Changing the Dialogue:

Descriptive Candidacies & Position-Taking in Campaigns for the U.S. House of Representatives

Rachel Porter¹ Maura McDonald Sarah A. Treul

Department of Political Science University of North Carolina at Chapel Hill

August 18, 2020

¹Rachel Porter is the corresponding author, please email her at rachsur@live.unc.edu. Presented at the Annual Meeting of the Society for Political Methodology (PolMeth XXXVII), July 14th, 2020. Do not cite this working paper without expressed permission from the authors.

In 2018, Susan Wild—an attorney and former state solicitor—was elected as the first woman to represent Pennsylvania's 7th congressional district in the U.S. House of Representatives. In her campaign, Wild championed policies related to women's healthcare accessibility and workplace harassment. Once in office, she continued to advocate for such issues, introducing legislation to address sexual violence against girls (H.R. 723) and to provide better legal services for female veterans (H.R. 3189). Representative Susan Wild's commitment to women's issues both during her campaign and in Congress is unsurprising; scholars tend to view descriptive candidates as strong stewards for the interests of constituents with whom they have a shared identity (Burden, 2007a; Bishin, 2009; Lowande et al., 2019). This identity can be rooted in physical characteristics (e.g race or gender) or a shared set of experiences (e.g. military service, small business ownership, or immigrant status) as both generate a sense of group identification (Mansbridge, 1999). In short, female candidates are expected to take up and fight for female-centric issues. What is unexpected, however, is that all five of Wild's male primary election competitors also took up positions related to gender equality in their campaigns.

Although electoral factors such as issue salience and district partisanship could help to explain these candidates' behavior, we contend that Wild's presence in the primary was decisive in motivating her male opponents to discuss women's issues. In our analysis, we assess if and how the presence of descriptively unique candidates (i.e. women, racial minorities, and military veterans) impact the kinds of campaign positions taken up by their primary election competitors. Following literature on descriptive representation, we posit that voters will be particularly drawn to candidates who share their identity because these individuals tend to be strong advocates for their groups' interests. We suspect that candidates who lack this same identity will, in turn, take up issues related to their opponents' diverse qualities in an attempt to neutralize this descriptive-based advantage. In testing our theory, we shed light on the normative impacts descriptive candidacies have on the electoral dialogue in primaries and, further, general elections.

Our analysis centers on primary elections because this is precisely where we expect to see candidates respond to the descriptive identities of their competition. Over the past several decades, both the number of two-party competitive districts (Jacobson and Carson, 2019) and proportion of uncontested primaries (Boatright, 2013) have steadily decreased. This suggests that, in modern congressional elections, candidates should devote attention in their campaign platforms to addressing the positions taken up by their sameparty primary opponents. Furthermore, today's parties have firmly staked out their policy priorities (Lee, 2016) and, responding to these now-clarified party cues, voters have sorted (Levendusky, 2009). As a result, each party's constituent base has grown increasingly distinct along cultural, social, and ethnic lines (Mason, 2018; Hetherington and Weiler, 2018). Aligning with this divide, we expect the qualities and characteristics voters find desirable in candidates to differ by party. Our theory posits that candidates take up issues related to their competitors' descriptive identities in an attempt to cross-pressure voters who might find those identities appealing. Because voter preferences on candidate attributes should be more consistent within party than across party, primary elections provide the ideal vehicle for testing our theory.

To examine the types of issues adopted by primary election candidates in 2018, we compiled, cleaned, and coded an original data set of text from congressional candidate campaign websites. These sites usually include a biography, a list of endorsements, and—in particular—outline a candidate's campaign issue agenda (i.e. their platform). We use this position-taking text from campaign websites to assess if and how non-descriptive candidates respond to the characteristics of their descriptively unique competitors. Campaign websites are a data source well-suited for our purposes because they (1) provide a near complete inventory of the issues important to a candidate's campaign, and (2) are largely representative of the population of campaigns. The text collected from these 1,344 candidates' websites constitutes the first comprehensive data set of campaign issue positions from congressional primary elections.

Employing these new data, we seek to determine if there is a relationship between a descriptive candidate's presence in a primary and their same-party opponents' issue adoption. We find that the candidacies of descriptively unique individuals spark a significant response from "non-descriptive" competitors (i.e. candidates who do not share their opponent's identity); for example, the presence of a Democratic female candidate in a primary is associated with a near thirty percentage-point increase in the probability that a male candidate in that same race takes up women's issue in his own campaign platform. We uncover substantively similar results in our examinations of white Democrats' responsiveness to the presence of a Black candidate and civilian Republicans' responsiveness to the presence of a military veteran. Furthermore, applying a structural topic model to platform text related to descriptive candidate characteristics, we show that descriptive and non-descriptive candidates are remarkably similar in how they discuss these issues. This suggests that, when non-descriptive candidates take up platform points related to the qualities of their competition, this action is more than just a symbolic gesture. Finally, in our comparison of primary and general election platform text, we demonstrate that campaign website content remains largely unchanged over the course of elections. Our findings indicate that a candidate's position-taking in the primary will have long-term consequences on campaign strategy.

This paper advances work on both descriptive representation and the study of campaign position-taking. Our analysis demonstrates that the diversity of a candidate's primary election competition has important implications for the issues she will take up in her own campaign. We show that when non-descriptive candidates adopt platform points related to their competitors' unique qualities, the content of this text mirrors that of descriptive candidates. Finally, candidate advocacy for these groups does not begin and end with the primary. Assessing platform text across the course of an election, we demonstrate that non-descriptive candidates carry forward the policies and positions that they adopted in the primary into the general election. How non-descriptive candidates

campaign is important because the positions they take during the election inform how they govern. Politicians follow through on their campaign platforms after attaining office, making good on the promises they made to voters (Ringquist and Dasse, 2004; Sulkin and Swigger, 2008; Sulkin, 2011). Accordingly, if more candidates cover issues in their campaigns related to groups traditionally underrepresented in lawmaking, there should be a greater probability that these policy priorities will reach the halls of Congress. This suggests that simply the *presence* of descriptive candidates in a race is important to broadening substantive representation in the legislative arena.

Issue Agendas in Congressional Campaigns

When crafting their campaign issue agendas, candidates must make a number of strategic considerations. Previous work highlights a diverse set of factors that may motivate a candidate to take up a given issue in her platform such as issue salience (Canes-Wrone et al., 2011; Bromley-Trujillo and Poe, 2020; Bélanger and Meguid, 2008), district characteristics (Spiliotes and Vavreck, 2002; Hayes et al., 2010; Miler, 2016), and voters' priorities (Miller and Stokes, 1963; Carsey, 2000; Lapinski et al., 2016). Over the past several decades, in tandem with the nationalization of congressional elections, "party-owned" issues have also become an increasingly important component of campaigns. According to Petrocik (1996), party-issue ownership exists when the public trusts a particular party to handle an issue better than the opposition due to the party's "history of attention, initiative and innovation" towards that issue (p.826). Petrocik goes on to demonstrate that voters see Democrats as better at handling social welfare issues, such as improving education and healthcare, and perceive that Republicans excel on defense-related issues, like foreign affairs and national security. Meeks (2016) notably highlights that these party issue reputations have persisted over time and are still held by voters today.

Another important consideration in the formation of campaign issue agendas is a candidate's own descriptive characteristics. Studies demonstrate that female candidates are

especially likely to run on issues associated with their gender (Kahn, 1996; Swers, 2002). Other research shows that Black candidates take up issues that are especially important to Black voters more often than other candidates (Kinder et al., 1996). Descriptively representative candidates may choose to emphasize policies associated with their unique identity because running on these issues can afford them an electoral advantage (Herrnson et al., 2003; Bystrom et al., 2005; Windett, 2014). For instance, Herrnson et al. (2003) find that women who take up female-specific issues have a 11% greater probability of winning the general election than do other candidates.

The implications of electing descriptive candidates to Congress are substantial. Descriptively diverse representatives tend to boost the political participation of Americans traditionally underrepresented in politics, motivating these constituents to vote at a higher rate and to take a greater interest in elections (Griffin and Keane, 2006; Whitby, 2007; Rocha et al., 2010; Reingold and Harrell, 2010). Tate (2001) notably finds that Black constituents express greater satisfaction with representatives who are Black. Further, High-Pippert and Comer (1998) show that female constituents who are represented by women in Congress feel a greater sense of political empowerment. This may be because descriptive representatives tend to be more responsive to and better advocates for constituents with whom they have a shared identity (Broockman, 2013; Lowande et al., 2019). In addition to their unique perspective, descriptive representatives also bring a certain legislative fortitude to Congress. Descriptive politicians are far more likely to legislate on issues related to their group-membership (Wilson, 2010; Swers, 2002; Bowen and Clark, 2014) and are especially effective lawmakers (Volden et al., 2013; Wallace, 2014). For instance, members of Congress who have served in the military tend to have greater success in advancing their defense-related legislation (Swers, 2007), are more likely to intervene with bureaucratic agencies on behalf of their constituents regarding veteran-related issues (Lowande et al., 2019), and may be better equipped to produce legislation addressing veterans' mental health concerns (Purtle, 2016; Best and Vonnahme, 2019).

Although the consequences of electing descriptively diverse candidates to Congress have been well-explored, scant attention has been paid to the impacts that descriptive candidacies have on campaigns and elections. As previously noted, a candidate's descriptive identity informs the issues she will take up in her own campaign issue agenda. We seek to determine if and how this descriptive identity impacts the kinds of issues adopted by a descriptive candidate's *opponents* (i.e. non-descriptive candidates). In other words, does the presence of a female candidate in a race motivate male candidates to discuss women's issues? Can the presence of a Black candidate spur white candidates to cover topics in their campaigns that disproportionately affect people of color?

This idea of elections as a kind of a campaign dialogue, where candidates react to the positions of their opponents, is captured in theories on issue convergence. Banda (2015) describes the concept as a "defensive campaign strategy," where candidates strategically respond to each others' issue platforms as a way "to negate—or at least moderate—the electoral benefits their opponents may receive due to their strategies" (p. 826). Proponents of issue convergence argue that a candidate's choice to respond to her opposition is critical (e.g. Kaplan et al. 2006; Sigelman and Buell Jr 2004; Sides 2006). Scholarship on issue convergence has traditionally employed this theoretical framework to explain *inter*-party position-taking, finding that Democrats and Republicans converge on similar issue-domains in their campaigns. Rather than examining strategic candidate behavior in the general election, this paper adapts theories on issue convergence to explain *intra*-party position-taking. More specifically, we endeavor to understand if and when non-descriptive candidates take up policy priorities and issue positions related to the descriptive qualities and characteristics of their same-party primary competition.

Existing work has established that candidates respond to the issue agendas of their opponents insofar as it provides them an electoral advantage. Extending this premise, we argue that non-descriptive candidates should react to the descriptive qualities of their competitors if doing so will help them win over voters. By converging on issues associated

with their competitors' descriptive characteristics, non-descriptive candidates attempt to mediate the appeal that these qualities have by cross-pressuring voters. Political polarization, however, has precipitated a divide where Democrats and Republicans prefer entirely different kinds of candidates (Hetherington and Weiler, 2018; Mason, 2018). This partisan division on preferred candidate qualities extends over personality traits (Hayes, 2005), ideological purity (Dolan, 2014; Thomsen and Swers, 2017), and demographic characteristics (Sanbonmatsu and Dolan, 2009; Hayes, 2011; McDonald et al., 2020). For this reason, we expect partisanship to condition a candidate's strategic responsiveness to her opponent's characteristics. Primary elections, therefore, provide the most appropriate environment for assessing the dynamics of descriptively motivated issue convergence.

Examining strategic candidate behavior in the context of primaries for the U.S. House of Representatives is also advantageous given that these contests have become increasingly competitive. Since the mid-2000's the proportion of uncontested primaries has steadily decreased (Boatright, 2013) and the average number of primary elections decided by a slim vote margin has steadily increased (Porter and Treul, 2019). Moreover, the vast majority of congressional districts today are safely-partisan; in these kinds of contests, earning the party's nomination may actually be more difficult than winning the general election. This all suggests that paying attention to one's primary competition is crucial to a successful campaign for Congress (Banda and Carsey, 2015). Examining primary elections, therefore, extends the scope of observable campaign behaviors in our analysis to better encompass the factors that motivate modern candidate campaign behavior.

Descriptive Representation & Issue Convergence

In primary elections, setting oneself apart from the competition is vital and, moreover, difficult when the field of candidates is crowded. Descriptively diverse candidates, therefore, have a significant leg up in primaries because they possess a politically salient identity beyond partisanship. Descriptive candidates are also more likely to take up and fight

for issues related to their inherent diversity, which make them appealing to constituents who share their identity. This is especially true of candidates whose descriptive status relates to the needs of traditionally underrepresented groups (Gershon, 2008; Mansbridge, 1999; Phillips, 1995). A descriptive candidate's unique qualities can become particularly valuable in elections when this identity demonstrates a "shared experience" or "common interest" with large swaths of voters (Burden, 2007a).

For the above reasons, we hypothesize that descriptively unique candidates will be the kinds of opponents who can elicit a reaction from copartisans. When a descriptive opponent belongs to a group with broad constituency appeal, this candidate's identity presents an especially salient electoral threat to same-party opponents. We expect that non-descriptive candidates will, therefore, work to dampen their competitors' descriptive-based advantage by building their own reputation on such issues (Banda, 2015). This conception of strategic responsiveness is patterned after traditional models of issue convergence. Moving beyond established theories, we suspect that the presence of a descriptive candidate alone may also be enough to motivate competitors to take up related-issues. This expectation breaks from existing work in that we hypothesize substantive issue coverage is not always necessary to elicit a strategic reaction. To account for this expectation, our analysis explores non-descriptive candidates' responsiveness to same-party opponents who discuss their descriptive status as well as those who do not discuss their inherent diversity in their own campaign platform text.

It is important to note that we do not expect every candidate to respond strategically to their descriptively unique opponents. We anticipate that an individual candidate's inclination to take up such issues will be conditional on whether she is a "strategic" competitor. Strategic campaign behavior may take many forms, such as garnering electoral experience before a run for Congress (Jacobson, 1989; Lawless and Fox, 2010), being judicious in one's emergence decisions (Jacobson and Kernell, 1983; Cox and Katz, 1996), or responding to local district conditions (Fenno, 1978; Mayhew, 1974; Hayes et al., 2010).

Truly "amateur" candidates, on the other hand, are most often agnostic towards their electoral environment because these individuals choose to run for their own purposes—not necessarily to win (Canon, 1993). A candidate's decision to take up those issues her opponent champions is clearly a strategic choice. It involves identifying a competitor's strengths, formulating an approach to counteract that opponent's potential advantage, and presenting oneself as credible and committed to such policies. Accordingly, we only expect those candidates who are mounting a serious campaign for office to be responsive to the presence of a descriptively unique candidate in their primary.

Case Selection: Presence of Descriptive Candidates

Detecting and measuring whether descriptive candidate emergence elicits a strategic reaction from primary election competitors presents some obvious hurdles. Our analysis must focus on those issues that can be linked to observable candidate characteristics or highly visible background experiences. This way, we can easily identify those descriptively unique candidates who should motivate competitor issue convergence. The crux of our theory is that competitors react to candidate descriptive diversity because it poses a salient electoral threat. This implies that a descriptive candidate's group membership is especially appealing to swaths of voters in that candidate's partisan primary constituency. Taking all of these factors into account, we identified three kinds of descriptively unique candidates for our evaluation: Democratic female candidates, Democratic Black candidates, and Republican military veterans.

