ORIGINAL PAPER



Ideology and Gender in U.S. House Elections

Danielle M. Thomsen^{1,2}

© Springer Science+Business Media, LLC, part of Springer Nature 2018

Abstract

Studies of gender-ideology stereotypes suggest that voters evaluate male and female candidates in different ways, yet data limitations have hindered an analysis of candidate ideology, sex, and actual election outcomes. This article draws on a new dataset of male and female primary and general election candidates for the U.S. House of Representatives from 1980 to 2012. I find little evidence that the relationship between ideology and victory patterns differs for male and female candidates. Neither Republican nor Democratic women experience distinct electoral fates than ideologically similar men. Candidate sex and ideology do interact in other ways, however; Democratic women are more liberal than their male counterparts, and they are advantaged in primaries over Republican women as well as Democratic men. The findings have important implications for contemporary patterns of women's representation, and they extend our understanding of gender bias and neutrality in American elections.

Keywords Gender · Ideology · Congressional elections · Partisan gap

The underrepresentation of women in American politics has motivated more than three decades of political science research. At the national legislative level, the U.S. is ranked 100th worldwide, with women comprising only 19% of the House of Representatives (IPU 2017). Scholars have long sought to understand the extent to which the electoral environment hinders the advancement of women in politics. A host of studies in the 1990s found that "when women run, they win" at equal rates as their male counterparts (i.e., Burrell 1994, 2014; Carroll 1994; Cook 1998; Darcy et al. 1994; Duerst-Lahti 1998; Gaddie and Bullock 2000; Seltzer et al. 1997; Thomas and Wilcox 1998). Female candidates receive as many votes and raise as much money as similarly situated men, and the main conclusion was that "winning elections has

Published online: 28 September 2018

Center for the Study of Democratic Politics, Princeton University, Princeton, NJ 08544, USA



[☐] Danielle M. Thomsen dthomsen@uci.edu

Department of Political Science, University of California, Irvine, Social Science Plaza, 3151, Irvine, CA 92697, USA

nothing to do with candidate sex" (Seltzer et al. 1997, p. 79). Most of these analyses focused on general elections, but those on primary victory rates revealed the same patterns as well (Burrell 1994, 2014; Gaddie and Bullock 2000; Lawless and Pearson 2008; Palmer and Simon 2012).

At the same time, others have raised concerns that gender-neutral outcomes are not indicative of a gender-neutral electoral environment. Pearson and McGhee (2013) show that female candidates are more qualified than their male counterparts (see also Milyo and Schosberg 2000), and Fulton (2012) uncovers a gender difference in incumbent vote share once candidate quality is taken into account. Research on the intersection between candidate sex and ideology also suggests that women are perceived to be more liberal than men and that the relationship between ideology and election outcomes differs for male and female candidates as a result (Koch 2000, 2002; McDermott 1997, 1998). Republican women are believed to incur an additional penalty in the primary and receive an additional benefit in the general election than their male counterparts (King and Matland 2003). In contrast, Democratic women candidates are believed to be more likely to win the primary but less likely to win the general election than ideologically similar men (McDermott 1998).

Studies of gender-ideology stereotypes have focused on voter perceptions and evaluations of either hypothetical or actual candidates rather than candidate-level victory patterns. But as Dolan (2014) notes, it is important to evaluate the real-world influence of candidate sex in elections as well. Furthermore, we also have good reason to believe that the relationship between candidate ideology and election results does not differ for men and women. The evidence is mounting that male and female candidates are evaluated in largely similar ways with respect to media coverage, voter perceptions, and vote choice (e.g., Brooks 2013; Dolan 2004, 2014; Hayes and Lawless 2015; Hayes et al. 2014). In a context of rising polarization, party and ideology have increasingly been shown to matter more than the gender cue (Hayes 2011). Previous data limitations have hindered an analysis of ideology and sex in congressional elections, but this question matters for our understanding of gender bias and neutrality in American elections.

This article draws on a new dataset of male and female primary and general election candidates for the U.S. House of Representatives from 1980 to 2012 to examine the relationship among candidate ideology, sex, and election outcomes. Ideology is associated with primary and general election outcomes in ways we would expect. Among Republicans, conservative men as well as women are more likely to win the primary election and less likely to win the general election than their liberal counterparts; among Democrats, conservative men and women alike are less likely to win the primary and more likely to win the general election than their liberal co-partisans (Hall and Snyder 2015). Yet the relationship between ideology and election outcomes does not differ between male and female candidates at either the primary or general election stage. Neither Republican nor Democratic female candidates experience distinct electoral fates than ideologically similar men, and there is little evidence that female candidates incur additional gains or losses at the ballot box than their ideologically similar male counterparts. Traditional factors such as incumbency, campaign resources, and district partisanship are strongly associated with primary and general election victory patterns.



