure A.6 shows that while seeing the gendered issue yielded a positive and statistically significant effect on support for policy for both Democratic and Republican respondents for Study 1, the difference between these point estimates is not statistically significant. Neither the use of a gendered justification nor exposure to a woman sponsor were statistically significant for both Democrat and Republican candidates, and the differences between the two groups for these treatment variables' point estimates were also not statistically significant.

The second panel of Figure A.6 in the Supplementary Materials shows similar effects to the first panel but instead examines Study 2. Again, seeing the gendered issue yields a positive and statistically significant effect on support for policy for both Democratic and Republican respondents for Study 1, but the difference between these point estimates is not statistically significant. The point estimates for the effect of receiving the women supporters treatment are not statistically significant either. In Figure A.7 in the Supplementary Materials, the same analysis done using the pooled data shows the same effects in terms of statistical significance with respect to Study 1 (first panel). With respect to Study 2, the AMCE point estimate for seeing a gendered issue is 0.11 percentage points for Democrats and 0.06 for Republicans; both of these effects are positive and statistically significant. The difference between the two point estimates is 0.05, which is a statistically significant effect. When using pooled data to look at Study 2 comparing Democratic and Republican respondents, the results show that the positive effect of seeing the gendered issue is greater among Democratic respondents than Republican respondents. Given the lack of other statistically significant effects with respect to the use of a woman sponsor, use of a gendered justification, and majority of supporters being women, these results suggest that neither Democrats nor Republicans are more susceptible to the gendered cues I hypothesized about. For members of both parties, the policy being evaluated is more important than the gendered cues pro-

vided. Future research would likely benefit from the pursuit of subgroup analyses based on respondents' gender and partisan identification.

### 5.3 Discussion

While the results of my experiments do not support my hypotheses, my findings are actually consistent with the null theory that gendered cues do not have an effect on support for policy. It is plausible that, much like party cues overwhelm gender cues (Dolan 2010, 2014*a*; Hayes 2011), the issues, too, overwhelm gender cues. The content of the policy being evaluated, in this case the ballot initiative, appears to be more important than the information cue provided. The result is constant for both “elite” and “public” cues, suggesting that the impact of the gendered cue does not depend on who initiated or supported the policy. There has not been much research done on isolating these gendered cues, so the results of my survey experiment, while they do not support my hypotheses, contribute to this literature and support this null theory of gendered information cues not having an effect on support for policy. These results still yield potentially quite important implications regarding using gendered cues in cultivating support for policy.

The results suggest that the issues being evaluated in the ballot initiatives matter far more than gender cues being used to impact support. For Study 1, the effect of the gendered issue appearing on the ballot initiative is positive and statistically significant for women respondents, though it is not statistically significant for men respondents. This might suggest that the gendered issue itself generates an affinity effect, as I hypothesize regarding using cues of a woman sponsor and gendered justification would; however, results from Study 2 suggest that this may not be the case. Study 2 results show that the effect of the gendered issue being shown on the ballot initiative is positive and statistically significant for both men and women. Additionally, because I only test two issues, it is difficult to say with confidence whether the positive effect of the gendered policy was due to the gendered nature of “teachers” or due to something else.



Upon reflection, it is possible that there was something about the ballot initiative for the gendered issue that made it more likely to inspire support from respondents. For example, “teachers” may have been a more understandable issue on a hypothetical ballot initiative than “redistricting.” My criteria for selecting these issues were focused on issue salience and perceived partisanship, but another useful criterion could have been the accessibility of these issues. While public support for both the gendered and non-gendered issue was relatively similar for both Democrats and Republicans, this similar level of support may not have indicated a similar understanding of the two issues. Furthermore, in addition to my outcome variable of support for policy, I asked respondents after each ballot initiative to indicate how important they perceived the given issue to be, from “Not at all important” to “Extremely important” on a five-point scale. The distribution of responses was similar between the two issues, but “teachers” appeared to be considered slightly more important by respondents. See Figure A.8 in Supplementary Materials.