First and foremost, candidates who self-identify as female are easily identifiable through the linguistic choices in their campaign website text. We distinguish male from female Democrats through their use of gender pronouns.¹ Republican military veterans readily make their history of service known in their website biographical sketches and throughout their campaign platforms.² Classifying the racial identity of Democratic candidates was

¹For our purposes, we consider any candidates who identifies as a woman to be regarded as such.

²We define military veterans as any candidate who served in the Armed Services.

more challenging from website text alone because, in certain electoral contexts, employing minority-group status may be strategically disadvantageous (McDonald et al., 2020). Furthermore, looking at images of candidates and assigning them a race is fraught due to the complexity of racial identity. Therefore, to identify Black candidates, we employed additional resources like newspaper articles, interest group endorsements, and data from social-networking websites.³

As previously discussed, the Democratic Party is considered to have a strong reputation on issues of social welfare and equality (Petrocik, 1996). Grossmann and Hopkins (2015) find evidence that Democratic voters are more likely to consider diversity to be at the core of their party. Furthermore, Dolan (2014) shows that voters who prefer female candidates are more likely to vote for Democratic candidates, all else equal. In short, gender and racial diversity are especially salient issues amongst Democrats. Being a female or Black candidate should therefore afford electoral advantages to individuals running in Democratic Party primaries. In response, Democratic non-descriptive primary competitors should consider their female and Black opponents to be electoral threats.

Turning to veterans, McDermott and Panagopoulos (2015) demonstrate that the ownership of military issues by the Republican Party makes candidates who hold veteranstatus especially attractive to Republican voters, all else equal. Although veteran status is not a demographic characteristic but rather an element of a candidate's background, group membership does not need to be a physical characteristic in order to influence voters' perceptions (e.g. Mansbridge 1999; Rahn 1993; McDermott 2009). Several studies also demonstrate that veterans, similar to women and racial minorities, are especially effective advocates for the interests of their group members (e.g. Lowande et al. 2019). This may be because shared experiences—like military service—operate similarly to other

³We identified fewer than ten candidates as racially ambiguous, in that they did not self-identify as Black and electoral coverage did not identify them as Black but they were more broadly identified as being a person of color (either by themselves or another organization). We did not consider these individuals to be Black candidates in our primary analyses. However, including these individuals in our estimations produces substantively identical results.

kinds of identities, affecting the ways in which people perceive and interact with the world around them (Burden, 2007b). All of this suggests that military veterans are but another ideal group by which to examine descriptively motivated issue convergence.

There are certainly other candidate types we could examine to explore the relationship between descriptive candidacies and competitors' issue coverage (e.g. LGBTQ candidates, Latino/a candidates, candidates who are immigrants, or candidates from working-class backgrounds). We chose our specified groups to highlight the ways in which non-descriptive opponents might respond to candidates who possess underrepresented demographic identities (i.e. women and Black candidates) as well as candidates whose unique identity is rooted in shared experiences (i.e. military veterans). These groups are also ideal for our purposes because a large enough population of each candidate type ran in 2018 to conduct a robust quantitative analysis. We recognize that candidates may possess multiple identities and that our specified cases encapsulate such candidate groups (i.e. Black women). However, because of the nature of minority candidate emergence, we do not possess a large enough sample of such individuals to thoroughly investigate the differential effect of intersectional identity on strategic responsiveness. We hope the subsequent analysis serves as a template for future research on the ways in which a diversity of identities may impact the electoral dialogue of primaries as well as general elections.

Data

In the age of digital campaigning, almost all candidates have an official campaign website. Typically, these websites have a main menu that directs readers to a series of sub-pages with titles like "Meet the Candidate" or "Donate Today." Among these sub-pages there is often an "Issues" tab, which explicitly lays out a candidate's policy priorities and positions. In this paper, we characterize a congressional candidate's campaign platform as the text presented on this "Issues" sub-page. Candidates and their campaign staff spend substantial time crafting their website messaging because this site serves as the informa-

tional "hub" for electoral stakeholders like journalists, potential donors, and would-be constituents. According to Druckman et al. (2009, p. 345), candidate campaign websites are a uniquely ideal form of data for studying campaign communication because they are "unmediated (i.e., directly from the campaign), complete (i.e. covering a full range of rhetorical strategies), and representative of the population of campaigns."

Since candidates are not limited to the same time and space restrictions on websites that they might face in campaign ads, press releases, or social media posts, they can emphasize every issue that they think might be important to potential supporters (Schneider, 2014). This view of the website as a campaign "snapshot" is echoed by Sulkin et al. (2007) who find that candidates typically present nearly twice as many issues on their campaign websites than they do in their advertisements. Fowler et al. (2019) further show that a candidate's online messaging is just as likely to include position issues (i.e. non-consensual issues) as are their campaign commercials. This, once again, suggests that websites contain the most comprehensive view of a candidate's campaign positions.

It is not as though this research is the first to use campaign websites as its chief source of data. However, because of the sheer amount of time involved in compiling and cataloging campaign websites, previous analyses have examined only a sample of campaign sites or restricted their scope to the general election. In order to capture a near complete picture of the types of issues candidates took up in their campaigns, we extracted, cleaned, and parsed the text from campaign platforms for *all* candidates who had an official campaign website and ran in a 2018 congressional primary election. This collection is the first comprehensive data set of congressional campaign platform text and provides numerous opportunities for future research.

Campaign Websites Text Collection

In our data collection, we successfully found an official campaign website for 83% of the 1,938 candidates who appeared on a primary ballot in 2018.⁴ To conduct our analysis, we next identified which of these candidates dedicated space on their website to discussing campaign issue priorities and policy positions. For many candidates, this was a simple process; platform pages on a candidate's site often had straightforward titles like "Where I Stand" or "My Positions." Using a mixture of web scraping and manual downloading, we extracted the text on issue positions from identified campaign websites. Of those 1,609 candidates who had a dedicated campaign website, 1,334 individuals included text that discussed issues and policies important to their campaigns. We collected the website text for 135 Republican veterans, 242 female Democrats, and 88 Black Democrats.

Identifying Candidate Issue-Positions

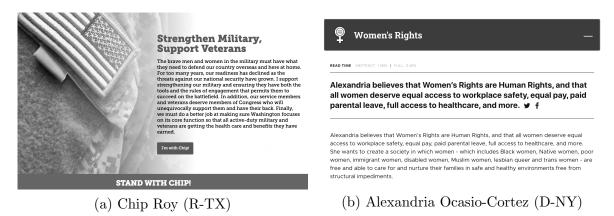
The issue-related text on a candidate's website—what we refer to as the campaign platform—was typically organized as a collection of paragraphs, each with a topical subheading that describes the overarching message for that snippet of text. Figure 1 depicts two examples of platform pages on candidate campaign websites. In Figure 1 (a), Chip Roy (R-TX) lists Strengthen Military, Support Veterans as a component of his platform and, in the subsequent text, goes on to discuss the importance of quality healthcare for those who have served their country. Similarly, in Figure 1 (b), Alexandria Ocasio-Cortez (D-NY) talks about workplace safety under the subheading Women's Rights. Subheadings like these make individual platform policies easily distinguishable within a platform docu-

⁴This number excludes individuals who ran in the state of Louisiana, which does not hold a dedicated primary election. A small number of candidates had no official campaign website. We identify four distinct reasons candidates lacked websites: 1) the candidate was an incumbent without any electoral competition; 2) the candidate used Facebook or Twitter as her primary campaign site; 3) the candidate was unsophisticated with little to no campaign presence; or 4) we somehow missed the site.

⁵Platform pages without clear issue positions were not collected and, therefore, are excluded from our analysis. Examples of these kinds of pages include blog posts or lists of past roll call votes.

⁶About 30% of candidates whose websites lacked a platform also performed poorly in the primary, garnering less than 10% of the vote. The vast majority of primary candidates without website text on issue position were political amateurs.

Figure 1: Examples of Campaign Issue Pages from the 2018 Midtern Election



ment. For our analysis, we extracted all text regarding descriptive-related issues from candidate campaign platforms.⁷ To identify those issues that should be most associated with the unique characteristics of Republican military veterans, female Democrats, and Black Democrats, we turned to the mission statements and policy priorities outlined by organized movements and advocacy groups.⁸

We define "women's issues" as the policy priorities outlined by The Women's March Network—the group responsible for coordinating the 2017 Women's March on Washington. These policies include ending violence against women, reproductive rights, and achieving equal pay for equal work. The goals put forward by Black Lives Matter provided a template for those policy priorities that should be most associated with Black Democratic candidates. These include ending police brutality, criminal justice reform, and stopping voter suppression. In addition to explicit policy priorities, broad issue-domains like healthcare or gun-rights can be framed in racial or gendered terms. Therefore, we considered any discussions on a candidate's platform that incorporated race or gender to be pertinent text. For instance, if a candidate covered education reform in her plat-

⁷Although many candidates included discussions of veteran, female, and Black-associated issues under a single subheading (as seen in Figure 1), this was not always the case. Therefore, to ensure that all relevant text was included and no superfluous text was analyzed, we read the platform text under each descriptive subheading and extracted only pertinent language. For a full description of our methodology for identifying text, see Section A of the online appendix.

⁸Extended examples of sub-topics and policies associated with veterans, female, and Black candidates is presented in Table A.1 of the online appendix.

form while also discussing the racial achievement gap, we would consider that candidate to have taken up a Black-associated issue. To exclude these kinds of discussions would be to misrepresent the scope of topics related to race and gender. We define "veterans' issues" as those issue priorities purported by Concerned Veterans for America.⁹ These include veteran's healthcare, mental-health awareness, and disability-access. Additionally, we consider "veterans' issues" to be topics for which veterans should have specialized knowledge or a unique perspective.¹⁰

Empirical Analysis

In the following analysis, we ask whether having a descriptively unique candidate in a race matters in terms of what issues their competitors cover. More specifically, we endeavor to determine if non-descriptive candidates are more likely to discuss women, veteran, or Black-associated issues when a candidate who belongs to that group is running in their same-party primary. Before model estimation, we employ a non-parametric method for data preprocessing. This procedure seeks to make our subsequent estimation for the effect of descriptive candidate presence more accurate and considerably less model-dependent (Ho et al. 2007). Methods such as matching and weighting achieve this aim by accounting for differences in covariates that, in our application, measure (1) a candidate's intrinsic likelihood to take up descriptive-related issues, and (2) indicate in which types of races a descriptive candidate may be more likely to emerge. This adjustment is done through the estimation of observational weights, which seek to achieve "balance" across covariates so candidates who did run against a descriptive competitor and those who did not are sufficiently similar. After the assignment of weights, a candidate's status as having run against a descriptive competitor is closer to being independent from previously specified

⁹This interest group is most closely associated with the priorities of conservative-leaning veterans.

¹⁰This includes discussions of foreign policy, terrorism, or defense spending. We draw this expectation from the careful reading of candidate platform text. We found that vets often employed their military experience to validate their position-taking on military issues or foreign-affairs.

covariates and, thus, model dependence is greatly reduced.¹¹ Although there are a number of methods for inducing balance across covariates, we employ a weighting methodology called entropy balancing (EB) developed by Hainmueller (2012). Entropy balancing purports a key advantage over more traditional matching methods (i.e. propensity score matching) in that it makes balance the primary target of intent.¹² Using the weights derived from entropy balancing, data is employed in a logistic regression model to estimate the effect of a descriptive candidate's presence on competitors' platform content.

Our theory posits that a candidate's inclination to "behave strategically" will condition her responsiveness to the presence of a descriptive opponent in her race. This expectation aligns with literature that finds strategic candidates to be more responsive to electoral conditions than their true amateur counterparts. For this reason, we estimate the balancing weights for strategic—or quality—candidates and amateurs separately. The computation of separate balancing weights allows us to estimate the effect of a descriptive candidate's presence separately for quality candidates and true amateurs. We consider a candidate to be a quality candidate if she has previously held publicly-elected office (Jacobson, 1989). This variable is widely considered to be a strong indicator for strategic candidate behavior (see Jacobson and Kernell 1983; Abramowitz 1991; Grimmer 2013; alternatively, see Roberds and Roberts 2002). Some candidates who lack elected experienced may also be especially strategic (Canon, 1993)—a trait observable in their ability to reach the same fundraising potential as their electorally experienced counterparts (Maestas and Rugeley, 2002). Therefore, we also consider political amateurs to be strategic (i.e. "quality" candidates) if they garnered more logged campaign contributions in the

¹¹We do not claim to have causally identified any effects through this analysis. There are any number of unobserved potential pathways through which our outcome of interest could have been brought into being. Instead, what we present here is a fairly robust investigation of the empirical relationship between the presence of a descriptive candidate and a non-descriptive candidate's platform content.

¹²Entropy balancing also (1) keeps estimates for observational weights as close as possible to their base weights to prevent loss of information and (2) is doubly robust (Zhao and Percival, 2017). This means that if either the true outcome model corresponds to a linear regression on the covariates or the true treatment assignment model corresponds to a logistic regression on the covariates, the effect estimated using EB weights is unbiased. For a more through discussion of the advantages of covariate balancing methods, see Imai et al. (2008).

Table 1: Entropy Balancing Covariates for Civilian Republican, Male Democratic, and White Democratic Candidates

Balancing Covariate	Covariate Values				
Republican Races (Treatment: Military Veteran in Race)					
Republican-Friendly Seat	0 - 100 (2016 Trump presidential vote)				
Primary Election System	0 (open; semi-open); 1 (closed primary)				
Incumbent in Race	0 (incumbent-contested); 1 (open-race)				
Presence of Military Installation	0 (no base); 1 (one or more)				
Presence of VA Hospital	0 (no hospital); 1 (one or more)				
Past Political Experience	0 (no experience)				
(Quality Candidates Only)	1 (previously held public office)				

Democratic Races (Treatment: Female Candidate in Race)

Democrat-Friendly Seat	0 - 100 (2016 Clinton presidential vote)		
Primary Election System	0 (open; semi-open); 1 (closed primary)		
Incumbent in Race	0 (incumbent-contested); 1 (open-race)		
History of Female Representation	0 (no female incumbent 2012-2017)		
(Democrat or Republican)	1 (past or present female incumbent)		
Past Political Experience	0 (no experience)		
(Quality Candidates Only)	1 (previously held public office)		

Democratic Races (Treatment: Black Candidate in Race)

Bemoeratie Races (Freatment, Black Ca	Beingeratic reaction (Treatment) Black Canadate in reace)				
Democrat-Friendly Seat	0 - 100 (2016 Clinton presidential vote)				
Primary Election System	0 (open; semi-open); 1 (closed primary)				
Incumbent in Race	0 (incumbent-contested); 1 (open-race)				
Candidate Gender	0 (male); 1 (female)				
District Black or African American Residents	$0 (\leq 13.04\%); 1 (> 13.04\%)$				
District White, Non-Hispanic Residents	$0 (\leq 64.63\%); 1 (> 64.63\%)$				
District in Southern State	0 (not South); 1 (South)				
Past Political Experience	0 (no experience)				
(Quality Candidates Only)	1 (previously held public office)				

Races with Black Candidates: District % Black residents and District % White residents transformed into dichotomous variables due to collinearity with each other and the covariate Democrat-Friendly Seat. Races with Veterans: Percent Active, Reserve, or Retired military constituents in district excluded because this covariate is highly correlated with military installation/VA hospital. Effects of treatment estimated with alternative covariates are presented in Tables A8 through A13 in Section D of the online appendix.

primary than the average candidate. 13 Because incumbents take into account a different

¹³This average is computed across all primary election candidates, excluding incumbents and candidates who ran in top-two primary states. We consider a politically-inexperienced Democratic candidate to be

set of strategic considerations when crafting their platforms than challengers, we exclude these candidates from our analysis.¹⁴

A full list of balancing covariates is provided above in Table 1; a complete justification for covariate selection and plots presenting covariate distributional balance are included in Section B of the online appendix. We achieve balance on all covariates of interest. We also find our estimates for the effect of descriptive candidate presence to be robust to other covariate balancing strategies. To examine the robustness of our findings to the presence of unobserved confounding factors, we conduct a series of sensitivity analyses that implement the best-practices put forward by Cinelli and Hazlett (2020). We investigate: (1) the overall robustness of the coefficient on descriptive candidate presence to unobserved linear or non-linear confounding, (2) the proportion of variation in candidate platform content that can be uniquely explained by descriptive candidate presence, and (3) the probability that an unobserved confounder could explain all or a substantial amount of variation in a candidate's decision to take up descriptive-related issues. In Section C of the online appendix, we demonstrate that unobserved confounders do not present a sufficient threat to the robustness of our findings.