Candidate sex and ideology do interact in other ways, however, and the findings shed additional light on the partisan gap among female officeholders. A growing number of scholars have begun to examine why the percentage of Democratic women in Congress has increased steadily over the past thirty years and why Democratic women now outnumber Republican women nearly three to one (i.e., Cooperman and Oppenheimer 2001; Crowder-Meyer and Lauderdale 2014; Elder 2008; Thomsen 2015; Thomsen and Swers 2017). Democratic women are more liberal than their male counterparts, and in terms of victory patterns, they are advantaged, albeit slightly, in primaries over Republican women as well as Democratic men. Moreover, Democratic women far outnumber Republican women in the pool of primary candidates. In an era where primary contests are often the most crucial, these differential rates of primary victory and the dramatic partisan skew in the number of women who run have important implications for the gender composition of Congress.

Previous Research on Candidate Sex and Ideology

The relationship between candidate ideology and victory rates has largely been examined among incumbents (Brady et al. 2007; Canes-Wrone et al. 2002; Erikson and Wright 2000; Hirano et al. 2010; but see Hall and Snyder 2015). Several studies suggest that those with moderate voting records do better than extremists, at least in the general election (Ansolabehere et al. 2001; Burden 2004; Erikson and Wright 2000). Canes-Wrone et al. (2002) show that extremism is negatively associated with vote share and that Democrats (Republicans) with more liberal (conservative) voting records are less likely to be reelected. Yet it is widely believed that ideologues do benefit at the primary stage, and Brady et al. (2007) find that moderate incumbents are more likely to lose the primary than extremists (but see Hirano et al. 2010). In the most thorough analysis of non-incumbents, Hall and Snyder (2015) demonstrate that moderates suffer in the primary and benefit in the general election.

The main concern here is whether the relationship between ideology and victory rates differs for male and female candidates. Others have examined ideology in conjunction with gender and the types of districts in which men and women run for Congress and win. For example, Frederick (2009) uses DW-NOMINATE scores to analyze ideological changes in the makeup of male and female members of Congress over time. He shows that women in the U.S. House are more divided along partisan and ideological lines than at any point over the past two decades and that they are even more ideologically distant than their male counterparts. In their comprehensive study of House elections, Palmer and Simon (2012) find that female candidates come from districts that are smaller, urban, racially and ethnically diverse, wealthier, and more educated. Yet these studies are either limited to members of Congress or conducted at the district level rather than the individual level. There are no previous analyses of the relationship among candidate ideology, sex, and election outcomes at the candidate level.

Scholars have also uncovered differences in how voters evaluate the ideology of male and female candidates, with women perceived to be more liberal than their



male counterparts (Koch 2000, 2002; McDermott 1997, 1998). An explicit implication of this stereotype is that the relationship between ideology and election outcomes differs for male and female candidates and that Republican and Democratic women are helped or hurt at the ballot box. As McDermott (1997, p. 276) explains, "If voters are assuming that women candidates are more liberal than candidates of the same party, ideology should have a stronger impact on the vote in races with Democratic women running and less of an impact on the vote in races with Republican women running." Koch (2000, p. 414) similarly notes, "For Democratic female candidates, gender ideological stereotypes increase the distance between female candidates and voters, increasing the likelihood citizens will vote for the Republican opponent, ceteris paribus. For Republican female candidates, gender stereotypes for ideology reduce the distance between them and most voters, thereby increasing their electoral prospects." The opposite pattern is expected to occur in the primary stage. As King and Matland (2003, p. 606) write, "To the extent conservatives are active in primaries, the impression that female Republicans are more liberal than otherwise identical male candidates works against women trying to win votes in the nomination."

In sum, a host of studies at the voter level suggest that conservatism has a stronger impact on vote choice for Republican women in primary elections and for Democratic women in general elections than their male co-partisans because gender-ideology stereotypes increase the perceived distance between female candidates and voters. Conversely, conservatism is posited to have a weaker impact on vote choice for Democratic women in primaries and for Republican women in general elections because stereotypes decrease the perceived distance between female candidates and voters. As discussed above, the effects of these perceptions are expected to matter for election outcomes. Ideological conservatism is believed to be negatively and positively related to primary election victory for female Republicans and Democrats, respectively, and positively and negatively related to general election victory for female Republicans and Democrats, respectively (Koch 2000, 2002; King and Matland 2003; McDermott 1997, 1998). To be clear, the question of interest here is not whether gender-ideology stereotypes do or do not exist, and it is quite possible that stereotypes exist but do not shape outcomes. The contribution is to instead examine whether the electoral gains and losses posited above map onto actual election results.