At the outset of this project, I intended to test multiple gendered and non-gendered issues to mitigate this problem. Specifically, I intended to use four issues to have two gendered issues and two non-gendered issues. In addition to “teachers” and “redistricting,” I planned to also include “paid family leave” as the second gendered issue and “automatic voter registration” as the second non-gendered issue. Testing four issues may have ameliorated some additional limitations with the research design. For example, “teachers” may not have been as obvious a gendered issue as may have been necessary to determine potential effects. Testing “paid family leave” may have provided another example of a “gendered issue” that more overtly invoked how women and men would fare differently upon its enactment. However, the ongoing COVID-19 pandemic has made paid family leave and voting-related issues increasingly salient, and the pandemic had progressed sufficiently before I administered my survey to merit dropping family leave and automatic voter registration from my experiment. Thus, I opted to just use “teachers” and “redistricting” to avoid using hyper-salient issues. As a result, it is hard to say that the differences between the effects of the gendered issue

and the non-gendered issue on respondents' support for policy are based on the relevance of gender.

While it is always hard to measure gender-related effects, these results do have implications for issue advocacy and efforts made to cultivate support for policy. It's possible that different issues would yield different results, but these findings suggest that the issue or policy being described matters more than gendered cues, which have been shown elsewhere to be relatively weak compared to others. My results suggest that politicians or issue advocates do not necessarily need to invoke gender to cultivate support for policy, which might be a useful finding for people who work to generate support for policy. Even with these nuances and limitations that arose following the analysis of my results, I conclude that the contents of the hypothetical ballot initiative, i.e., the proposed policy, mattered more than the gender cues to which respondents were exposed.

## **6 Conclusion**

Though my results did not provide support for my hypotheses, they did provide some insight on how politicians or issue advocacy groups could approach voters to garner support for policy. These results suggest that strategies used to cultivate support for policy need not focus on how a policy impacts one gender over another.

Going forward, scholars may want to test whether gendered cues impact voters' support for different policies, both gendered and non-gendered, i.e., whether my results are generalizable across many different policies. If the results from this research are applicable with other policies, this may be, normatively, a positive in the sense that gendered-related cues, such as a particular sponsor, gendered justifications, or groups' support for policy, may not impact support for policy. But more research is necessary to determine what types of policies these results apply to. Such research would help to evaluate whether the results generated by this study were specific to the two hypothetical ballot initiatives tested. It might also

prove useful to discern whether voters were more susceptible to gendered cues when exposed to some policies or issues over others.

Additionally, it may be worth exploring further whether gendered cues need to be more explicit to affect support for policy. For example, in this study, the names I used to signal the gender of the initiative sponsor were made up and did not represent real people. If I had used the names of real issue advocates, candidates, or politicians, perhaps these effects would have been greater. However, using real people's names may have incurred additional information cues, e.g., pertaining to race, political affiliation, or personal traits. "We're comfortable with women leaders in the abstract, but once they actually start winning or getting close to power, that is when all of the sexism and unconscious gender bias kicks in," according to Jennifer Palmieri, former communications director for Hillary Clinton.<sup>17</sup> American voters and their policy opinions may not base opinions on overt gender bias, but such bias may only manifest when there are specific people who voters may evaluate and judge. Yet it is also important to acknowledge that measuring gendered effects is extremely difficult, and it is hard to say whether using real politicians in a similar experiment to indicate gendered cues may be a more effective way of trying to capture these effects. This is an inherent limitation to any research involved in measuring effects related to gender.

Understanding the different ways in which gender can impact voters' support for policy is important for politicians and issue advocates concerned with advancing the policy ideas they believe to be best for the country and the American people. This study hopefully contributes to this understanding in concluding that issues may matter more than gendered information cues in cultivating support for policy. If one is trying to convince others of the validity or merit of a certain policy, one need not invoke gender to be successful in doing so.

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<sup>17</sup>Washington Post, "Elizabeth Warren's exit raises questions about the role of women in U.S. politics," [https://www.washingtonpost.com/politics/sen-elizabeth-warren-ends-presidential-campaign/2020/03/05/98921986-4d33-11ea-9b5c-eac5b16dafaa\\_story.html](https://www.washingtonpost.com/politics/sen-elizabeth-warren-ends-presidential-campaign/2020/03/05/98921986-4d33-11ea-9b5c-eac5b16dafaa_story.html), last accessed on May 20, 2020.