Findings

Using our weighted data, we fit three sets of partisan models to estimate the likelihood that quality and amateur candidates take up issues related to the descriptive characteristics of their primary election competition. In our Republican-Veteran models, we expect that when a civilian competes against a military vet, she will be more likely to take

strategic if she raised more than \$464 from Political Action Committees (PACs) or \$21,655 from individual contributors during the primary. We consider a politically-inexperienced Republican candidate to be strategic if she raised more than \$165 from PACs or \$3,763 from individual contributors during the primary. In our sample of quality candidates 32% of Democratic men (N=79), 41% of white Democrats (N=133), and 31% of civilian Republicans (N=56) went on to win their primary.

¹⁴Incumbent candidates use a different decision-making schema to choose the issues they run on than the average non-incumbent candidate (i.e. committee membership; legislating history; etc.). For these reasons, they are excluded from our analysis. Re-estimating balancing weights with incumbents and, further, including them in our parametric analysis produces substantively similar results.

Table 2: Predicted Probability of Issue Adoption in Partisan Primary Elections

Type of Descriptive Candidate	No Candidate	Candidate	Difference (95% CI)
Female Candidate in Democratic Race			
Male Democrats, Quality	0.40	0.68	+ 0.28 [0.11, 0.42]
Male Democrats, Amateur	0.62	0.67	+ 0.05 [0.01, 0.09]
Black Candidate in Democratic Race			
White Democrats, Quality	0.16	0.35	+ 0.19 [0.02, 0.39]
White Democrats, Amateur	0.03	0.06	$+\ 0.03\ [-0.01,\ 0.25]$
Military Veteran in Republican Race			
Civilian Republicans, Quality	0.50	0.70	+ 0.20 [0.04, 0.36]
Civilian Republicans, Amateur	0.38	0.27	$-0.11 \left[-0.34, 0.09 \right]$

Coefficients correspond to a logistic regression where the units of analysis in order presented are non-incumbent, male Democratic candidates; white Democratic candidates; and Republican civilian candidates. The DV is whether or not a candidate took up women, Black, or veteran-associated issues in their platform. The coefficient of interest is the presence of a descriptively representative candidate (woman, Black, or veteran). For full models, see Tables A8 through A13 in Section D of the online appendix. Bolding indicates statistical significance at a 95% confidence interval.

up veterans' issues in her platform. In our Democratic-Female models, we expect that when a male candidate competes against a female Democrat in the primary, he will be more likely to take up women's issues in his platform. Finally, in our Democratic-Black models, we expect that when a white candidate competes against a Black Democrat in the primary, she will be more likely to take up Black-associated issues in her platform. We fit separate regressions for quality and amateur candidates because, as previously noted, we expect that strategic behavior will condition a candidate's responsiveness to a descriptively representative opponent in her primary election. We include all balancing covariates discussed in Table 1 as predictors in our logit estimations.

The results for all six models are reported in Table 2. Coefficients of interest are presented as predicted probabilities for interpretability.¹⁵ The column titled "No Candidate" indicates the predicted probability of related-issue uptake for quality and amateur

¹⁵Predicted probabilities are produced from 1,000 simulated coefficients drawn from a multivariate normal distribution with all predictors are held constant at their mean value. All dichotomous variables were held constant at zero. For Democratic and Republican Party primary elections, two-party presidential vote-share is held constant at 60%.

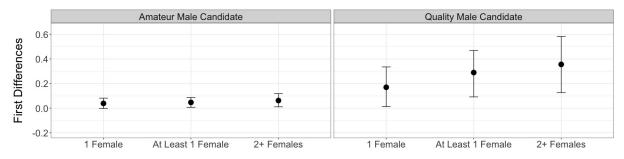
candidates who did not run against the kind of descriptive opponent specified in the left-most column. The column titled "Candidate" indicates the predicted probability of related-issue uptake for quality and amateur candidates who did run against the kind of descriptive opponent specified in the left-most column. First differences in point estimates as well as corresponding 95% confidence intervals are included in the right-most column of Table 2. Across all quality models, the presence of a descriptive candidate is associated with a substantial increase in the probability that non-descriptive quality candidates take up related-issues. For instance, the presence of a female candidate in a Democratic primary election increases the predicted probability that a male Democrat will take up women's issues by nearly thirty percentage points. For all three quality candidate models, presence of a descriptive opponent is the only covariate associated with a substantively notable increase in the likelihood of adopting descriptive-related issue positions. ¹⁶ Per our expectations, the presence of a descriptive candidate in a partisan primary election is not associated with a notable increase in related-issue adoption for true amateur candidates.

Quality versus amateur candidate responsiveness is further explored in Figure 2. Here we investigate if and how the *number* of female candidates in a Democratic Party primary impacts male candidates' adoption of women's issues. This exercise is not replicated for Black candidates or military veterans because there are not a sufficient number of primary races that had two or more of these descriptive candidates. We re-balance our data and employ these new weights to compare male candidate responsiveness to the presence of a *single* female candidate versus *two or more* female candidates.¹⁷ As in Table 2, positive first differences indicate that men who ran against a woman are more likely to

¹⁶Although our Democratic-Black models do not include minority candidates as units of analysis—here the units of analysis are white candidates only—our regression includes primaries that had a Black candidate emerge as well as another candidate who self-identified as a different racial minority. A secondary analysis that excludes such races is presented in the second columns of Table A10 and A11 of the online appendix. After re-balancing our data and constraining our analyses to only include races with Black and white, non-Hispanic candidates, these new models produce substantively identical results.

¹⁷Entropy balancing is conducted over all covariates outlined in Table 1. Balance is achieved across all covariates of interest. In models that assess the effect of a single female, those candidates who ran against two or more women are excluded from the analysis. Likewise, in models that assess the effect of 2+ females, those candidates who ran against a single woman are excluded from the analysis.

Figure 2: First Differences in Predicted Probability of Issue Adoption Conditional on the Number of Female Candidates in a Primary Race



Number of Female Candidates in Primary Election

Dots represent the point estimate for differences in predicted probability of women's issue adoption between male candidates who ran against a woman and those who did not. Predicted probabilities and 95% confidence intervals are produced from 1,000 simulated coefficients drawn from a multivariate normal distribution with all predictors are held constant at their mean value. Full model specifications are provided in Tables A8 and A9 in Section D of the online appendix.

take up women's issues than are men who did not run against a woman. The right panel demonstrates that quality male issue adoption is indeed impacted by the number of women who ran in their same race (i.e. the strength of electoral threat). A single female candidate's presence increases a male Democrat's propensity to cover women's issue by seventeen percentage-points, all else equal. If a male quality candidate runs against two or more women in the primary, however, the effect size increases to thirty-six percentage points. This difference in effect size between quality Democratic men who ran against one versus two or more female candidates is statistically significant. Alternatively, the left panel shows that the number of female candidates in a race has no notable impact on male amateurs' campaign behavior, aligning with our expectations and existing findings.

Descriptive Candidacies and Substantive Coverage

Theories on issue convergence conceptualize elections as a kind of dialogue, where candidates react to the issue positions taken up by their opponents. Our theory on descriptively-motivated issue convergence follows this theoretical framework to the extent that we also expect candidates to react to the campaign strategies of their opponents. However, departing from existing work, we posit that the personal characteristics of descriptively

unique candidates alone can be enough to motivate competitors to take up related-issues. In other words, we suspect that descriptive candidates need not discuss their intrinsic diversity to elicit a strategic response from their non-descriptive opponents.

Leveraging our data on Democratic female and Black candidates, we examine whether descriptive candidates must substantively cover issues related to their inherent diversity in order to generate a strategic response from their opponents. We constrain this analysis to quality candidates because no noteworthy effects of descriptive candidate presence were previously identified among amateurs. We do not assess civilian Republicans' issue adoption because upwards of 80% of veterans talked about veterans' issues in their 2018 platforms. This means that only a small minority of quality candidates ran against a vet who did not discuss veterans' issues (N=11). With these limited data we cannot reliably assess if it is a candidate's discussion of substantive issues or her innate descriptive characteristics that elicits a response from her competition.

Unlike Republican veterans, female and Black Democrats were less consistent in adopting women and Black-associated issues into their platforms. Of those candidates who identified as Black that ran in a contested Democratic primary, ¹⁸ 37% (N=39) covered Black-associated issues in their online platforms. ¹⁹ Of those female candidates who ran in a contested Democratic primary, ²⁰ 60% (N=144) covered women's issues in their online platforms. ²¹ These candidates' decision to judiciously employ their status as descriptively diverse is consistent with literature on strategic campaign behavior. In certain district

 $^{^{18}}$ This does not include incumbents. Many incumbents did not have a dedicated campaign website, choosing instead to rely on their official House.gov online presence as a means for advertising their campaign. Further, if an incumbent did have a campaign website, rarely did she include a dedicate page for platform positions. For this reason, we exclude from this stage of our analysis any non-descriptive candidate who ran against a Black incumbent.

¹⁹Of those candidates who did not discuss Black-associated issues, about half (N=33) had a platform but neglected to discuss Black issues. About 22% (N=15) had a website but did not provide any information regarding issue positions. Finally, 28% (N=19) did not have a campaign website.

²⁰Once again, this does not include incumbents. Male Democrats who ran against a female incumbent are excluded from this stage of our analysis.

 $^{^{21}}$ Of those candidates who did not discuss women's issues, about 62% (N=63) had a platform but neglected to discuss Black issues. About 16% (N=16) had a website but did not provide any information regarding issue positions. Finally, 22% (N=22) did not have a campaign website.

Table 3: First Differences in Predicted Probability of Issue Adoption Conditional on Substantive Issue Coverage

Type of Descriptive Candidate	Difference (95% CI)
Female Candidate in Democratic Primary Race Substantive Coverage (Candidate, N=144; No Candidate, N=79) No Substantive Coverage (Candidate, N=33; No Candidate, N=79)	+ 0.30 [0.02, 0.39] + 0.13 [0.01, 0.33]
Black Candidate in Democratic Primary Race Substantive Coverage (Candidate, N=49; No Candidate, N=244) No Substantive Coverage (Candidate, N=42; No Candidate, N=244)	+ 0.24 [0.04, 0.44] + 0.11 [0.01, 0.31]

Units of analysis in order presented are non-incumbent, quality male Democratic candidates and white Democratic candidates. The DV is whether or not a candidate took up women or Black-associated issues in their platform. The categorization *Substantive Coverage* indicates that the female or Black candidates covered issues in her platform related to her own descriptive diversity. The categorization *No Substantive Coverage* indicates that the female or Black candidates *did not* cover issues in her platform related to her own descriptive diversity. Full models are presented in Tables A14 and A15. Bolded coefficients indicate statistical significance at a 95% confidence interval.

contexts (e.g. Republican-controlled districts), touting one's status as descriptively diverse can put candidates on less than desirable electoral footing (McDonald et al. 2020).

To investigate male and white Democrats' responsiveness to purely descriptive versus descriptive and substantive candidate cues, we subset our data into the following groups: (1) quality Democrats who faced a female or Black candidate that substantively covered related-issues in her platform, and (2) quality Democrats who faced a female or Black candidate that *did not* substantively cover related-issues in her platform. We compare these observations to non-descriptive quality Democratic candidates who did not run against a descriptive candidate in the primary. Using the same covariates discussed above, we estimate new weights using entropy balancing. All covariates outlined in Table 1, except *History of Female Incumbent*, ²² are included in our models.

We present the first differences in predicted probabilities of issue adoption for male and white quality Democratic candidates in Table 3; estimates are drawn from logistic regres-

²²Few male Democrats ran in districts that had a history of female incumbency where the female candidate also did not talk about her descriptive diversity (N=7). Including this variable produces extreme balancing weights, therefore this coefficient is omitted from balancing and the subsequent regression.

sion coefficients modeled using our re-weighted data. The left column denotes whether male and white Democrats ran against a female or Black candidate, respectively. The values in parenthesis indicate the number of candidates who did or did not run against a descriptive opponent in each analysis. The categorization Substantive Coverage indicates that the female or Black candidate present adopted platform issues related to her own descriptive diversity. The categorization No Substantive Coverage indicates that the female or Black candidate present did not adopt platform issues related to her own descriptive diversity.²³ The right column presents first differences in the predicted probability of issue adoption with 95% confidence intervals, simulated with the same methodology used to produce those first differences shown in the right-most column of Table 2.

Across both our Democratic-Female and Democratic-Black models, the effect of presence decreases when descriptive candidates do not discuss their own unique qualities and characteristics; however, the effect size is still substantively notable. These findings provide additional evidence for our hypothesis that candidate responsiveness hinges on perceived electoral threat. Although non-descriptive candidates respond to simply the *presence* of a descriptive candidate, their likelihood of issue convergence is elevated when that descriptive candidate touts her own diversity. These results parallel with those presented in Figure 2; when non-descriptive candidates run against a greater number of descriptive challengers (i.e. the electoral threat they face is elevated), their likelihood of relate-issue adoption increases.

Content Analysis: Non-Descriptive Candidate Platform Text

The contents of candidates' campaigns will have important consequences on their legislative behavior should they be elected to Congress. A variety of literature finds that representatives tend to follow-through on their promises, legislating on and voting in ac-

 $^{^{23}}$ In instances where multiple female/Black candidates ran against a male/white candidate, the category No Substantive Coverage was only assigned if none of the descriptive candidates substantively discussed their diversity. In other words, for those districts that had multiple descriptive candidates, either every candidate substantively discussed their diversity or none of the candidates discussed their diversity.

cordance with those positions they touted during their campaigns (Ringquist and Dasse, 2004; Sulkin and Swigger, 2008; Sulkin, 2011). Our findings indicate that a descriptive candidate's presence in the primary motivates non-descriptive candidates to take up policies related to their opponents' unique qualities and characteristics. Accordingly, if more descriptive candidates run, their presence will not only diversify the electoral dialogue but will also increase the probability that related-issues will reach the halls of Congress—even if the descriptive candidates themselves do not win. The normative implications of such a relationship are substantial. However, the prospect that a non-descriptive candidate could serve as a surrogate for descriptive issues is conditional on (1) how they communicate their positions on such topics, and (2) whether they carry these positions forward from the primary to the general election and beyond.