Candidate Ideology and Sex in the Contemporary Context: Theoretical Expectations

Several recent studies suggest that candidate sex matters in other ways on the campaign trail as well. For example, voters do not ascribe feminine stereotypes to female politicians, and as a result, female politicians seem to be losing on male stereotypical qualities but not receiving an advantage on qualities typical of women (Schneider and Bos 2014). Cassese and Holman (2017) show that women candidates are vulnerable to negative attacks that emphasize traits and policies stereotypically associated with their party. Times of security threat also amplify the negative effect of



gender stereotypes on the evaluations of Democratic women candidates (Holman et al. 2016). Ditonto et al. (2014) finds that gender effects come from differences in the amounts and types of information that voters search for during a campaign. There is significant variation in gender stereotype reliance across individuals as well (Bauer 2015). All of these studies help us to understand how voters perceive candidates through a gendered lens. However, the main goal here is to draw on aggregate election results rather than individual voter behavior to further understand the obstacles that women face in winning elections.

Data limitations have hindered a systematic analysis of ideology and gender in elections, yet we also have good reason to believe that the relationship between candidate ideology and election outcomes does not differ for men and women. A growing body of scholarship has shown that factors other than candidate sex have far greater implications for election outcomes. Dolan (2004, 2014) has long argued that vote choice is shaped by partisanship and incumbency rather than candidate sex. Hayes and Lawless (2015) also demonstrate that media coverage and voter evaluations stem primarily from partisanship and ideology, not the sex of the candidate. Brooks (2013) finds little evidence that the public makes less favorable assumptions about women candidates or that women candidates are held to a higher standard than men. Even studies of gender-ideology stereotypes show that the effect of candidate sex is smaller than that of other predictors of vote choice, such as incumbency, party, and ideology (Koch 2000; McDermott 1997). For example, McDermott (1997) finds that in open seat races with a Democratic woman and a Republican man, the probability that the most liberal voters support the Republican is 0.01, compared to 0.93 for the most conservative voters; in races with only men these values change to 0.03 and 0.90, respectively. In other words, while candidate sex changes the probability of voting for a Republican by 0.02 or 0.03, respondent ideology does so by 0.92 and $0.87.^{1}$

In addition, the broader political context has changed dramatically over the past few decades. Candidate sex may convey less information as women candidates have become more common and as political elites and the public have become more receptive of women in politics (Hayes and Lawless 2015). Moreover, the two parties have continued to polarize ideologically, which has further increased the salience of party and ideology in U.S. elections. Congressional districts have become more homogenous as the electoral bases of the parties shifted from being diverse to more uniform (Stonecash et al. 2003). Voters are better sorted along party lines, and they increasingly match their partisanship with their ideology (Hetherington 2001; Levendusky 2009). Electoral competition in House elections has declined as a result of partisan consistency in voting behavior, and fewer representatives come from districts that lean toward the opposite party (Abramowitz et al. 2006; Jacobson

¹ The magnitude of the effect of candidate sex on perceptions of candidate ideology is much smaller than that of factors like respondent ideology, feeling thermometer ratings, and perceptions of party ideology (Koch 2002, p. 421). Moreover, the size of the effect of actual candidate ideology on voter perceptions of her ideology is between two and four times that of candidate sex (Koch 2002, p. 421).



2015). Factors such as party and incumbency are more likely to matter for election outcomes, especially in the current partisan era.

These findings would instead suggest that the relationship between conservatism and election outcomes does not differ for male and female candidates, at least at the congressional level. It is possible, however, that candidate ideology and sex do interact in other ways. Differences in the ideological positions of male and female candidates may matter for the election of women, especially on the Democratic side. Frederick (2009) shows that Democratic women in Congress have remained to the left of their male counterparts. Democratic women may have higher rates of primary victory than Democratic men given that liberal Democrats are more likely to win the primary than conservative Democrats (Hall and Snyder 2015). Lawless and Pearson (2008) indeed find that in virtually every election from 1990 to 2004, Democratic women received more votes than Democratic men in congressional primaries. The reason for these differences in ideology is beyond the scope of the article, but it may reflect the cultures of the parties. While the Democratic Party embraces group differences, Republican candidates are united by a common conservative identity (Freeman 1986; Grossman and Hopkins 2015). In short, ideology and sex may shape patterns of women's representation, but not because the relationship between ideology and victory rates differs for male and female candidates.