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# Supplementary Materials

## A Additional Figures and Tables

**Table A.1** Demographic data from survey participants

**Table A.2** Name list from Butler and Homola

**Figure A.1** A sample screen shot from Study 1 with “redistricting,” man initiative sponsor, and gendered justification

**Figure A.2** A sample screen shot from Study 2 with “teachers” and men supporters

**Figure A.3** Experimenter demand effects

**Figure A.4** Study 1 main results with pooled data

**Figure A.5** Study 2 main results with pooled data

**Figure A.6** Comparing effects by respondents’ party

**Figure A.7** Comparing effects by respondents’ party using pooled data

**Figure A.8** Respondents’ perceived importance of “teachers” and “redistricting”



Table A.1: Respondent Demographics

Demographic	Proportion of Sample (%)
<b>Gender</b>	
Male	48.2
Female	51.6
Other	0.2
<b>Political Party</b>	
Democrat	38.4
Republican	33.2
Independent	23.5
Something else	4.9
<b>Region</b>	
Northeast	20.5
Midwest	18.5
South	37.0
West	24.0
<b>Age</b>	
18-24	12.5
25-34	19.4
35-44	19.5
45-54	18.0
55-64	15.0
65+	15.6
<b>Education</b>	
College Degree	39.9
No College	60.1
<b>Race</b>	
White	75.0
Black/African American	11.5
Asian	5.9
American Indian/Alaska Native	1.7
Other	5.9
<b>Hispanic</b>	
Non-Hispanic	87.3
Hispanic	12.7

Table A.2: List of White Names from Butler and Homola (2017)

Women's Names	Men's Names
Abigail Smith	Bradley Schwartz
Allison Nelson	Brett Clark
Amy Mueller	Cody Anderson
Anne Evans	Cole Krueger
Caitlin Schneider	Colin Smith
Carly Smith	Connor Schwartz
Carrie King	Dustin Nelson
Claire Schwartz	Dylan Schwartz
Emily Schmidt	Garret Novak
Emma Clark	Geoffrey Martin
Hannah Phillips	Greg Adams
Heather Martin	Hunter Miller
Holly Schroeder	Jack Evans
Jenna Anderson	Jake Clark
Jill Smith	Jay Allen
Katelyn Miller	Logan Allen
Katherine Adams	Luke Phillips
Kathryn Evans	Matthew Anderson
Katie Novak	Maxwell Haas
Kristen Clark	Scott King
Madeline Haas	Tanner Smith
Molly Kruger	Todd Mueller
Sarah Miller	Wyatt Smith

**Proposition:**

Establishes and requires a non-partisan and independent commission to draw Congressional district lines.

**Analysis in support:**

*"Having a non-partisan and independent commission draw Congressional district lines would prevent gerrymandering and give a fairer chance to political candidates who have been historically excluded from political office, such as women candidates."* – Jake Clark, Initiative Sponsor

Figure A.1: Example of survey question from Study 1 with non-gendered issue (“redistricting”), a man sponsor, and a gendered justification

**Proposition:**

Increases salaries for public school teachers within the state.

**Analysis in support:**

According to recent research from a non-partisan organization, 73% of men support increasing public school teachers' salaries.

Figure A.2: Example of survey question from Study 2 with gendered issue (“teacher”) and men supporters