Descriptive-related issues are not monolithic, they are collections of ideas. Just because two candidates talk about the same issue-domain does not mean that their discussions will be the same. For instance, regarding women's issues, one candidate might talk about gendered pay inequality in her platform and another could cover maternal mortality rates. Although both of these candidates would be considered to have discussed women's issues, the *substance* of their platform content is entirely different. It is well-established that descriptive candidates are keenly aware of the policy priorities most important to constituents with whom they share an identity. Therefore, in a perfect world, descriptive candidate emergence would not only spur issue adoption but would also provide a template for the *aspects* of descriptive-related issues (i.e. issue sub-topics) that non-descriptive candidates should take up into their platforms.

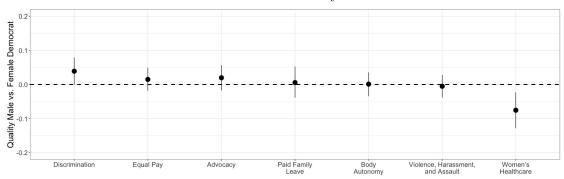
We employ an unsupervised machine learning approach for content analysis developed by Roberts et al. (2014) called structural topic modeling (STM) to assess the substance of each candidate's descriptive-related text. Like other topic models, the STM is a generative model of word counts where a topic is defined as a distribution over words and each word has a certain probability of belonging to a topic. One of the principle innovations of the STM is its use of covariates in the definition of prior distributions for documenttopic proportions and topic-word distributions. For our application, this means that a candidate's status as descriptive or non-descriptive can be used to help inform where we might expect to see variance in sub-topic prevalence.

We produce three topics models for sub-topical platform content. Our texts of interest are the platform points from candidate websites that address descriptive-related issue positions.²⁴ The number of topics chosen for each model is determined using the best practices outlined by Roberts et al. (2014). A full account of text pre-processing, our topic selection strategy, and a summary of words most associated with each sub-topic can be found in Section F of the online appendix. In our Democrat-female model, our units of analysis are female candidates and those male quality candidates who ran against a woman in the primary. Identified women's issue "sub-topics" include wage discrimination, paid family leave, and women's healthcare. In our Democratic-Black model, our units of analysis are Black candidates and those white quality candidates who ran against a Black candidate in the primary. Identified Black issue "sub-topics" include ballot access, policing reform, and private prisons. Finally, in our Republican-veteran model, our units of analysis are military vets and those civilian quality candidates who ran against a veteran in the primary. Identified veterans' issue "sub-topics" include veteran's healthcare, terrorism, and strengthening the military.

To assess variation in sub-topic prevalence across descriptive and non-descriptive candidates, we estimate a series of topic models with a content covariate that identifies each candidate as either descriptive or non-descriptive. In these models, the outcome of interest is the proportion of a candidate's descriptive-related platform text dedicated to a given sub-topic, as determined by each structural topic model. Figures 3, 4, and 5 present the mean differences in sub-topical prevalences for all specified sub-topics. The

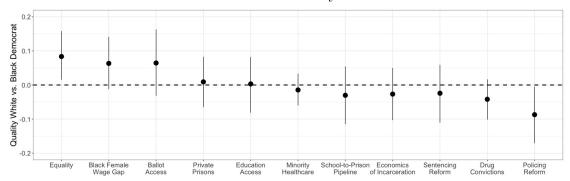
²⁴As previously noted, in identifying whether or not a non-descriptive candidate discussed in her platform issues related to her opponent's descriptive diversity, we also extracted all issue-pertinent text. For a full account of text identification and extraction, see Section A of the online appendix.

Figure 3: Structural Topic Model: Mean Topical Coverage of Quality Male versus Female Democratic Primary Candidates



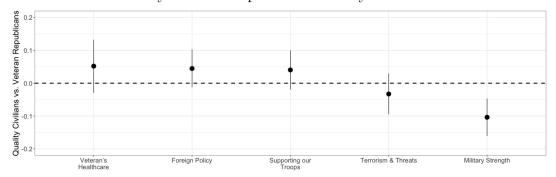
Full topic definitions, their associated word stems, and overall topical frequencies are presented in Tables A16 in Section E of the online appendix. Point estimates for differences in sub-topical prevalence include 90% confidence intervals.

Figure 4: Structural Topic Model: Mean Topical Coverage of Quality White versus Black Democratic Primary Candidates



Full topic definitions, their associated word stems, and overall topical frequencies are presented in Tables A18 in Section E of the online appendix. Point estimates for differences in sub-topical prevalence include 90% confidence intervals.

Figure 5: Structural Topic Model: Mean Topical Coverage of Quality Civilian versus Military Veteran Republican Primary Candidates



Full topic definitions, their associated word stems, and overall topical frequencies are presented in Tables A17 in Section E of the online appendix. Point estimates for differences in sub-topical prevalence include 90% confidence intervals.

dashed line denotes the null hypothesis that topic prevalence does not differ significantly across contrasted groups. Points falling above the dotted reference line indicate that non-descriptive quality candidates talked more about that particular sub-topic than did descriptive candidates; points falling below the dotted reference line indicate that descriptive candidates talked more about that sub-topic than did non-descriptive candidates. In Figure 3, units of analysis are Democratic female candidates (N=153) and male, quality candidates who covered women's issues in their platforms (N=123). In Figure 4, units of analysis are Democratic Black candidates (N=38) and white, quality candidates who covered women's issues in their online campaign platforms (N=70). Finally, in Figure 5, units of analysis are Democratic Black candidates (N=38) and white, quality candidates who covered women's issues in their platforms (N=70).

Across all three models, descriptive and non-descriptive candidates were strikingly similar in the average amount of platform text they dedicated to each sub-topic. These results provide some indication of issue consistency between descriptive and non-descriptive candidates. However, there are some noteworthy points of divergence. Black candidates dedicated 9% more of their descriptive-related platform text to Policing Reform; this subtopic includes references to demilitarizing the police, abolishing "broken window" policing, and the police killings of Black Americans. Female candidates dedicated about 7% more of their descriptive-related platform text to Women's Healthcare; this sub-topic covers policies related to breast-cancer screenings and maternal mortality rates. Finally, military veterans dedicated, on average, 11% more text to the sub-topic Military Strength, which discusses military equipment improvements and budget increases. Furthermore, non-descriptive candidates dedicated a larger proportion of their descriptive-related platform text to broad discussions of diversity, as evident through the Discrimination topic in Figure 3 and Equality topic in Figures 4. These sub-topics are notably more "symbolic" in nature, and may speak to the limitations non-descriptive candidates face as issue surrogates in that they lack the kinds of life experiences that tie them to these issues.

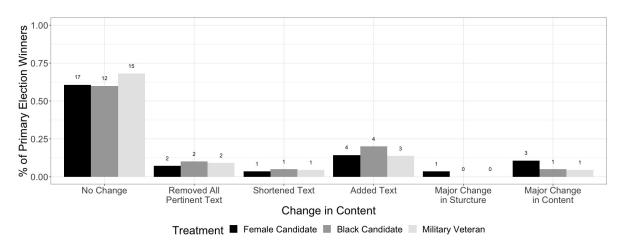
To gain further insight into non-descriptive candidates' aptitude for serving as issue surrogates, we also examine if and how they carry forward their descriptive-related issue positions from the primary to the general election. There is a chance that candidates only take up issues related to their descriptive competitors to win the primary and, after winning, remove these positions from their online platform text. If non-descriptive candidates do not stick by their descriptive-related platform positions through the general, then any confidence that these candidates can serve as issue surrogates is surely misplaced.

In our analysis, we examine the descriptive-related platform text of primary election winners; specifically, those individuals that ran against a descriptive opponent in the primary. We conducted a line-by-line comparison of descriptive-related issue text and—based on this juxtaposition—assigned each primary election winner to one of six categories that indicated if and how they changed their platform text. We chose to conduct comparisons by hand rather than using a text similarity metric (i.e. jaccard similarity) because this process allowed us to make qualitative judgments about how candidates changed their platform text. If a candidate made no changes to her descriptive-related platform text between the primary and general, she received the No Change code. If, between the primary and general, the candidate removed all text related to her descriptively unique primary opponent(s), she was categorized as having Removed all Pertinent Text. For those candidates who did change their text, we noted if they Shortened Text or Added Text across elections. Finally, if a candidate continued to discuss related-issues in her platform but the content of this discussion bore no resemblance to her text from the primary election, she was assigned the code Major Change in Content. If a candidate continued to discuss related-issues in her platform but the organization/structure of this content had changed substantially, she was assigned the code Major Change in Structure.

As evident in Figure 6, non-descriptive quality candidates consistently carried forward their positions on descriptive issues from the primary to the general election.²⁵ After facing

 $^{^{25}}$ No true amateurs who (1) ran against a descriptive candidate, and (2) covered descriptive issues in the primary advanced to the general election.

Figure 6: Changes in Descriptive-Related Platform Text for Non-Descriptive Primary Election Winners



Bars represent the percent of each candidate type (denoted by treatment status) that fall into each coding category. Numbers above each bar indicate the raw number of candidates who fall into each coding category by treatment type. A total 28 male candidates who ran against a female Democrat advanced to the general election; 20 white Democrats who faced a Black candidate advanced to the general election; and 22 Republican civilians who faced a military vet made it to the general election. These numbers exclude incumbents.

a descriptive candidate in the primary, about 75% of Democratic men who advanced to the general election either made no changes to their platform text or added more text about women's issues. Among white Democrats, 70% of candidates made no changes or added text. Finally, over 80% of civilian Republican primary election winners either added or made no changes to their text on veteran's issues.

Discussion

In the preceding analysis, we demonstrate that descriptively unique candidates can affect the campaign behavior of their non-descriptive primary election opponents in important ways. Using new data on candidate policy positions drawn from congressional campaign websites, we show that non-descriptive candidates tend to adopt platform issues that relate to the qualities and characteristics of their diverse competitors. We investigate the effect of a female candidate's presence on male Democrats' platform content, a Black candidate's presence on white Democrats' platform content, and a military veteran's presence on Republican civilian candidates' platform content. We demonstrate that the presence of a descriptive candidate in a partisan primary can boost the probability of non-descriptive candidate issue adoption by up to thirty percentage-points. This relationship, however, is conditional on whether or not a non-descriptive competitors is a "quality candidate" or "true amateur." Departing from existing work, we also show that descriptive candidates need not discuss their own diversity to elicit a reaction from their same-party opponents.

The importance of seeing more descriptive representatives in Congress cannot be understated. However, a dearth of diverse candidates in the political pipelines (Thomsen and King 2020) and the increasing competitiveness of open races (Jacobson and Carson, 2019) means that any changes in the demographic makeup of Congress will be—at best—incremental. Our research, however, suggests that descriptive candidates do not need to win their primary to have an impact on substantive representation. In addition to being more likely to adopt descriptive-related issues, we find that when non-descriptive candidate take up such issues the content of their discussions is strikingly similar to that of their descriptive opponents. Moreover, non-descriptive candidates stick by their stances on issues related to candidate diversity. The vast majority of white Democrats, male Democrats, and Republican civilians carried forward their descriptive-related positions from the primary to the general—in some cases, even substantially adding to their discussion of these issues. These findings suggest that, when prompted by a descriptive opponent, non-descriptive candidates may serve as issue surrogates.

The 2018 election was the most diverse on record with 476 female candidates on the ballot in the primaries—many of them Black women—in addition to the 232 veterans running for office. Although this election was punctuated by a wave of diversity, the average election year sees far too few diverse candidates among its ranks. Candidates from minority populations often feel that, in order to make their bid for Congress count, they must win their election (Lawless and Fox, 2010). Our work should be encouraging to minority candidates who want to run—the mere presence of their candidacy can make

a difference in campaign and legislative dialogue.

References

- Abramowitz, Alan. 1991. "Incumbency, campaign spending, and the decline of competition in U.S. House elections." *Journal of Politics* 53:34–56.
- Banda, Kevin K. 2015. "Competition and the dynamics of issue convergence." *American Politics Research* 43(5):821–845.
- Banda, Kevin K, and Thomas M Carsey. 2015. "Two-stage elections, strategic candidates, and campaign agendas." *Electoral Studies* 40:221–230.
- Bélanger, Éric, and Bonnie M Meguid. 2008. "Issue salience, issue ownership, and issue-based vote choice." *Electoral Studies* 27(3):477–491.
- Best, Rebecca, and Greg Vonnahme. 2019. "Military service and legislative agendas: A study of legislators in four states." $Armed\ Forces\ \mathcal{C}\ Society$.
- Bishin, Benjamin. 2009. Tyranny of the minority: The subconstituency politics theory of representation. Temple University Press.
- Boatright, Robert G. 2013. *Getting primaried: The changing politics of congressional primary challenges*. University of Michigan Press.
- Bowen, Daniel C., and Christopher J. Clark. 2014. "Revisiting Descriptive Representation in Congress: Assessing the Effect of Race on the Constituent–Legislator Relationship." Political Research Quarterly 67(3):695–707.
- Bromley-Trujillo, Rebecca, and John Poe. 2020. "The importance of salience: public opinion and state policy action on climate change." *Journal of Public Policy* 40(2):280–304.
- Broockman, David E. 2013. "Black Politicians Are More Intrinsically Motivated to Advance Blacks' Interests: A Field Experiment Manipulating Political Incentives." American Journal of Political Science 57(3):521–536.

- Burden, Barry C. 2007a. Personal roots of representation. Princeton University Press.
- Burden, Barry C. 2007b. Personal roots of representation. Princeton University Press.
- Bystrom, Dianne G, Terry Robertson, Mary Christine Banwart, and Lynda Lee Kaid. 2005. Gender and candidate communication: Videostyle, webstyle, newstyle. Routledge.
- Canes-Wrone, Brandice, William Minozzi, and Jessica Bonney Reveley. 2011. "Issue accountability and the mass public." *Legislative Studies Quarterly* 36(1):5–35.
- Canon, David T. 1993. "Sacrificial Lambs or Strategic Politicians? Political Amateurs in U.S. House Elections." American Journal of Political Science 37:1119–1141.
- Carsey, Thomas M. 2000. Campaign dynamics: The race for governor. University of Michigan Press.
- Cinelli, Carlos, and Chad Hazlett. 2020. "Making sense of sensitivity: Extending omitted variable bias." *Journal of the Royal Statistical Society: Series B* 82(1):39–67.
- Cox, Gary W., and Jonathan N. Katz. 1996. "Why Did the Incumbency Advantage in U.S. House Elections Grow?" American Journal of Political Science 40(2):478–497.
- Dolan, Kathleen A. 2014. When does gender matter?: Women candidates and gender stereotypes in American elections. Oxford University Press, USA.
- Druckman, James N, Martin J Kifer, and Michael Parkin. 2009. "Campaign communications in US congressional elections." *American Political Science Review* 103(3):343–366.
- Fenno, Richard F. 1978. *Home Style: House Members in Their Districts*. New York: Longman.
- Fowler, Erika Franklin, Michael M. Franz, Gregory J. Martin, Zachary Peskowitz, and Travis N. Ridout. 2019. "Political Advertising Online and Offline." https://web.stanford.edu/~gjmartin/papers/Ads_Online_and_Offline_Working.pdf.