It is important to note that the role of candidate sex in elections may differ across levels of office. The focus here is on congressional candidates, but it is possible that gendered evaluations in congressional campaigns are distinct from those at other levels of office. For example, Lawless (2004) and Streb et al. (2008) find that voters may still harbor negative perceptions of women running for president even if they do not feel the same way about women running for other offices. Huddy and Terkildsen (1993) also suggest that gender stereotypes matter in different ways at different levels of office, and others leave open the possibility that a glass ceiling may remain for women who seek the presidency in particular (i.e., Brooks 2013).

Descriptive Changes in Candidate Ideology

This article uses newly available ideology data to examine the relationship among candidate ideology, sex, and victory patterns. The analyses are based on primary and general election results for the U.S. House of Representatives from 1980 to 2012. The dataset includes 24,125 primary candidates and 13,660 general election candidates (Republicans and Democrats). The election results were obtained from the Federal Election Commission and the *America Votes* series (Scammon et al. 1990–2006). These data were then merged with Bonica's (2014) ideology estimates of U.S. House candidates (CFscores). Bonica uses campaign finance records to place the vast majority of candidates, winners as well as losers, on a common ideology



scale.² Bonica et al. (2013) and Bonica (2014) have conducted a series of analyses to establish the validity of the scores. They are highly correlated with measures of legislator ideology that are derived from roll-call votes, most notably Poole and Rosenthal's (2007) DW-NOMINATE scores.

There are several reasons why CFscores are particularly useful for the purposes here. The main advantage is that we can analyze the ideology of those who won as well as lost their races, rather than just incumbents. Of the full sample of those who appeared on the ballot, 17,639 (73%) of the primary candidates and 12,632 (92%) of the general election candidates have CFscores. Second, the data span 17 election cycles and allow for a long-term analysis. Lastly, due to the size of the dataset, there is ample variation across a host of key political and electoral variables such as incumbency and district partisanship.

One potential concern is that CFscores differ systematically for those who are and are not elected to office. Bonica (2014) addresses this concern by showing that the scores are robust to changes in incumbency status. He estimates two distinct ideal points for when the candidate ran as an incumbent and as a non-incumbent and shows that non-incumbent CFscores are correlated with incumbent CFscores at 0.96. In addition, the relationship between non-incumbent CFscores and future DW-NOMINATE scores is no weaker than it is for incumbent CFscores (Bonica 2014, pp. 371–2).⁴ A second possible concern is that CFscores reflect gender biases of donors and that women candidates will have more liberal CFscores than would be apparent from their voting behavior because donors perceive them to be more liberal than men, yet this is somewhat alleviated by the fact that the correlation between DW-NOMINATE scores and CFscores does not differ for male and female candidates (0.92 for both). More generally, the benefits of using the CFscores far outweigh the tradeoffs, and they are the best available metric for the purposes here.

Figure 1 shows the average ideology of male and female primary and general election candidates from 1980 to $2012.^5$ CFscores range from approximately -1.5 to 1.5, with higher values indicating more conservative positions. The trends are similar across primary and general election candidates. Republican women candidates were to the left of their male counterparts in the 1990s (p < 0.01), but this pattern

⁵ These averages include races in which candidates do and do not face opposition.



² See Bonica et al. (2013) and Bonica (2014) for a full description of the data and validation (see also Bonica et al. 2013 for an application to economic inequality). I use the dynamic CFscores in the analyses below, but the results are very similar with the static CFscores.

³ The DIME dataset includes candidates who filed with the FEC. Candidates who do not exceed the \$5000 threshold of campaign fundraising are not required to file. Those who are excluded are thus more likely to be long-shot candidates, but it is not clear that they are more likely to be ideologues or moderates. Even so, these excluded candidates comprise only 6% of primary winners and 0.02% of general election winners, so they are highly unlikely to have an influence on policy outcomes or women's representation. Furthermore, these data provide the best publicly available measures of the ideological positions of congressional winners and losers over time.

⁴ Bonica suggests that contribution records may even offer a more complete measure of ideology than does legislative voting. Contributors can consider factors beyond candidates' voting behavior, such as policy goals, endorsements, or cultural values. Yet Bonica's goal is not to replicate DW-NOMINATE scores, and he notes that the two measures should be viewed as complementary.