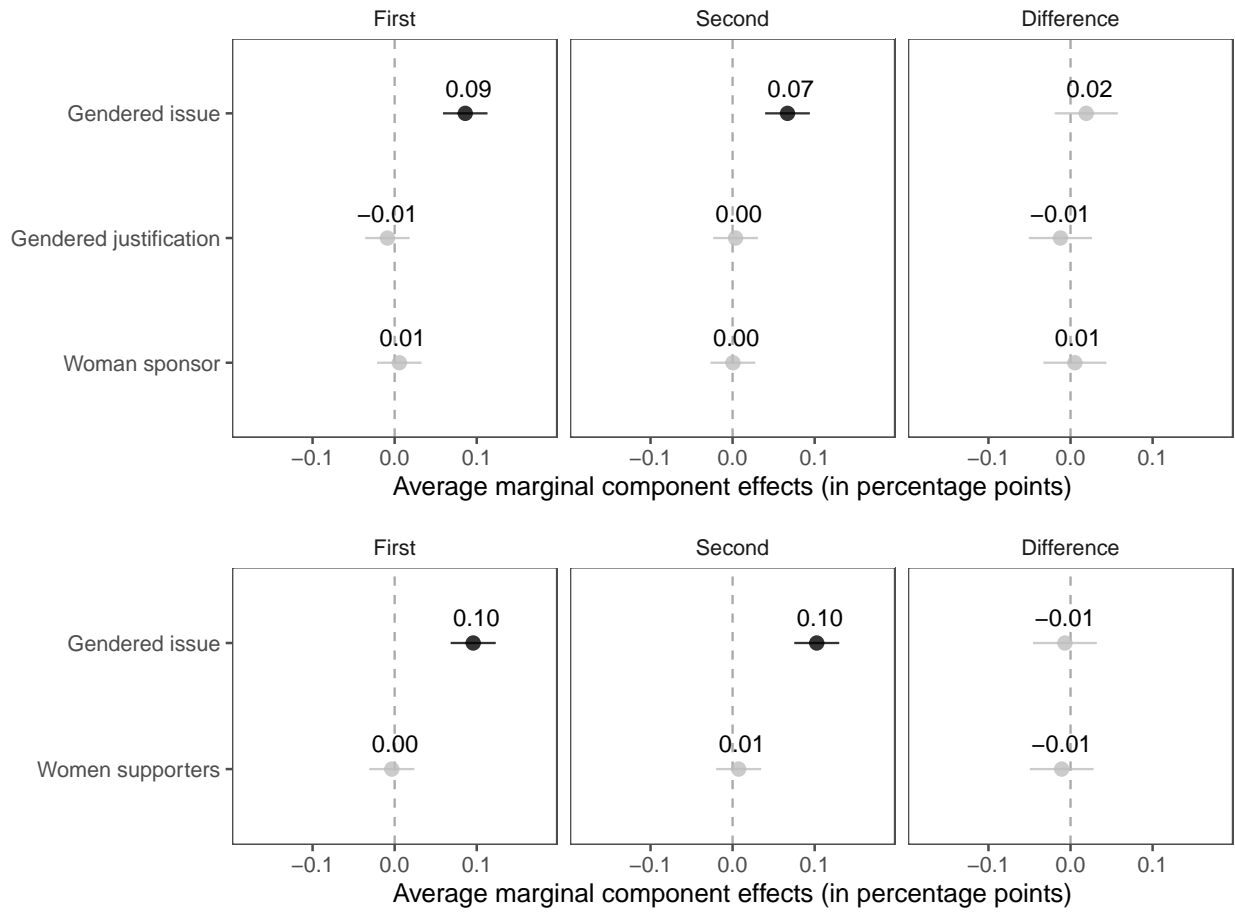


Figure A.3: Experimenter demand effects

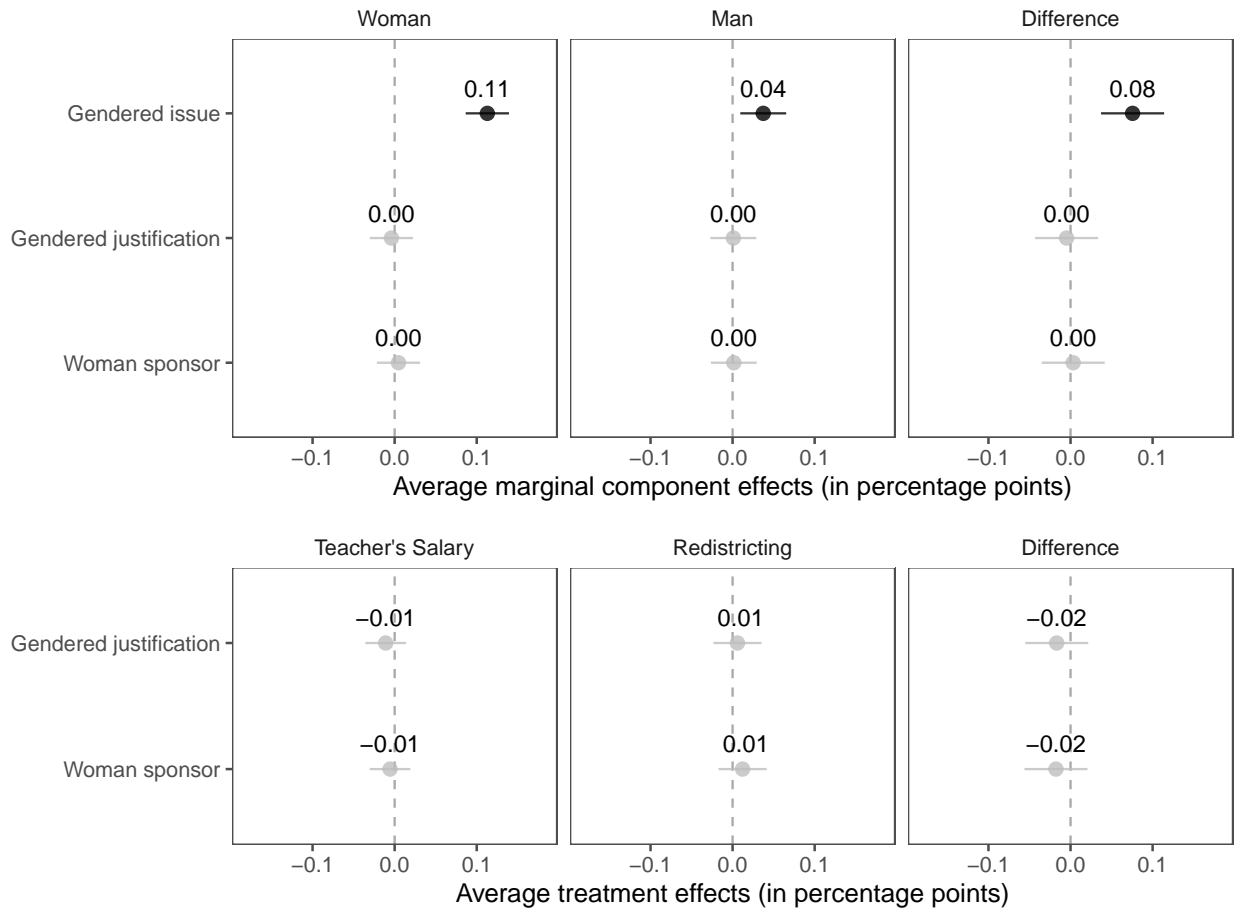