- Gershon, Sarah Allen. 2008. "Communicating Female and Minority Interests Online: A Study of Web Site Issue Discussion among Female, Latino, and African American Members of Congress." Press/Politics 13(2):120–140.
- Griffin, John D., and Michael Keane. 2006. "Descriptive Representation and the Composition of African American Turnout." *American Journal of Political Science* 50(4):998–1012.
- Grimmer, Justin. 2013. "Appropriators Not Position Takers: the distorting effects of electoral incentives on Congressional representation." American Journal of Political Science 57(3):624–642.
- Grimmer, Justin, and Brandom M. Stewart. 2013. "Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts." *Political Analysis* 21:267–297.
- Grossmann, Matt, and David A Hopkins. 2015. "Ideological Republicans and group interest Democrats: The asymmetry of American party politics." *Perspectives on Politics* 13(1):119–139.
- Hainmueller, Jens. 2012. "Entropy balancing for causal effects: A multivariate reweighting method to produce balanced samples in observational studies." *Political Analysis* 20(1):25–46.
- Hayes, Danny. 2005. "Candidate Qualities through a Partisan Lens: A Theory of Trait Ownership." American Journal of Political Science 49(4):908–923.
- Hayes, Danny. 2011. "When gender and party collide: Stereotyping in candidate trait attribution." *Politics & Gender* 7(2):133–165.
- Hayes, Matthew, Matthew V Hibbing, and Tracy Sulkin. 2010. "Redistricting, responsiveness, and issue attention." *Legislative Studies Quarterly* 35(1):91–115.

- Herrnson, Paul S, J Celeste Lay, and Atiya Kai Stokes. 2003. "Women running "as women": Candidate gender, campaign issues, and voter-targeting strategies." *The Journal of Politics* 65(1):244–255.
- Hetherington, Marc, and Jonathan Weiler. 2018. Prius Or Pickup?: How the Answers to Four Simple Questions Explain America's Great Divide. Houghton Mifflin.
- High-Pippert, Angela, and John Comer. 1998. "Female Empowerment: The Influence of Women Representing Women." Women and Politics 19(4):55–66.
- Imai, Kosuke, Gary King, and Elizabeth A. Stuart. 2008. "Misunderstandings between experimentalists and observationalists about causal inference." *Journal of the Royal Statistical Society: Series A* 171(2):2008.
- Jacobson, Gary C. 1989. "Strategic Politicians and the Dynamics of U.S. House Elections, 1946-1986." American Political Science Review 83(3):773–93.
- Jacobson, Gary C, and Jamie L Carson. 2019. The politics of congressional elections. Rowman & Littlefield.
- Jacobson, Gary C., and Samuel Kernell. 1983. Strategy and Choice in Congressional Elections. New Haven: Yale University Press, second edition.
- Kahn, Kim Fridkin. 1996. The Political Consequences of Being a Woman. Columbia University Press.
- Kaplan, Noah, David K Park, and Travis N Ridout. 2006. "Dialogue in American political campaigns? An examination of issue convergence in candidate television advertising."

 American Journal of Political Science 50(3):724–736.
- Kinder, Donald R., Lynn M. Sanders, and Lynn M. Sanders. 1996. Divided by color:

 Racial politics and democratic ideals. University of Chicago Press.

- Lapinski, John, Matt Levendusky, Ken Winneg, and Kathleen Hall Jamieson. 2016. "What Do Citizens Want from Their Member of Congress?" *Political Research Quarterly* 69(3):1–11.
- Lawless, Jennifer L, and Richard L Fox. 2010. It still takes a candidate: Why women don't run for office. Cambridge University Press.
- Lee, Frances E. 2016. *Insecure majorities: Congress and the perpetual campaign*. University of Chicago Press.
- Levendusky, Matthew. 2009. The Partisan Sort: How Liberals Became Democrats and Conservatives Became Republicans. Chicago, IL: University of Chicago Press.
- Lowande, Kenneth, Melinda Ritchie, and Erinn Lauterbach. 2019. "Descriptive and substantive representation in congress: Evidence from 80,000 congressional inquiries."

 American Journal of Political Science 63(3):644–659.
- Maestas, Cherie D., and Cynthia R. Rugeley. 2002. "Assessing the "Experience Bonus" through Examining Strategic Entry, Candidate Quality, and Campaign Receipts in U.S. House Elections." *American Journal of Political Science* 52(3):520–535.
- Mansbridge, Jane. 1999. "Should blacks represent blacks and women represent women?"

 A contingent" yes"." The Journal of politics 61(3):628–657.
- Mason, Lilliana. 2018. *Uncivil agreement: How politics became our identity*. University of Chicago Press.
- Mayhew, David R. 1974. Congress: The Electoral Connection. New Haven: Yale University Press.
- McDermott, Monika L. 2009. "Religious stereotyping and voter support for evangelical candidate." *Political Research Quarterly* 62(2):340–354.

- McDermott, Monika L., and Costas Panagopoulos. 2015. "Be All that You Can Be: The Electoral Impact of Military Service as an Information Cue." *Political Research Quarterly* 68(2):293–305.
- McDonald, Maura, Rachel Porter, and Sarah Treul. 2020. "Running as a Woman?: Candidate Presentation in the 2018 Midterms." *Political Research Quarterly*.
- Meeks, Lindsey. 2016. "Aligning and trespassing: Candidates' party-based issue and trait ownership on Twitter." *Journalism & Mass Communication Quarterly* 93(4):1050–1072.
- Miler, Kristina. 2016. "Legislative responsiveness to constituency change." American Politics Research 44(5):816–843.
- Miller, Warren E, and Donald E Stokes. 1963. "Constituency influence in Congress."

 American political science review 57(1):45–56.
- Mimno, David, Hanna M. Wallach, Edmund Talley, Miriam Leenders, and Andrew Mc-Callum. 2011. "Optimizing Semantic Coherence in Topic Models." In *Proceedings of the* 2011 Conference on Empirical Methods in Natural Language Processing. pp. 262–272.
- Petrocik, John R. 1996. "Issue ownership in presidential elections, with a 1980 case study."

 American journal of political science pp. 825–850.
- Phillips, Anne. 1995. The Politics of Presence. Oxford University Press.
- Porter, Rachel A., and Sarah A. Treul. 2019. "Inexperience and Success in Congressional Primaries." Presented at MPSA 2018.
- Purtle, Jonathan. 2016. ""Heroes' invisible wounds of war:" constructions of posttraumatic stress disorder in the text of US federal legislation." Social Science and Medicine 149:9–16.

- Rahn, Wendy M. 1993. "The Role of Partisan Stereotypes in Information Processing about Political Candidates." *American Journal of Political Science* 37(2):472–496.
- Reingold, Beth, and Jessica Harrell. 2010. "The Impact of Descriptive Representation on Women's Political Engagement: Does Party Matter?" *Political Research Quarterly* 63(2):280–294.
- Ringquist, Evan J, and Carl Dasse. 2004. "Lies, damned lies, and campaign promises? Environmental legislation in the 105th Congress." *Social Science Quarterly* 85(2):400–419.
- Roberds, Stephen C., and Jason M. Roberts. 2002. "Are All Amateurs Equal? Candidate Quality in the 1992-1998 House Elections." *Politics and Policy* 30(3):482–501.
- Roberts, Margaret E., Brandon M. Stewart, and Dustin Tingley. 2014. "stm: R Package for Structural Topic Models." *Journal of Statistical Software* 21.
- Rocha, Rene R., Caroline J. Tolbert, Daniel C. Bowen, and Christopher J. Clark. 2010. "Race and Turnout: Does Descriptive Representation in State Legislatures Increase Minority Voting?" *Political Research Quarterly* 63(4):890–907.
- Sanbonmatsu, Kira, and Kathleen Dolan. 2009. "Do Gender Stereotypes Transcend Party?" *Political Research Quarterly* 62(3):485–494.
- Schneider, Monica C. 2014. "Gender-based strategies on candidate websites." *Journal of political marketing* 13(4):264–290.
- Sides, John. 2006. "The origins of campaign agendas." British Journal of Political Science 36(3):407–436.
- Sigelman, Lee, and Emmett H Buell Jr. 2004. "Avoidance or engagement? Issue convergence in US presidential campaigns, 1960–2000." American Journal of Political Science 48(4):650–661.

- Spiliotes, Constantine J., and Lynn Vavreck. 2002. "Campaign Advertising: Partisan Convergence or Divergence?" *Journal of Politics* 64(1):249–261.
- Sulkin, Tracy. 2011. The legislative legacy of congressional campaigns. Cambridge University Press.
- Sulkin, Tracy, Cortney M Moriarty, and Veronica Hefner. 2007. "Congressional candidates' issue agendas on-and off-line." *Harvard International Journal of Press/Politics* 12(2):63–79.
- Sulkin, Tracy, and Nathaniel Swigger. 2008. "Is there truth in advertising? Campaign ad images as signals about legislative behavior." The Journal of Politics 70(1):232–244.
- Swers, Michele L. 2002. The Difference Women Make: The Policy Impact of Women in Congress. University of Chicago Press.
- Swers, Michele L. 2007. "Building a Reputation on National Security: The Impact of Stereotypes Related To Gender and Military Experience." *Legislative Studies Quarterly* 32(4):559–595.
- Tate, Katherine. 2001. "The Political Representation of Blacks in Congress: Does Race Matter?" Legislative Studies Quarterly 26(4):623–638.
- Thomsen, Danielle M, and Michele L Swers. 2017. "Which women can run? Gender, partisanship, and candidate donor networks." *Political Research Quarterly* 70(2):449–463.
- Volden, Craig, Alan E. Wiseman, and Dana E. Wittmer. 2013. "When Are Women More Effective Lawmakers Than Men?" American Journal of Political Science 57(2):326–341.
- Wallace, Sophia J. 2014. "Representing Latinos: Examining Descriptive and Substantive Representation in Congress." *Political Research Quarterly* 67(4):917–929.

- Whitby, Kenny J. 2007. "The Effect of Black Descriptive Representation on Black Electoral Turnout in the 2004 Elections." Social Science Quarterly 88(4):1010–1023.
- Wilson, Walter C. 2010. "Descriptive Representation and Latino Interest Bill Sponsorship in Congress." *Social Science Quarterly* 91(4):1043–1062.
- Windett, Jason Harold. 2014. "Gendered campaign strategies in US elections." *American Politics Research* 42(4):628–655.
- Zhao, Qingyuan, and Daniel Percival. 2017. "Entropy balancing is doubly robust." *Journal* of Causal Inference 5(1).

Changing the Dialogue:

Descriptive Candidacies & Position-Taking in Campaigns for the U.S. House of Representatives

Online Appendix & Supplementary Information

A Issue Selection & Textual Identification

Issue Examples by Descriptive Candidate Category

We relied on the explicit goals and policy platforms for advocacy groups and organized movements to identify those issues that should (1) be most associated with descriptive candidates of interest and, (2) be taken up by non-descriptive candidates in response to descriptive candidate presence. Female-associated issues were drawn from the Women's March Network's 2018 policy platform. Black-associated issues were drawn from the Black Lives Matter policy platform. Veteran-associated issues were drawn from the priorities put forward by Concerned Veterans for America and the careful reading of veterans' campaign platform text. A near-comprehensive list of top sub-topic areas and example policies for each descriptive candidate group is provided in Table A.1.

Table A1: Descriptive Candidate Topic Categories and Example Policies

Women's Issues; Wom	en's March Network		
Topic Category	Example Subtopic Issues		
Reproductive Rights	Pro-choice; Sex education; Access to contraception; Maternal Healthcare; Funding Planned Parenthood; Body autonomy; Right to reproductive privacy		
Women's Healthcare	Maternal mortality rates; Gender as a pre-existing condition; breast-cancer screeing; racial minority (female) healthcare access and quality of care		
Wage Discrimination	female entrepreneurship; equal pay for equal work; hiring discrimination; breaking the glass ceiling; support for the Lilly Ledbetter Fair Pay Act		
Domestic Abuse	Re-authorizing the Violence Against Women Act; Closing the boyfriend loophole		
Sexual Harassment	Support for #MeToo; Support for It's On Us Campaign; Workplace Safety		
Black Issues; Black Liv	ves Matter		
Topic Category	Example Subtopic Issues		
Criminal Justice Reform	School-to-prison pipeline; Ending mandatory minimum sentencing; Ban the Box; re-enfranchising felons; Ending the cash bail system; Mass incarceration; Ending the private prison system; Increasing rehabilitative programs		
Police Brutality	Addressing systematic bias; Demilitarizing the police; Investing in community-based policing; De-escalation training; Defund the police; re-examining hiring practices		
Racial Injustice	Support for Black Lives Matter; discussions of racism, white supremacy, etc.		
Voter Suppression	Ballot access initiatives; increasing polling stations; Repealing Voter ID laws		
Black Issues; Black Liv	ves Matter		
Topic Category	Example Subtopic Issues		
Veteran's Healthcare	Reforming the VA; mental health and suicide awareness; disability access; privatization of veteran's healthcare; expanding vets' healthcare options (i.e. Tricare)		
Thanks for Sacrifice	Explicit statements of thanks for veterans & their families		
Military Funding	Improving technology, cyber-defense; Re-authorizing defense budget; Upgrading nuclear capabilities; training and equipment		
Foreign Policy	Terrorism (ISIL, Muslim Brotherhood, Al-Qaeda); Peace through strength; America First; Leaving the UN; Foreign Aid; Stances on "world policing"		
Threats to America	Alliance with / Support for Israel; Repealing Iran Deal; Russian election interference; North Korea; China; Opinions on President Obama or Trump leadership foreign relations agenda		

Descriptive-Related Text Identification

To collect text data from candidate campaign websites, we first identified the names of all major party candidates running in 2018. We then searched for these candidates' campaign web-pages by following links from Politics1.com, which provided a near complete inventory of sites. We also visited candidate social media pages and conducted a simple Google search in our attempt to identify the complete population of congressional campaign websites. To extract platform text from campaign websites, we used a combination of automated scraping and manual downloading. A small number of candidates had no official campaign website. We identify four distinct reasons candidates lack websites: 1) the candidate was an incumbent without any electoral competition; 2) the candidate used Facebook or Twitter as her primary campaign site; 3) the candidate was unsophisticated with little to no campaign presence; and 4) we somehow missed this website. If in our efforts to collect all text for all primary election candidates a website was missed, we employed the Internet Archive's Way Back Machine to attempt to collect that candidate's platform text.