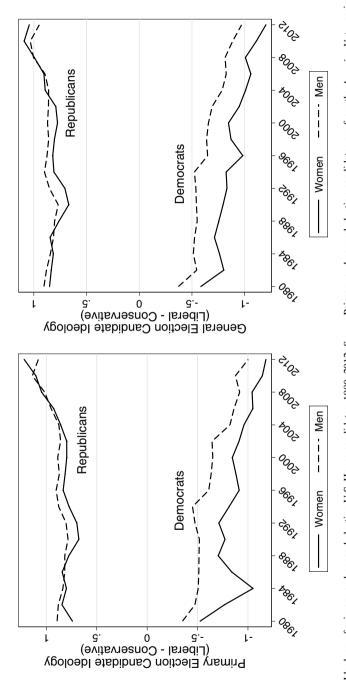


Fig. 1 Ideology of primary and general election U.S. House candidates, 1980–2012. Source Primary and general election candidates are from the America Votes series and the FEC website. Ideology estimates are from Bonica (2014)



was not as evident in the 1980s. This is somewhat surprising given that the Republican women who held office during this time were more liberal than the Republican men (Frederick 2009; Welch 1985). GOP female primary candidates had an average ideology score of 0.80 and 0.78 in the 1980s and 1990s, respectively, compared to 0.85 and 0.87 for Republican men. These differences again disappeared by the mid-2000s. Since then, women running in the primary and general election have been at least as conservative as the men, though the differences are not statistically significant. The average ideology score of female and male Republican primary candidates in the 2000s was 1.01 and 1.01, respectively.

On the Democratic side, women candidates in both primary and general elections have remained to the left of their male co-partisans throughout this time period, and the difference is significant in every election (p < 0.01). Democratic women had an average score of -0.80 in the 1980s and -0.83 in the 1990s, respectively, compared to -0.47 and -0.55 for Democratic men. The gap has been similar in recent elections as well, with Democratic women and men having an average score of -1.06 and -0.86, respectively, in the 2000s. The diminishing of the ideological gap between male and female Republican candidates and the continued liberalism of female Democratic candidates relative to Democratic men are similar to Frederick's (2009, pp. 185–6) findings with DW-NOMINATE scores.

What is clear is that Republican and Democratic candidates, men and women alike, are moving away from the ideological center. This trend emerges among primary and general election candidates. Indeed, the changes over time are more dramatic than the disparity between men and women at any specific point in time. Republican women had an average ideology score of 0.74 and 0.68 in 1980 and 1990, respectively, but this figure increased to 0.80 in 2000 and 1.10 in 2010. Similarly, the average score of Republican men was 0.89 in 1980 and 0.78 in 1990, versus 0.89 in 2000 and 1.14 in 2010. The patterns are the same for Democrats. The average score of Democratic women was -0.53 in 1980, -0.77 in 1990, -0.84 in 2000, and -1.14 in 2010. Democratic men also became more liberal, with scores of -0.35 in 1980, -0.52 in 1990, -0.65 in 2000, and -0.88 in 2010. In sum, both men and women have become more polarized over the last thirty years, and the question of how candidate ideology and sex are associated with election outcomes is even more important as the parties have drifted apart.

Data and Method

The remainder of the article examines the linkages among candidate sex, ideology, and victory rates, and I use a series of regressions to test whether the relationship between ideology and election outcomes differs for male and female candidates. Candidate ideology is measured with Bonica's CFscores, and CFscores are coded so that higher values correspond to ideological conservatism.⁶ Candidate sex was

⁶ Ideology could also be measured as liberalism, but I opted to use this measure in light of the above research on whether conservatism has a stronger effect on election outcomes for female candidates.



obtained in part from this dataset and through additional online and newspaper searches. The gender breakdown of primary candidates is similar to that in Lawless and Pearson (2008), which provides additional validation. A total of 3035 and 1753 women ran in U.S. House primaries and general elections, respectively, and women comprised 12.6% of all primary candidates and 12.8% of all general election candidates. This figure is higher than the average of 8% reported by Lawless and Pearson (2008) because of the difference in time periods. Of the full sample of primary and general election female candidates, 2380 and 1644 have CFscores (78% and 94%, respectively). Due to the focus on ideology, the empirical analyses include only candidates with CFscores.

I account for several political and electoral factors shown to influence victory patterns. I include a dummy variable for whether or not the candidate is an incumbent, as the vast majority of incumbents win the primary and general election. Incumbency was obtained from Bonica's dataset and confirmed through additional merges with Jacobson's (2013) congressional elections data and Pettigrew et al.'s (2014) data of House primary candidates.⁸ In addition, the number of primary candidates is expected to be negatively associated with winning the primary (Lawless and Pearson 2008) but positively associated with winning the general election. I include the total number of primary candidates as well as this variable squared, as the negative effect of additional candidates should diminish as the number of competitors increases.⁹ Candidates who raise more money are also expected to be more likely to win (Hall and Snyder 2015). Contributions were obtained from Bonica's dataset and measured as logged values of total campaign receipts. I also include a dummy variable to control for extreme ideological outliers, measured as those who are the most extreme 1 percent of their party. Palmer and Simon (2008, 2012) and Elder (2008) demonstrate that district and regional characteristics influence the election of women to office as well. Like Palmer and Simon (2012), district partisanship is measured as the proportion of the two-party vote won by the Republican candidate in presidential elections (Jacobson 2013). Republicans are expected to be less likely to win the primary but more likely to win the general election in more heavily Republican districts, and the opposite pattern is expected to occur for Democratic candidates (Stone and Maisel 2003). Lastly, state and year fixed effects are included in all of the models. 10