Figure A.4: Study 1 main results with pooled data

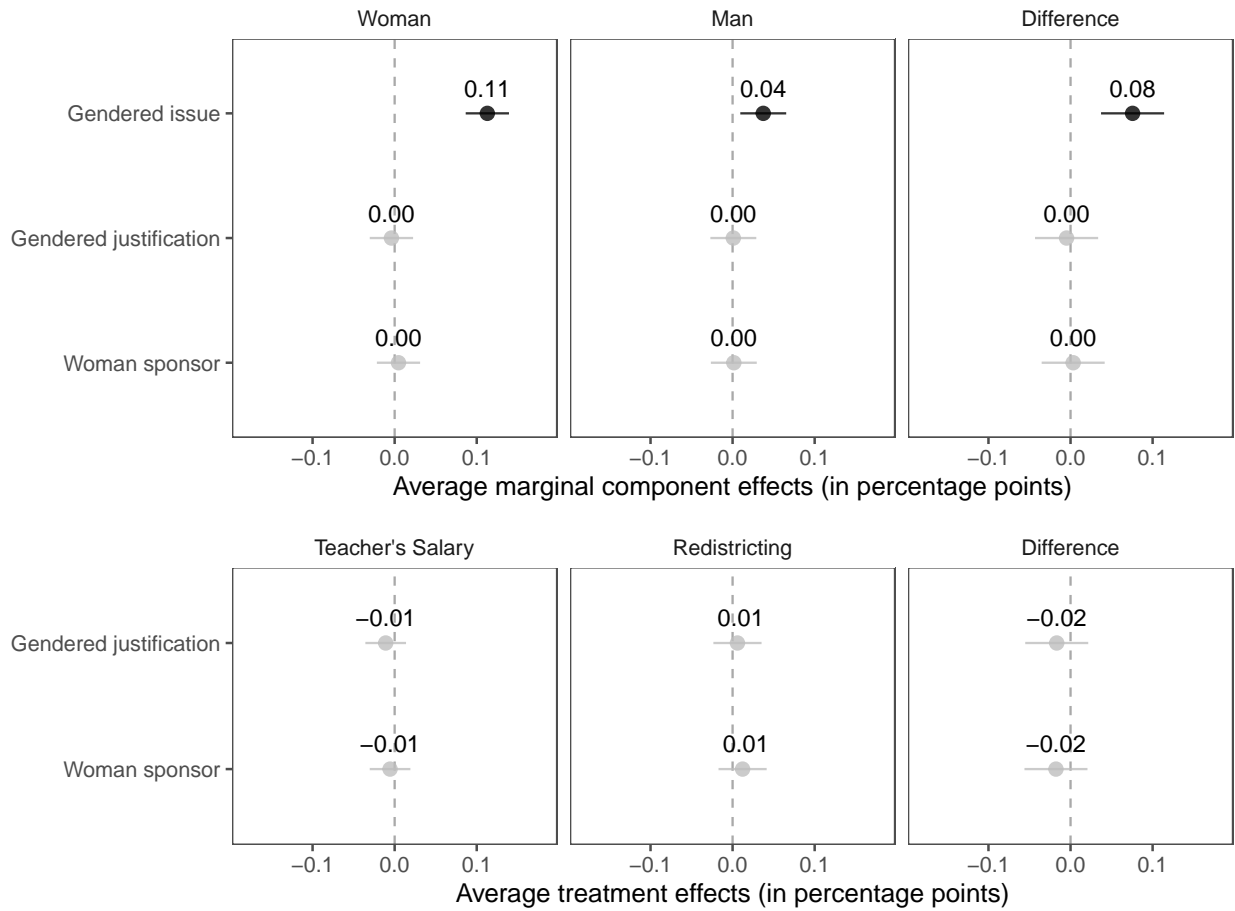


Figure A.5: Study 2 