To identify pertinent platform text (i.e. policy points related to Black, female, or veterans' issues), two approaches were employed. First, two independent coders read each campaign platform (1) flagging the presence of descriptive-related issues, and (2) extracting text. Although many candidates included discussions of veteran, female, and Black-associated issues under a single subheading (as seen in Figure 1), this was not always the case. For instance, some candidates included their discussions of reproductive rights alongside Medicare for All and the Affordable Care Act, grouping these sub-topics under a single heading. Therefore, to ensure that all relevant text was included and no superfluous text was analyzed, we read the platform text under each descriptive subheading and extracted only pertinent language. Sentences were kept intact. Therefore, in the event that issue-relevant text was interspersed with other non-pertinent language, all text was extracted. Once this first step was complete, these two independent lists of identified candidates and their corresponding platform text were compared and reconciled. Further, to ensure no text was accidentally missed, policy-specific keyword searches of platform text were conducted for each descriptive topic area. So, for instance, a simple search was conducted on platform text for words like "racial," "criminal justice," and "suppression" to ensure that all candidates who talked about Black-associated issues in their platforms were flagged. If a platform had any specified keywords, that text was re-read to ensure that all candidates who talked about a given descriptive-related topic were identified.

Our criteria for determining whether or not a non-descriptive candidate took up a given descriptive issue was broad. By this, we mean that in our flagging of candidate issue coverage we made no qualitative judgments about a candidate's text. So, for instance, if a male Democrat simply stated "equal pay for equal work" in his platform, we would still consider him to have covered "women's issues." Those candidates who expressed a stance on diversity but made no statement about policies related to those descriptive constituent groups were not deemed to have covered female or Black-associated issues. These kinds of statements often manifested themselves in platitudes like "I will fight for Americans of every skin color" or "Every person deserves respect, regardless of their gender." Candidates were only considered to have adopted female or Black-associated

issues into their platforms if their text followed progressive Democratic Party stances on these issues. For example, if a candidate stated that he did not support abortion for religious reasons but he would ultimately champion a women's right to choose, we would flag that candidate for having covered "women's issues." However, if a candidate simply stated his opposition to abortion, that candidate would not have been flagged for covering "women's issues." We noted a total of four Democratic male candidates as having held anti-progressive positions on "women's issues." We noted that a total of nine white Democrats stated their support for the police and other first-responders in their platforms while also evoking themes purported by Blue Lives Matter. These candidates were not considered to have covered Black-associated issues and were excluded from our analysis. This same intuition was applied to Republican candidates. Any candidate who included text that was overtly anti-military (i.e. calls for severe cuts to the defense budget; supports reigning in spending on troop equipment; advocates for cutting back the VA) was not considered to have covered "veterans' issues" in his platform (only three identified).

B Observational Weights: Entropy Balancing

B.1 District Balancing Covariates

For covariate balancing, our estimand is the average treatment effect on the treated (ATT). To calculate balancing weights, we employ a weighting methodology developed by Hainmueller (2012) called entropy balancing (EB). This approach eliminates the need to cyclically model propensity scores and check for covariate balance—what Imai et al. (2008) call the "propensity score tautology"—by directly incorporating covariate balance into the weight estimation procedure. Another advantage of entropy balancing is that it is doubly robust, meaning that if either the true outcome model corresponds to a linear regression on the covariates or the true treatment assignment model corresponds to a logistic regression on the covariates, the effect estimated using EB weights is unbiased (Zhao and Percival 2017). Using the Weightlt package developed by Greifer (2020), we estimate balancing weights using the covariates described below.

In our analysis, we seek to achieve balance on covariates that measure a candidate's intrinsic likelihood to take up female, Black, or veteran-associated issues (the outcome) and covariates that indicate in which types of races a descriptively representative candidate may be more likely to emerge (treatment assignment). Across all three models, we balance over some basic district conditions. Candidates tend to run in races where they perceive themselves as possessing a strategic advantage (Maisel and Stone 1997; 2014). Accordingly, Republicans and Democrats may be more likely to emerge in safely partisan congressional districts where they have greater clout with voters. To capture voter sentiment, we include a covariate in our estimation of balancing weights for district partisan seat safety—a continuous measure for the district's two-party 2016 presidential vote share. For Democratic primary races, this is expressed as Hillary Clinton's share of the two-party vote; for Republican primary races, this is expressed as Donald Trump's share of the two-party vote. Incumbents tend to win reelection at overwhelming rates (Jacobson and Carson, 2019), therefore it is often most strategic for a candidate to emerge when a

seat becomes vacant (Jacobson 1983). Therefore, in our covariate balancing, we include a binary indicator for "incumbent in race" (0) or "open" (1). Finally, there is competing research on the effects of a state's primary system (i.e. openness) on strategic candidate behavior (see McGhee et al. 2014; Hill 2015). To ensure our definition of balancing covariates is comprehensive, we include a binary indicator for whether or not a state's primary election system is "closed" (i.e. only registered partisans can vote in the primary).

B.2 Treatment Assignment: Female Candidate Emergence

To determine the effect of a female candidate's presence on male Democrats' campaign behavior, we balance over covariates that indicate in which types of races a female candidate may be more likely to emerge. Democratic female candidates are especially calculated in their decision to run, choosing to emerge only when they think that they have a good shot at winning (Fox and Lawless 2005; Fulton et al. 2006; Kanthak and Woon 2014). Therefore, we expect women to be more likely to run in districts that are safely-Democratic. These are the kinds of races where voters are especially receptive to female candidates (Dolan 2014) and where women may find greater success in building their donor networks (Thomsen and Swers 2017). Voter sentiment is captured by our measure for Clinton's 2016 two-party presidential vote-share. Studies also suggest that women may be especially likely to emerge in districts without an incumbent (Palmer and Simon 1998). The presence of an incumbent is indicated by our "open race" covariate. Finally, we expect that female candidates may be more likely to run in districts where there is a demonstrated history of a woman winning office (Fox and Lawless 2011; Fulton 2011). Therefore, we include a dichotomous indicator for whether or not that district was represented by a woman (Democrat or Republican) during any period from the 113th to 115th Congress.

B.3 Treatment Assignment: Black Candidate Emergence

To determine the effect of a Black candidate's presence on white Democrats' campaign behavior, we balance over covariates that indicate in which types of races a Black candidate may be more likely to emerge. Similar to women, Black candidates are incredibly judicious in their decision to run and, therefore, less likely to emerge (Fox and Lawless 2005). The absence of Black candidates, however, may also be rooted in explanations irrespective of political ambition. Supply-side theories on minority candidate emergence note that, in districts with a small minority population, there may be no viable Black candidate to run for office—absent any hesitations that candidate may have about running (Canon 1996; Branton 2009; Shah 2014). To account for the baseline supply of potential Black candidates, we include a dichotomous measure for districts with an above-average number of Black residents as reported by the 2015 American Community Survey. Some research finds that, due to prejudice and racism, Black candidates do not perform as well in districts with a greater population of white voters (Andersen and Junn 2010; Schaffner 2011; Tesler 2013; Washington 2006). For this reason, we include a dichotomous measure for districts with an above-average proportion of white residents. Moreover, Juenke and Shah (2016) find that district conditions like seat vacancy and partisanship are key predictors for Black candidate electoral success. Our continuous measure for presidential vote-share

and binary indicator for open race status capture these important factors which predict where Black candidates may be more likely to win and, therefore, where they may be especially likely to run.

B.4 Treatment Assignment: Military Veteran Emergence

To determine the effect of a military veteran's presence on civilian Republicans' campaign behavior, we balance over covariates that indicate in which types of races a vet may be more likely to emerge. Supply-side explanations may also provide a rationale for the emergence patterns of Republican military veterans. Certain congressional districts particularly those with a military base or resources for veterans—tend to have larger populations of veterans and, therefore, have a larger supply of potential candidates. Aside from an elevated presence of veterans, these kinds of installations also provide jobs for the local community and support the local economy, making defense-related issues especially salient to constituents. Studies on the strategic campaign behavior of vets are limited. However, the nascent body of work dedicated to this topic indicates military vets tend to run in "high opportunity" environments (e.g. Collens 2020). Districts with constituent populations who care deeply about veterans and policies related to the military seem to fit this description. For all of these reasons, we include binary covariates for the presence of a military base in a district and the presence of a VA hospital to approximate not only a district's population of military vets but also the salience of veteran-related issues to that district's constituency.

B.5 Outcome Variable: Likelihood of Issue Coverage

We expect that a candidate's likelihood to cover Black issues will be mediated by the number Democratic-leaning constituents in a district (captured by Clinton's 2016 presidential vote-share), prevalence of Black constituents in a district (captured by a dichotomous indicator for Black residents in a district), and whether or not a non-descriptive candidate is running in a southern state. We expect that a candidate's likelihood to cover women's progressive issues will be similarly mediated by whether or not a district leans Democratic. Finally, as we previously outlined, civilian Republicans may be more likely to cover veteran's issues if these topics are especially salient to a given constituency. This is measured through the presence of a military base or VA hospital in a district.

There may be some non-descriptive candidates who have a personal stake in an issue and, therefore, may be more likely to take up these issues. This is problematic because candidate intention is nearly impossible to observe; therefore, our ability to condition on this covariate is limited. We expect, however, that each individual candidate's inclination to take up a given issue will—to some extent—be mediated by whether or not he is "strategic." For instance, even if a male Democrat genuinely cares about advocating for women's equality, he should be far less likely to cover this topic if he is running in a Republican-controlled district. In such a race, covering "women's issues" presents no advantage to that candidate and, in all likelihood, discussing this topic would serve as a liability (e.g. Thomsen 2015; McDonald et al. 2020). Therefore, by controlling

for candidate strategic intent, we can (somewhat) account for a candidate's unobserved personal convictions towards a policy.

B.6 Love Plots: Covariate Distributional Balance

We establish balance across all covariates identified in Table 1. Plots of covariate distributions are presented in Figures 1 through 6. These figures depict—before and after weighting—the absolute mean differences in the covariate distribution for non-descriptive candidates who did and did not run against a descriptive opponent in their partisan primary election. To best approximate the conditions of a controlled experiment using observational data, these mean difference between candidate types should be close to zero. The dotted line indicates a 0.05 threshold; points falling to the left of this line indicates balance has been achieved for that covariate. To provide a mode of comparison beyond unweighted data, covariate distributions weighted with the covariate balancing propensity score methodology (CBPS) proposed by Imai and Ratkovic (2012) are also plotted.

Figure 1: Covariate Balance: Love Plot for Male Democratic Strategic Candidates

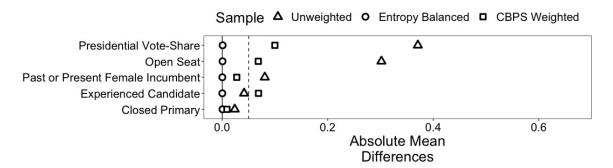


Figure 2: Covariate Balance: Love Plot for Male Democratic Amateur Candidates



Figure 3: Covariate Balance: Love Plot for White Democratic Strategic Candidates

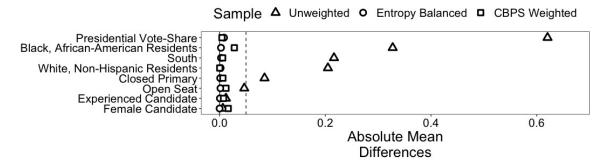


Figure 4: Covariate Balance: Love Plot for White Democratic Amateur Candidates

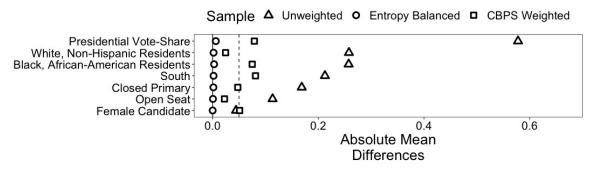


Figure 5: Covariate Balance: Love Plot for Civilian Republican Strategic Candidates

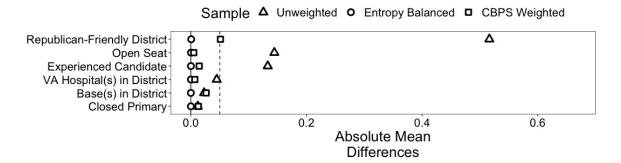
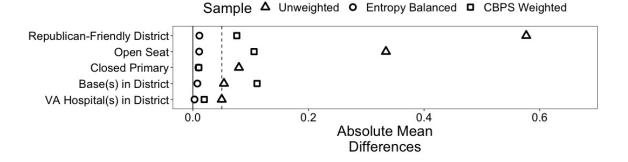


Figure 6: Covariate Balance: Love Plot for Civilian Republican Amateur Candidates



C Sensitivity Analysis

C.1 Unit of Analysis: Male Democratic Candidates

Table A2: Quality Democratic Male Issue Coverage

	DV: Fema	ale-Associated Issue	Coverage
Link Function	(1) EB Weighted Logistic	(2) CBPS Weighted Logistic	(3) EB Weighted Gaussian
Treatment: Female Candidate	1.261* (0.38)	1.332* (0.39)	0.27* (0.52)
Candidate: Quality	-0.763 (0.47)	-0.625 (0.44)	-0.163* (0.08)
District: Presidential Vote	0.009 (0.02)	$0.005 \\ (0.02)$	0.002 (0.01)
District: Open Seat	-0.244 (0.48)	-0.240 (0.50)	-0.047 (0.06)
District: Closed Primary	0.560 (0.47)	0.516 (0.44)	0.114 (0.07)
District: History Female Inc.	-0.442 (0.50)	-0.376 (0.53)	-0.099 (0.09)
Constant	-0.476 (0.72)	-0.372 (0.72)	-0.387* (0.11)
Observations - Treated; Control	166; 79	166; 79	166; 79

We endeavor to understand to what extent unobserved cofounders may be responsible for our findings regarding the effect of descriptive candidate presence. To do so, we employ the sensmakr package developed by Cinelli et al. (2020). Because this software requires a linear model, we convert the link function from logit to Gaussian for our sensitivity analysis. This model produces substantively similar results using our EB weighted data. Coefficient estimate comparisons are presented in Table A2 with 95% confidence intervals.

A sensitivity analysis examining the fragility of our estimates is presented in Table A3. The partial R^2 of descriptive candidate presence (treatment) with candidate issue uptake (outcome) presented in column 4 of Table A3 demonstrates that an extreme confounder (orthogonal to the covariates) that explains 100% of the residual variance of the outcome would need to explain at least 8.34% of the residual variance of the treatment to fully account for the observed estimated effect. Per column 5 of Table A3, unobserved

Table A3: Sensitivity Analysis: Treatment Effect on Quality Male Democrat Issue Coverage in 2018 Primary Elections

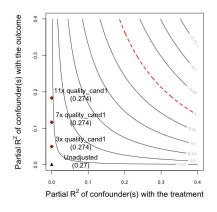
Outcome: Probability of Female Issue Coverage (0,1)

Treatment:	Est.	S.E.	t-value	$R^2_{Y \sim D \mathbf{X}}$	$RV_{q=1}$	$RV_{q=1,\alpha=0.05}$
	(1)	(2)	(3)	(4)	(5)	(6)
Female Candidate	0.274	0.059	4.654	8.3%	26%	15.9%
df = 238	Bound	(1x Car	ndidate Qu	$uality$): R_V^2	$_{\sim Z \mathbf{X} D} =$	$1.7\%, R_{D\sim Z X}^2 = 0\%$

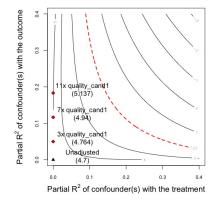
confounders (orthogonal to the covariates) would need to explain 25.96% of the residual variance of both the treatment and outcome to fully account for our findings (i.e. bring the point estimate to 0). If unobserved cofounders were to explain 15.93% of the residual variance of both the treatment and outcome, these factors would be sufficiently strong enough to make our results indifferent from zero at the significance level of alpha = 0.05.