¹⁰ I also ran the models with controls for partisan eras (1980–1992; 1994–2004; 2006–2012), and the results are virtually identical to those presented below (see Table 3). In addition, I account for whether it was a presidential election year and whether the candidate was running in the South, and the results are the same (see Table 4). Standard errors are clustered by race in the primary models.



⁷ Candidate sex was unable to be identified in 13 cases.

⁸ Pettigrew et al.'s (2014) data and the data presented here are virtually identical. There are very minor discrepancies due to the omission of a few states and/or districts in a handful of years, but the fact that they were collected independently provides further validation to both datasets.

⁹ I calculated the total number of primary candidates by party, congressional district, and year. The number of candidates was calculated by congressional district and year in states where the top two vote getters advance to the general, regardless of party (i.e., CA, LA, and WA in various cycles).

Table 1 Candidate ideology, sex, and primary and general election outcomes

	DV: Win Primary Election		DV: Win General Election	
	(1: Republicans)	(2: Democrats)	(3: Republicans)	(4: Democrats)
Ideological conservatism	0.03** (0.01)	- 0.07** (0.01)	- 0.09** (0.01)	0.10** (0.01)
Woman	- 0.04 (0.03)	0.06* (0.02)	0.01 (0.03)	- 0.06* (0.02)
Ideological conserva- tism×woman	0.02 (0.03)	0.02 (0.02)	- 0.03 (0.03)	- 0.04 (0.02)
Incumbent	0.42** (0.01)	0.42** (0.01)	0.65** (0.01)	0.62** (0.01)
Number of primary candidates	- 0.08** (0.01)	- 0.06** (0.01)	0.05** (0.01)	0.04** (0.00)
Number of primary candidates squared	0.00** (0.00)	0.00** (0.00)	0.00 (0.00)	- 0.00 (0.00)
Logged campaign receipts	0.06** (0.00)	0.05** (0.00)	0.02** (0.00)	0.02** (0.00)
Extreme ideologue	- 0.13** (0.04)	- 0.22** (0.03)	- 0.02 (0.04)	0.08 (0.05)
Republican presidential vote share	- 0.11** (0.01)	0.06** (0.00)	0.10** (0.00)	- 0.09** (0.00)
Constant	0.40** (0.07)	- 0.21* (0.10)	- 0.46** (0.08)	0.29** (0.08)
Number of observations	5097	4933	5735	5973
\mathbb{R}^2	0.34	0.39	0.69	0.70

Source Ideology estimates are from Bonica (2014). Entries are OLS regression coefficients with standard errors in parentheses. All models include state and year fixed effects

Results

The main hypothesis is that the relationship between ideology and election outcomes is unlikely to differ for male and female candidates in the contemporary partisan context. Conservative Republicans are predicted to be more likely to win the primary and less likely to win the general election, and conservative Democrats are predicted to be less likely to win the primary and more likely to win the general election (Hall and Snyder 2015); however, the interaction between ideological conservatism and sex is not expected to be significant.

The results are presented in Table 1. In columns 1 and 2, the dependent variable is whether the candidate won the primary; in columns 3 and 4, the dependent variable is whether the candidate won the general election. ¹² We can see that the

¹² I also ran logistic regression models, and these results are presented in Table 5. I also present the most basic specification of the models with ideology, sex, the interaction term, and incumbent (Table 6). Lastly, I ran the models with primary and general election vote share as the dependent variable (Table 7),



^{**}p < 0.01, *p < 0.05

¹¹ Like Lawless and Pearson (2008), I exclude primary and general election candidates who are unopposed. Of the 17,639 primary candidates with CFscores, 7606 (43%) were unopposed; of the 12,632 general election candidates with CFscores, 916 were unopposed (7%). This figure is higher than the percentage of unopposed candidates in the full sample of 24,125 primary candidates (35%), because those with CFscores were more likely to run unopposed than those without CFscores (43% and 12%, respectively). Since the focus is on the interaction between candidate ideology and sex, the candidates with ideology scores are of primary interest here.

interaction coefficient is not statistically significant across the primary and general election models, and there is little evidence that the relationship between ideological conservatism and victory rates differs for male and female candidates. ¹³ Although we cannot definitively rule out an effect as the standard errors are quite large, the coefficient is substantively small across models. ¹⁴