main results with pooled data

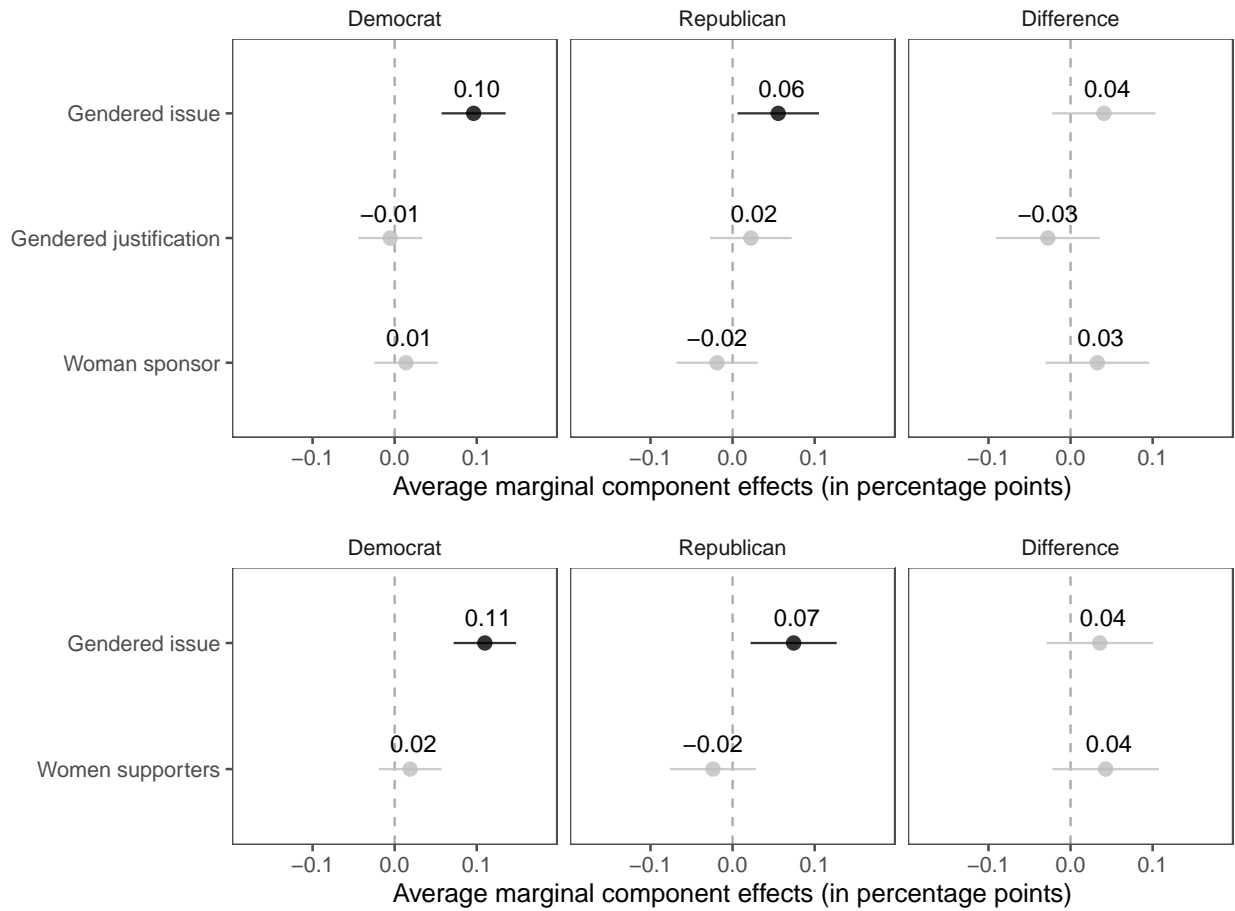


Figure A.6: Comparing effects by respondents' party