Next, in Figure 7(a) Figure 7(b), we visually demonstrate how confounders of different types would affect point estimates and t-values. The horizontal axis describes the fraction of the residual variation in the treatment (partial R^2) explained by the confounder; the vertical axis describes the fraction of the residual variation in the outcome explained by the confounder. The contours show the adjusted estimate that would be obtained for an unobserved confounder (in the full model) with hypothesized values of the sensitivity parameters. The three reference points show that a cofounder 3x, 7x, or 11x stronger than observed covariate *Quality Candidate* still produce robust findings. Figure 7(b) shows the sensitivity of the t-value of the treatment effect. As we move along the horizontal axis, the adjusted effect and standard-errors remain fairly consistent. This plot shows that the statistical significance of our treatment remains robust to a confounder 3x, 7x, or 11x stronger than observed covariate *Quality Candidate*.

Figure 7: Sensitivity contour plots in the partial R2 scale with benchmark bounds



(a) Sensitivity of the Point Estimate



(b) Sensitivity of the T-Value

C.2 Unit of Analysis: White Democratic Candidates

Table A4: Quality, White Democrat Issue Coverage

	DV: Blac	ck-Associated Issue	Coverage
	(1)	(2)	(3)
	EB Weighted	CBPS Weighted	EB Weighted
Link Function	Logistic	Logistic	Gaussian
Treatment: Black Candidate	1.263*	1.320*	0.30*
	(0.34)	(0.34)	(0.05)
Candidate: Quality	-0.075	-0.135	-0.015
·	(0.48)	(0.49)	(0.08)
Candidate: Gender	0.321	0.363	0.071
	(0.37)	(0.37)	(0.06)
District: Presidential Vote	0.014	0.011	0.003
	(0.02)	(0.02)	(0.00)
District: Open Seat	-0.126	-0.151	-0.026
•	(0.41)	(0.42)	(0.06)
District: Closed Primary	0.388	0.375	0.085
•	(0.38)	(0.38)	(0.06)
District: South	0.414	0.367	0.091
	(0.42)	(0.43)	(0.07)
District: Black Residents	0.365	0.360	0.082
	(0.39)	(0.39)	(0.06)
District: White, Non-Hispanic Res.	0.295	0.281	0.065
, •	(0.42)	(0.42)	(0.07)
Constant	-2.031	-1.897	0.043
	(1.25)	(1.29)	(0.22)
Observations - Treated; Control	79; 244	79; 244	79; 244

We endeavor to understand to what extent unobserved cofounders may be responsible for our findings regarding the effect of treatment. To do so, we employ the sensmakr package developed by Cinelli et al. (2020). Because this software requires a linear model, we convert the link function from logit to Gaussian for our sensitivity analysis. This model produces substantively similar results using our EB weighted data. Coefficient estimate comparisons are presented in Table A4 with 95% confidence intervals.

Table A5: Sensitivity Analysis: Treatment Effect on Quality, White Democrat Issue Coverage in 2018 Primary Elections

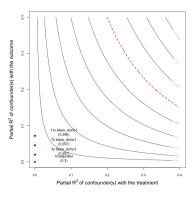
Outcome: Probability of Black Issue Coverage (0,1)

						<u> </u>
Treatment:	Est.	S.E.	t-value	$R^2_{Y \sim D \mathbf{X}}$	$RV_{q=1}$	$RV_{q=1,\alpha=0.05}$
	(1)	(2)	(3)	(4)	(5)	(6)
Black Candidate	0.298	0.053	5.592	9.1%	27%	18.5%
df = 313	Bound	(1x Bla	ck Resider	nts): $R_{Y\sim Z}^2$	$q_{ \mathbf{X},D} = 2.0$	$0\%, R_{D\sim Z \mathbf{X}}^2 = 0\%$

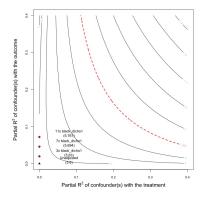
A sensitivity analysis examining the fragility of our treatment estimates is presented in Table A3. The partial R^2 of descriptive candidate presence (treatment) with candidate issue uptake (outcome) presented in column 4 of Table A3 demonstrates that an extreme confounder (orthogonal to the covariates) that explains 100% of the residual variance of the outcome would need to explain at least 9.08% of the residual variance of the treatment to fully account for the observed estimated effect. Per column 5 of Table A3, unobserved confounders (orthogonal to the covariates) would need to explain 27.01% of the residual variance of both the treatment and outcome to fully account for our findings (i.e. bring the point estimate to 0). If unobserved cofounders were to explain 18.48% of the residual variance of both the treatment and outcome, these factors would be sufficiently strong enough to make our results indifferent from zero at the significance level of alpha = 0.05.

Next, in Figure 8(a) Figure 8(b), we visually demonstrate how confounders of different types would affect point estimates and t-values. The contours show the adjusted estimate that would be obtained for an unobserved confounder (in the full model) with hypothesized values of the sensitivity parameters. The three reference points show that a cofounder 3x, 7x, or 11x stronger than observed covariate *Black Residents* still produce robust findings. Figure 8(b) shows the sensitivity of the t-value of the treatment effect. This plot shows that the statistical significance of our treatment remains robust to a confounder 3x, 7x, or 11x stronger than observed covariate *Black Residents*.

Figure 8: Sensitivity contour plots in the partial R2 scale with benchmark bounds



(a) Sensitivity of the Point Estimate



(b) Sensitivity of the T-Value

C.3 Unit of Analysis: Civilian Republican Candidates

Table A6: Quality, Civilian Republican Issue Coverage

	DV: Veter	an-Associated Issue	e Coverage
	(1) EB Weighted	(2) CBPS Weighted	(3) EB Weighted
Link Function	Logistic	Logistic	Gaussian
Treatment: Military Veteran	0.945*	0.912*	0.172*
·	(0.38)	(0.38)	(0.06)
Candidate: Quality	0.437	0.393	0.076
	(0.44)	(0.44)	(0.07)
District: Presidential Vote	0.009	0.007	0.002
	(0.02)	(0.02)	(0.00)
District: Open Seat	0.356	0.398	0.068
	(0.40)	(0.39)	(0.07)
District: Closed Primary	-0.128	-0.227	-0.024
	(0.59)	(0.56)	(0.10)
District: Military Base	-0.582	-0.596	-0.100
	(0.47)	(0.47)	(0.07)
District: VA Hospital	0.133	0.110	0.026
	(0.42)	(0.41)	(0.07)
Constant	0.105	0.268	0.541*
	(0.93)	(0.91)	(0.19)
Observations - Treated; Control	101; 76	101; 76	101; 76

We endeavor to understand to what extent unobserved cofounders may be responsible for our findings regarding the effect of treatment. To do so, we employ the sensmakr package developed by Cinelli et al. (2020). Because this software requires a linear model, we convert the link function from logit to Gaussian for our sensitivity analysis. This model produces substantively similar results using our EB weighted data. Coefficient estimate comparisons are presented in Table A6 with 95% confidence intervals.

A sensitivity analysis examining the fragility of our treatment estimates is presented in Table A7. The partial R^2 of descriptive candidate presence (treatment) with candidate issue uptake (outcome) presented in column 4 of Table A7 demonstrates that an extreme confounder (orthogonal to the covariates) that explains 100% of the residual variance of the outcome would need to explain at least 3.92% of the residual variance of the treatment to fully account for the observed estimated effect. Per column 5 of Table A3, unobserved

Table A7: Sensitivity Analysis: Treatment Effect on Quality, Civilian Republican Issue Coverage in 2018 Primary Elections

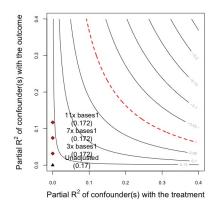
Outcome: Probability of Veteran's Issue Coverage (0,1)

Treatment:	Est.	S.E.	t-value	$R^2_{Y \sim D \mathbf{X}}$	$RV_{q=1}$	$RV_{q=1,\alpha=0.05}$
	(1)	(2)	(3)	(4)	(5)	(6)
Military Veteran	0.172	0.065	2.649	3.9%	18.3%	5%
df = 372	Bound	(1x % 1)	Base Prese	ence): $R_{Y_{\sim}}^2$	$z_{Z \mathbf{X},D} = 1$	$1.1\%, R_{D\sim Z \mathbf{X}}^2 = 0\%$

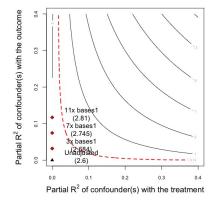
confounders (orthogonal to the covariates) would need to explain 18.26% of the residual variance of both the treatment and outcome to fully account for our findings (i.e. bring the point estimate to 0). If unobserved cofounders were to explain 4.97% of the residual variance of both the treatment and outcome, these factors would be sufficiently strong enough to make our results indifferent from zero at the significance level of alpha = 0.05.

Next, in Figure 8(a) Figure 8(b), we visually demonstrate how confounders of different types would affect point estimates and t-values. The contours show the adjusted estimate that would be obtained for an unobserved confounder (in the full model) with hypothesized values of the sensitivity parameters. The three reference points show that a cofounder 3x, 7x, or 11x stronger than observed covariate *Presence of Military Base in District* still produce robust findings. Figure 8(b) shows the sensitivity of the t-value of the treatment effect. As we move along the horizontal axis, the adjusted effect and standard-errors remain fairly consistent. This plot shows that the statistical significance of our treatment remains robust to a confounder 3x, 7x, or 11x stronger than observed covariate *Presence of Military Base in District*.

Figure 9: Sensitivity contour plots in the partial R2 scale with benchmark bounds



(a) Sensitivity of the Point Estimate



(b) Sensitivity of the T-Value

D Alternative Model Specifications

Table A8: Quality Democratic Male Issue Coverage Original Model & Alternative Specifications

	DV: Female-A	Associated	Issue Cove	erage
	(1) Original Model	(2)	(3)	(4)
Female Candidate in Race	1.261* (0.38)	1.264* (0.38)	1.510* (0.52)	
Candidate: Quality	-0.763 (0.47)	-0.876 (0.48)	-0.839 (0.46)	-0.662 (0.55)
District: Presidential Vote	0.009 (0.02)	0.010 (0.02)		-0.013 (0.02)
District: Open Seat	-0.244 (0.48)	-0.357 (0.46)	-0.345 (0.47)	-0.310 (0.63)
District: Closed Primary	$0.560 \\ (0.47)$	0.609 (0.47)	0.795 (0.49)	1.381* (0.69)
District: History Female Inc.	-0.442 (0.50)			-0.745 (0.64)
District: Current Female Incumbent		-0.448 (0.66)		
District: Woman-Friendliness ¹			0.002 (0.01)	
Treatment: $2+$ Female Candidates 2				2.160* (0.54)
Constant	-0.476 (0.72)	-0.115 (0.72)	-0.293 (0.40)	0.190 (0.82)
Obs Candidate; No Candidate	166; 79	166; 79	166; 79	77; 79

¹ Each district's Women Friendliness is drawn from estimates produced by Palmer and Simon (2012). Using district demographic characteristics, this measure expresses the probability of that a given congressional district will elect a woman. The Women-Friendly Index is produced through a logit analysis on twelve demographic variables commonly used to predict partisan outcomes in House elections available from the U.S. Census and other sources. Index values have been re-scaled using a linear transformation such that the minimum value is -0.63 (i.e. least friendly) and maximum value is 2.4 (i.e. most friendly). Variable is omitted from initial model because it correlates significantly (r = 0.78) with Democratic presidential vote-share. ² Here we re-weight our data and estimate the effect of having two or more female candidates in a given primary election compared to races with no female candidates. Male candidates who against a single women were omitted.

Table A9: Amateur Democratic Male Issue Coverage Original Model & Alternative Specifications

	DV: Female-A	ssociated	Issue Cov	erage
	(1) Original Model	(2)	(3)	(4)
Female Candidate in Race	0.202* (0.08)	0.227* (0.09)	0.208* (0.12)	
District: Presidential Vote	-0.006 (0.01)	-0.005 (0.00)		-0.006 (0.00)
District: Open Seat	-0.149 (0.10)	-0.103 (0.10)	-0.134 (0.13)	-0.146 (0.10)
District: Closed Primary	0.004 (0.10)	0.002 (0.10)	-0.159 (0.18)	0.004 (0.10)
District: History Female Inc.	0.428* (0.12)			0.481* (0.12)
District: Current Female Incumbent		0.436* (0.14)		
District: Woman-Friendliness ¹			0.074 (0.18)	
Treatment: 2+ Female Candidates ²				0.202* (0.09)
Constant	0.529* (0.15)	0.468* (0.15)	0.344* (0.12)	0.529* (0.15)
Obs Candidate; No Candidate	90; 55	90; 55	90; 55	30; 55

 $^{^1}$ Each district's Women Friendliness is drawn from estimates produced by Palmer and Simon (2012). Using district demographic characteristics, this measure expresses the probability of that a given congressional district will elect a woman. Index values have been re-scaled using a linear transformation such that the minimum value is -0.63 (i.e. least friendly) and maximum value is 2.4 (i.e. most friendly). Variable is omitted from initial model because it correlates significantly (r = 0.78) with Democratic presidential vote-share. 2 Here we re-weight our data and estimate the effect of having two or more female candidates in a given primary election compared to races with no female candidates. Male candidates who ran in a primary with only a single women were omitted.

Table A10: Quality, White Democrat Issue Coverage Original Model & Alternative Specifications

	DV: Black-Asso	ociated Issue Cov	verage
	(1) (Original Model)	(2) (B/W Only ¹)	(3)
Black Candidate in Race	1.263* (0.34)	1.320* (0.34)	1.045* (0.38)
Candidate: Quality	-0.075 (0.48)	-0.034 (0.58)	0.224 (0.51)
Candidate: Gender	0.321 (0.37)	0.183 (0.50)	0.307 (0.40)
District: Presidential Vote	0.014 (0.02)	0.026 (0.03)	-0.019 (0.03)
District: Open Seat	-0.126 (0.41)	0.100 (0.49)	0.236 (0.45)
District: Closed Primary	0.388 (0.38)	1.103* (0.54)	0.441 (0.41)
District: South	0.414 (0.42)	0.622 (0.48)	0.062 (0.40)
District: Black Residents	0.365 (0.39)	1.210* (0.60)	
District: White, Non-Hispanic Res.	0.295 (0.42)	-0.468 (0.59)	
District: % Black Residents			0.071 (0.03)
Constant	-2.031 (1.25)	-2.555 (1.66)	-0.812 (1.11)
Obs Candidate; No Candidate	79; 244	55; 197	79; 244

 $^{^1}$ Includes only district where white and Black ran in a Democratic primaries. No races with other racial minorities (i.e. Native American, Asian) were included. In this instance, our definition of racial minorities includes individuals self-identifying as Hispanic. 2 Continuous measure for the proportion of Black residents that reside in the district.