Figures 2 and 3 show the predicted probability of winning the primary and general election, respectively, across male and female candidates. The left panels display the values for Democrats and the right panels display those for Republicans. 15 Among men and women, conservative Republicans are more likely to win the primary and less likely to win the general election than their liberal co-partisans, and conservative Democrats are less likely to win the primary and more likely to win the general election than their liberal co-partisans. 16 Various current and former members of Congress are noted in the figures to make the discussion more concrete. For instance, the probability of winning the primary is 48% for a liberal male Democratic candidate like Chris Van Hollen (MD) and 44% for a moderate like Steny Hoyer (MD). The same pattern emerges among Democratic women: the likelihood of victory is 50% for a liberal woman like Nancy Pelosi (CA) and 48% for a moderate like Blanche Lincoln (AR). For Republicans, the probability of primary victory is 43% for a conservative male candidate like Paul Ryan (WI) and 41% for a moderate like Steve LaTourette (OH). Similarly, for a conservative female candidate like Marsha Blackburn (TN), the likelihood of winning is 41%, compared to 37% for a moderate like Connie Morella (MD). The trends are the same for men and women in both parties.

Figure 3 displays the predicted values for general election outcomes. Among Republicans, the likelihood of winning the general election is 22 and 19% for conservative candidates like Ryan and Blackburn, compared to 27 and 29% for moderate candidates like LaTourette and Morella. Among Democrats, the probability of general election victory is 21 and 20% for liberal candidates like Van Hollen and Pelosi, compared to 26 and 23% for moderate candidates like Hoyer and Lincoln. The relationship is again the same for men and women in both parties.

Footnote 12 (continued)

but I opted to focus on victory rates because they are of ultimate relevance for patterns of women's representation. Across specifications, the results remain largely the same, and the interaction term does not reach conventional levels of significance. The sole exception is the general election model for Democrats in Table 7, but again, the size of the coefficient is small, and the overwhelming pattern indicates statistical and substantive insignificance across models.

¹⁶ The results conform to those in Hall and Snyder (2015), though their focus is not on candidate gender. Their sample differs from that in Table 1 as Hall and Snyder analyze races with no incumbent, but the results are similar to those presented here.



¹³ Marginal effect graphs are presented in Figs. 4 and 5. The effect of conservatism on primary and general election outcomes does not differ for male and female candidates in either party.

¹⁴ It is possible that the pooled models mask variation over time and that sex and ideology were associated with victory rates in the 1980s and early 1990s. To examine this question, I ran separate models for each election year (see Lawless and Pearson 2008 and Frederick 2009 for similar empirical approaches). The results are presented in Fig. 6. In general, the relationship between ideology and election outcomes does not differ for men and women across this 30-year period.

¹⁵ All other variables are set at their mean or mode so these values are for non-incumbents.

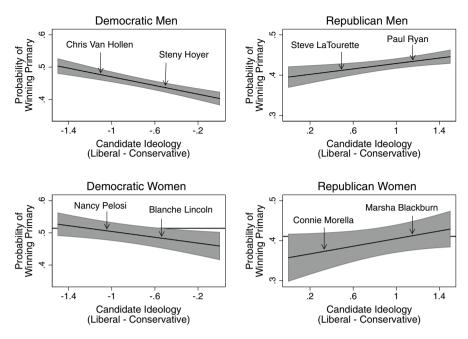


Fig. 2 Predicted probability of primary election victory, by party and sex. *Note* Values are calculated from the models in columns 1 and 2 in Table 1

Perhaps one reason the interaction is not significant is that traditional factors such as incumbency, campaign resources, and district partisanship are enormously important for election outcomes (i.e., Burrell 1994, 2014; Dolan 2004, 2014; Hayes 2011; Lawless and Pearson 2008; Palmer and Simon 2008, 2012). As expected, incumbents and those who raise more money are more likely to win the primary and general election. The huge effect of incumbency in particular echoes a long line of research on how consistently successful incumbents are at winning both primary and general elections (i.e., Jacobson 2013). In addition, candidates are less likely to win the primary but more likely to win the general election as the number of primary competitors increases; the squared term is positive and significant in primary elections but the coefficient is very small. Very extreme ideological outliers are also less likely to win the primary. Finally, candidates in districts with more favorable partisan leanings are less likely to win the primary and more likely to win the general election (Stone and Maisel 2003).

¹⁷ Candidate quality has long been a key factor in congressional elections as well, but data limitations prevent its inclusion here. Pettigrew et al.'s (2014) dataset includes the previous political experience of primary candidates from 2000 to 2010, and this variable is correlated with campaign receipts at 0.60 and with incumbent at 0.82 so I am confident the models are capturing a key dimension of quality. Yet I also ran the models with this measure of candidate quality among non-incumbents from 2000 to 2010, and the interaction term is insignificant (see Table 8).