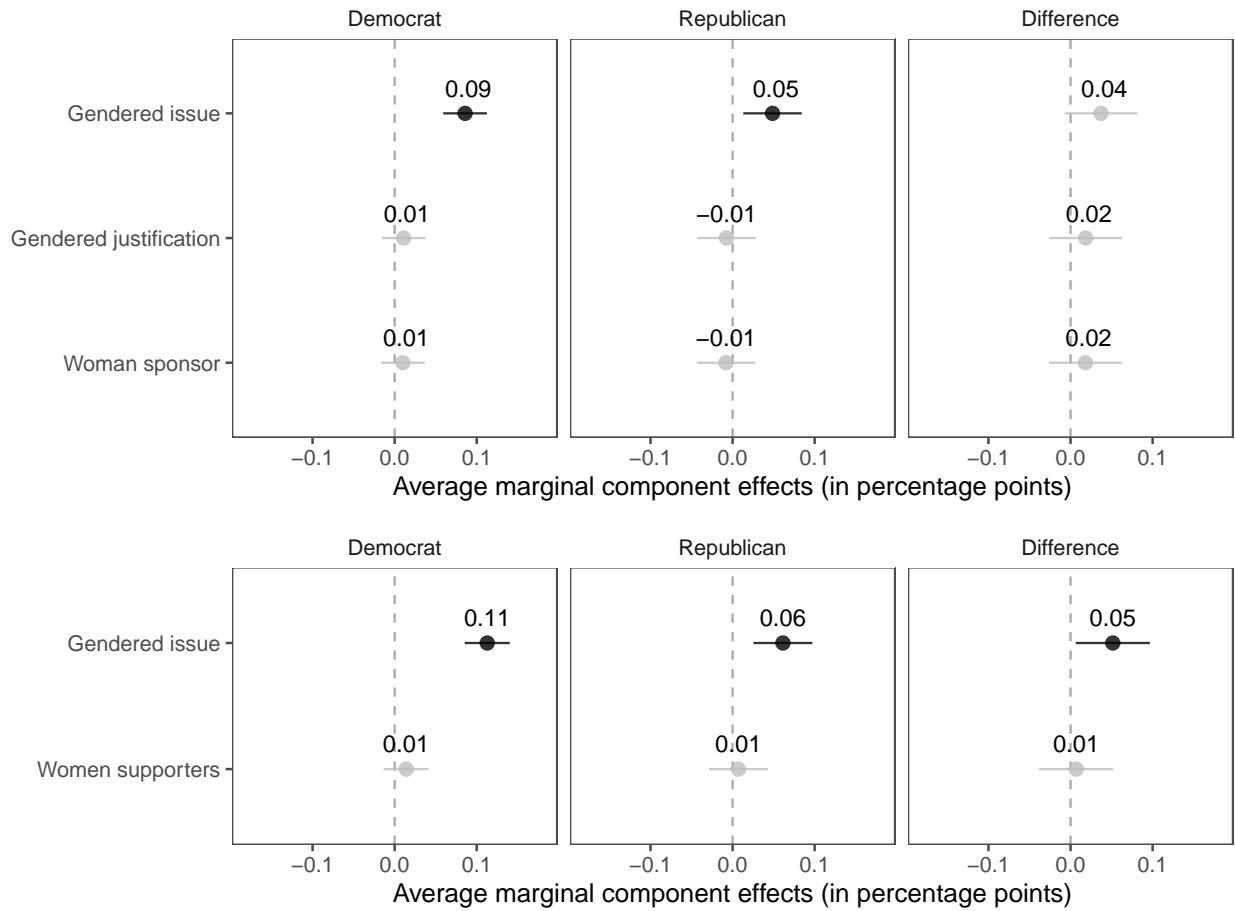


Figure A.7: Comparing effects by respondents' party using pooled data