Table A11: Amateur, White Democrat Issue Coverage Original Model & Alternative Specifications

	DV: Black-Asso	ociated Issue Cov	verage
	(1) (Original Model)	(2) (B/W Only ¹)	(3)
Black Candidate in Race	$0.860 \\ (0.59)$	0.864 (0.68)	0.945 (0.63)
Candidate: Gender	1.303* (0.59)	1.605* (0.68)	1.458* (0.64)
District: Presidential Vote	0.066* (0.03)	0.084 (0.05)	0.058 (0.03)
District: Open Seat	-1.189 (0.73)	-1.240 (0.94)	-0.792 (0.82)
District: Closed Primary	0.294 (0.81)	-0.285 (0.98)	0.056 (0.78)
District: South	2.342* (0.74)	2.622* (0.83)	2.295* (0.76)
District: Black Residents	-0.193 (0.63)	-0.409 (0.73)	
District: White, Non-Hispanic Res.	0.375 (0.65)	0.614 (0.73)	
District: % Black Residents			0.007 (0.03)
Constant	-5.117* (2.00)	-5.886* (2.50)	-4.927* (1.90)
Obs Candidate; No Candidate	38; 102	30; 87	38; 102

¹ Includes only district where white and Black ran in a Democratic primaries. No races with other racial minorities (i.e. Native American, Asian) were included. In this instance, our definition of racial minorities includes individuals self-identifying as Hispanic. ² Continuous measure for the proportion of Black residents that reside in the district.

Table A12: Quality, Civilian Republican Issue Coverage Original Model & Alternative Specifications

	DV: Veteran-Associ	ated Issue Coverage
	(1) Original Model	(2)
Military Veteran in Race	0.945* (0.38)	0.950* (0.37)
Candidate: Quality	0.437 (0.44)	0.424 (0.45)
District: Presidential Vote	0.009 (0.02)	-0.003 (0.01)
District: Open Seat	0.356 (0.40)	0.544 (0.43)
District: Closed Primary	-0.128 (0.59)	-0.198 (0.61)
District: Military Base	-0.582 (0.47)	
District: VA Hospital	0.133 (0.42)	
District: % Veteran Population in District 1	,	0.277 (0.38)
Constant	$0.105 \\ (0.93)$	0.277 (0.96)
Obs Candidate; No Candidate	101; 76	101; 76

 $^{^{1}}$ Percent veteran's population in district estimated by the National Center for Veterans Analysis and Statistics. Estimates were produced in September, 2015.

Table A13: Amateur, Civilian Republican Issue Coverage Original Model & Alternative Specifications

	DV: Veteran-Associated Issue Coverage	
	Original Model	(2)
Military Veteran in Race	-0.616	-0.583
	(0.54)	(0.58)
District: Presidential Vote	0.003	-0.001
	(0.02)	(0.01)
District: Open Seat	0.868	1.114*
-	(0.60)	(0.55)
District: Closed Primary	-0.820	-1.097
v	(1.01)	(0.75)
District: Military Base	1.199*	
v	(0.57)	
District: VA Hospital	-0.290	
•	(0.60)	
District: % Veteran Population in District ¹		0.803
		(0.73)
Constant	-0.402	0.343
	(1.04)	(1.00)
Obs Candidate; No Candidate	32; 51	32; 51

 $^{^1}$ Percent veteran's population in district estimated by the National Center for Veterans Analysis and Statistics. Estimates were produced in September, 2015.

E Substantive vs. Descriptive Treatment

Table A14: Quality Democratic Male Issue Coverage Original Model & Alternative Treatment Assignment

	DV: Female-Associated Issue Coverage		
	(1)	(2)	(3)
	Original Model	Descriptive $+$ Sub.	Descriptive
Female Candidate in Race	1.261* (0.38)		
Female Candidate in Race Descriptive and Substantive ¹		1.403* (0.40)	
Female Candidate in Race Descriptive $Only^2$			1.027* (0.52)
Candidate: Quality	-0.763 (0.47)	-0.900 (0.50)	-1.716 (0.92)
District: Presidential Vote	0.009 (0.02)	0.003 (0.02)	0.059* (0.03)
District: Open Seat	-0.244 (0.48)	-0.285 (0.48)	-0.584 (0.56)
District: Closed Primary	0.560 (0.47)	0.584 (0.51)	0.514 (0.53)
District: History Female Inc.	-0.442 (0.50)		
Constant	-0.476 (0.72)	-0.209 (0.73)	-2.261 (1.12)
Obs Candidate; No Candidate	166; 79	144; 79	33; 79

¹ Effect of interest is the presence of a female candidate who substantively covered women's issues in her campaign platform. ² Effect of interest is the presence of a female candidate who did not substantively covered women's issues in her campaign platform.

Table A15: Quality, White Democrat Issue Coverage Original Model & Alternative Specifications

	DV: Black	k-Associated Issue Co	verage
	(1) Original Model	(2) Descriptive + Sub	(3) Descriptive
Black Candidate in Race	1.263* (0.34)		
Black Candidate in Race Descriptive and Substantive ¹		1.524* (0.40)	
Black Candidate in Race Descriptive $Only^2$			1.004* (0.43)
Candidate: Quality	-0.075 (0.48)	$0.060 \\ (0.57)$	-0.331 (0.61)
Candidate: Gender	0.321 (0.37)	-0.006 (0.44)	0.743 (0.47)
District: Presidential Vote	0.014 (0.02)	0.015 (0.03)	0.025 (0.03)
District: Open Seat	-0.126 (0.41)	-0.162 (0.45)	-0.265 (0.53)
District: Closed Primary	0.388 (0.38)	0.494 (0.43)	0.089 (0.51)
District: South	0.414 (0.42)	0.490 (0.49)	0.571 (0.52)
District: Black Residents	0.365 (0.39)	0.311 (0.44)	0.534 (0.45)
District: White, Non-Hispanic Res.	0.295 (0.42)	0.572 (0.49)	0.485 (0.54)
Constant	-2.031 (1.25)	2.194 (1.56)	-2.773 (1.65)
Obs Candidate; No Candidate	79; 244	49; 244	42; 244

 $^{^1}$ Effect of interest is the presence of a Black candidate who substantively covered Black-associated issues in her campaign platform. 2 Effect of interest is the presence of a Black candidate who did not substantively covered Black-associated issues in her campaign platform.

F Content Analysis: Structural Topic Model

To prepare the text for modeling, we took several pre-processing steps standard in text analysis (Grimmer and Stewart, 2013). First, we cleaned the text of any HTML tags and extraneous source code. Second, we removed any stop words—commonly used words such as "the," "a," or "in" that have no substantive meaning but rather serve a purely grammatical function. Second, we discarded punctuation, numbers, and removed capitalization. Third, we simplified platform vocabulary by stemming words, which removes word endings to reduce the dimensionality of text. For instance, using stemming, words like legislative, legislator, and legislation would simplify to legislat-. Finally, we removed infrequent words, dropping any terms that did not appear in at least 10 male/female, 12 civilian/veteran, or 5 white/Black candidates' platform text. Different thresholds were chosen because the number of units assessed in each analysis varied. On whole, each corpus included about 200 documents and 500 terms. For our Democratic-Female models, we defined seven topics. For our Democratic-Black models, we defined eleven topics. Finally, for our Republican-Veteran models, we defined five topics.

To determine the strength of our modeled topics we produced plots comparing topical semantic coherence with topic-word exclusivity, which are displayed in Figures 10, 11, and 12. Topic quality is evaluated using semantic coherence—how often words within a topic co-occur—and exclusivity—the uniqueness of words to each topic—which are displayed on the x-axis and y-axis respectively. Using this approach is accepted as a reasonable surrogate for human judgment on the quality of topics (Mimno et al., 2011). The highest quality topics fall in the top right corner of each figure.

Sub-topic labels for women, Black, and veteran-associated issues are presented in Tables A16, A18 and A17. Topic labels were determined using the highest probability words associated with each topic, which are presented in the second column of each table. In order to label these topics, we reviewed the model summary of stems associated with each topic. In determining a topic label, we evaluated in what ways these stems may be similar or how they built toward a common theme. To validate our topic labeling, we randomly selected and read five campaign platforms that included a relatively high proportion of words associated with each of the twenty-seven topics. The overall prevalence of each sub-topical component of descriptive issues are presented in the third column.

Figure 10: Topical Semantic Coherence by Topic-Word Exclusivity Female Democrats and Male, Quality Democrats in Races with a Female Candidate

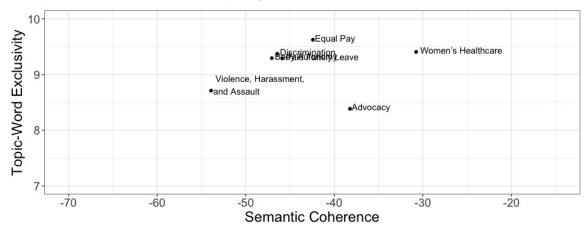


Figure 11: Topical Semantic Coherence by Topic-Word Exclusivity Black Democrats and White, Quality Democrats in Races with a Black Candidate

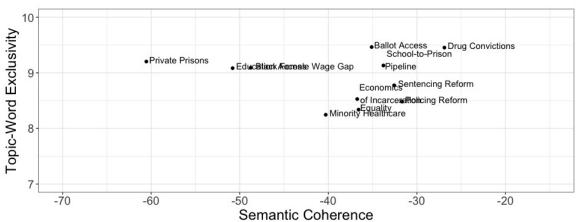


Figure 12: Topical Semantic Coherence by Topic-Word Exclusivity Military Veteran Republican and Civilian, Quality Democrats in Races with a Veteran

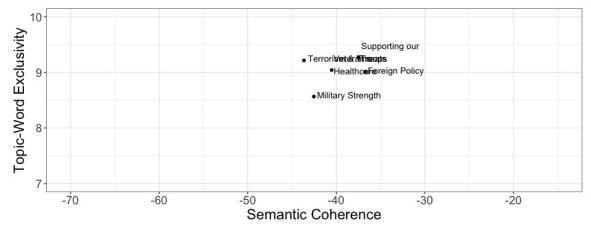


Table A16: STM Topics: Strategic Democratic Male & Democratic Female Campaign Platform Subtopics within Women's Issues

Description	Stems	%
Women's Healthcare	health, care, women, access, plan, parenthood, provid, healthcar, afford, reproduct, contracept, insur, matern, medic, control, cancer, coverag, qualiti, birth, rate, screen, doctor, cost	67.50
Equal Pay	women, equal, pay, work, men, support, paid, workplac, earn, fair, gap, cent, less, discrimin, dollar, receiv, man, wage, champion, end, pass, unaccept	41.35
Discrimination	right, must, protect, woman, gender, discrimin, equal, fight, law, defend, ensur, healthcar, social, justic, citizen, regardless, race, advoc, america, support, human	39.86
Paid Family Leave	famili, work, leav, job, make, wage, paid, econom, parent, support, polici, worker, workforc, childcar, children, week, take, countri, without, help	39.59%
Advocacy	women, right, congress, fight, legisl, stand, protect, continu, member, trump, plan, republican, support, advoc, law, presid, elect, offic, back, choic, decis, attack, nation, washington, repres, career, leader, voic, chang	36.76
Body Autonomy	abort, control, life, support, women, birth, decis, pregnanc, educ, pro, access, ex, mother, safe, legal, reduc, free, rate, unwant, comprehens, freedom, roe, teen, rare	28.96
Violence, Harassment, and Assault	violenc, women, sexual, domest, assault, survivor, legisl, victim, gun, secur, abus, prevent, school, children, address, campus, girl, color, improv, rape, amend, coverag	67.50

Table A17: Model Strategic Republican Male & Military Veteran Campaign Platform Subtopics within Military Issues

Description	Stems	%
Veteran's Healthcare	veteran, care, servic, serv, deserv, honor, provid, women, men, health, famili, support, sacrific, ensur, healthcar, job, qualiti, medic, prioriti, militari, reform, hero, resourc	58.45
Supporting Troops	support, militari, believ, protect, women, countri, defend, men, american, brave, homeland, militari, best, recogn	36.54
Military Strength	militari, forc, defens, secur, equip, fight, home, congress, deploy, ensur, arm, train, understand, combat, invest, fund, best, strong, experi, budget, soldier	33.16
Foreign Policy	nation, must, secur, world, militari, strong, america, unit, alli, defens, state, peac, israel, threat, support, strength, region, strengthen, leadership, american, global, understand, maintain, protect, valu, oppos, without, threaten, opportun, develop, econom, border, healthcar, share	27.11
Terrorism & Threats	ran, nuclear, north, presid, russia, korea, weapon, war, obama, terrorist, deal, threat, peac, middl, regim, alli, america, power, china, action, leader, terror, trump, capabl, militari, congress, foreign, stop	24.74

Table A18: Model Strategic Democratic Male & Democratic Female Campaign Platform Subtopics within Women's Issues

Description	Stems	%
Ballot Access	vote, right, voter, elect, day, registr, restor, automat, discrimin, suppress, earli, disenfranchis, strengthen, expand, effort, democraci, repres, gerrymand, access, ballot, elimin, constitut, restrict, ban, discriminatori, former, civil, republican	17.53
Sentencing Reform	prison, sentenc, drug, support, crime, peopl, justic, minimum, mandatori, violent, minor, incarcer, offens, end, reform, must, need, penalti, crimin, offend, time, rehabilit, law, act, violenc, mass, base, color, way, disproportion, stop, expung, employ, action, individu, includ, requir, percent	12.58
School-to-Prison Pipeline	system, prison, justic, crimin, end, school, incarcer, black, arrest, racial, white, must, communiti, children, color, pipelin, vulner, rate, student, imprison, abus, racism, program, dispar, record, bias, recidiv, push, disproportion, econom	11.42
Economic Impact of Incarceration	prison, incarcer, peopl, system, rate, rehabilit, sentenc, cost, spend, less, minimum, mass, money, world, number, effect, profit, increas, result, privat, court, crimin, public, approach	10.87
Black Female Pay Gap	women, communiti, equal, justic, racial, work, discrimin, color, econom, system, black, poverti, pay, job, opportun, gender, earn, wage, inequ, injustic, dollar, poor, end, wealth, white, race, fight, provid, gap, district, men, racism, man, paid	9.91
Policing Reform	polic, communiti, offic, justic, crime, offend, reform, law, system, gun, public, defend, crimin, violenc, window, fight, ensur, enforc, bail, kill, focus, effect, broken	9.24
Private Prisons	crimin, privat, percent, justic, facil, provid, incarcer, reform, increas, sentenc, prison, mental, polic, treatment, civil, prevent, need, enforc, state, one, protect, reduc, public, crime, cost, abus, offens, term, jail	8.90
Education Access	school, american, right, district, program, white, citi, achiev, fair, civil, equal, system, student, communiti, educ, public	8.40
Equality	justic, equal, american, system, law, must, civil, crimin, right, serv, race, reform, enforc, opportun, citizen, polic, liberti, corrupt, african, trump, profit, crime, punish, fair	8.15
Drug Convictions	marijuana, crimin, justic, black, law, regul, decrimin, prison, non, alcohol, color, medic, prohibit, opioid, african, violent, disproportion, equal	7.74
Minority Healthcare	health, program, women, access, death, pay, color, disproportion, enforc, mental, children, black, provid, rehabilit, disproportion, healthcar	3.26