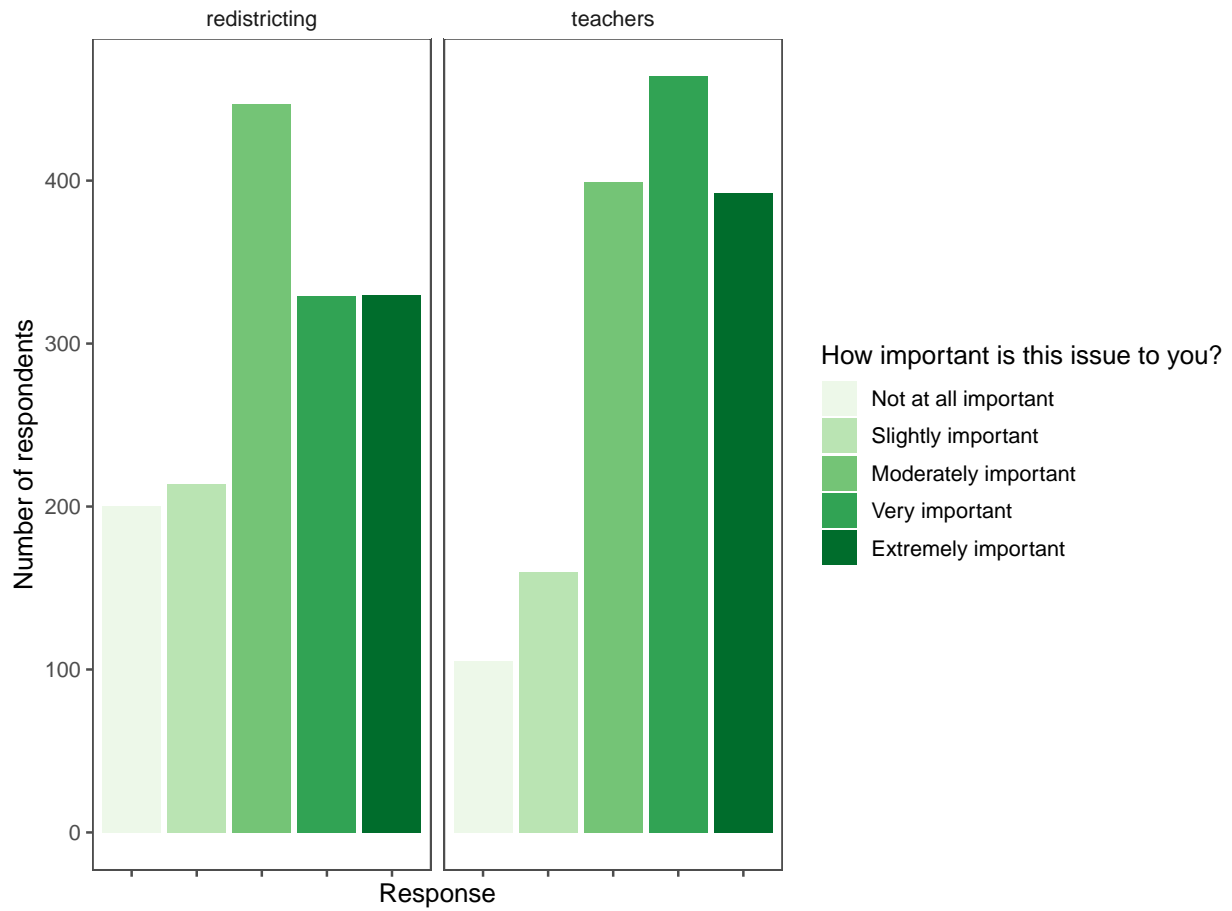


Figure A.8: Respondents' perceived importance of "teachers" and "redistricting"