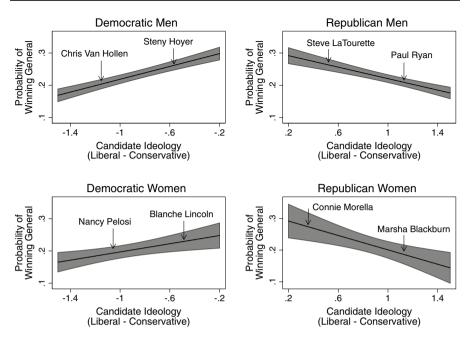


Fig. 3 Predicted probability of general election victory, by party and sex. *Note* Values are calculated from the models in columns 3 and 4 in Table 1

The preceding analysis provided little evidence that the relationship between ideology and election outcomes differs, on average, for male and female candidates. Yet we can also examine this question by looking at specific primary matchups between male and female candidates. In particular, we can test whether Republican women are as likely to win the primary as equally conservative male alternatives in the race and whether Democratic women are as likely to win when running against ideologically similar men. To examine victory rates between male and female primary competitors, I created five ideology categories for Republican and Democratic candidates, and I focus only on primary races that have male and female competitors in the same ideology category. ¹⁸ Given the reduced sample size and the fact that virtually all of the incumbents who sought reelection won their primaries, the analysis is restricted to open seat races. I control for the number of primary candidates, campaign receipts, and ideology category. The aim is to analyze whether Republican and Democratic women are as likely to win the primary as ideologically similar male competitors.

The results are shown in Table 2, and they echo those above. Among open-seat candidates, Republican women are not significantly less likely to win the primary than ideologically similar men, and Democratic women are not significantly more

¹⁸ Male and female candidates were statistically indistinguishable in all five categories. The ideology category controls are not shown in Table 2, but the coefficients are not significant.



Table 2 The relationship between candidate sex and primary election outcomes for ideologically similar male and female competitors

	(1: Republicans)	(2: Democrats)
Woman	0.05 (0.06)	0.08 (0.05)
Number of primary candidates	- 0.02* (0.01)	- 0.02** (0.01)
Logged campaign receipts	0.11** (0.01)	0.10** (0.01)
Constant	- 0.82** (0.20)	- 0.82** (0.17)
Number of observations	206	269
R^2	0.26	0.24

Source Ideology estimates are from Bonica (2014). Entries are OLS regression coefficients with standard errors in parentheses

likely to do so. The number of primary candidates and campaign receipts are again associated with victory rates.

Although ideologically similar male and female candidates seem to fare equally well in primary and general elections, candidate ideology and sex do intersect in other ways, particularly on the Democratic side. As illustrated in Fig. 1, Democratic women have been to the left of their male counterparts for the last three decades, and this ideological difference has implications for primary and general election victory rates. While Democratic men still dramatically outnumber women in the candidate pool, a greater percentage of female Democratic non-incumbents won the primary (46% of women and 42% of men; p < 0.05). Among non-incumbents, the predicted probability that the "typical" Democratic female candidate wins the primary is 0.50, on average, compared to 0.44 for the typical Democratic man. In fact, Democratic women have higher rates of primary victory than Democratic men, Republican women, and Republican men (p < 0.05 for all groups) (see also Lawless and Pearson 2008). At the same time, the predicted probability that Democratic non-incumbent women candidates win the general election is lower than that for Democratic men (0.20 and 0.26, respectively).

Ideology differences among congressional candidates have been smaller on the Republican side. Roughly equal percentages of Republican male and female non-incumbents won the primary (42% and 41%, respectively). Republican women are less likely to win the general election than Republican men (19% and 14%, respectively; p < 0.05), but this difference is not significant once electoral and partisan factors are taken into account. There is no difference in the primary and general election victory rates between male and female incumbents in either party. It is also important to consider these findings in light of contemporary patterns of women's representation. In an era where primary contests are often the most critical, one avenue for future research is to further examine why the Democratic Party has been

¹⁹ These values are calculated from the models in Table 1. Additional models that exclude the interaction term are provided in Tables 9 and 10. In the primary models, candidate sex is insignificant for Republicans but positive and significant for Democrats, with and without the inclusion of ideology. In the general election models, candidate sex is insignificant for Republicans but negative and significant for Democrats, with and without the inclusion of ideology.



^{**}p<0.01, *p<0.05

more successful than the Republican Party at grooming female candidates who are ideologically congruent with the activist base of the party.

Indeed, the main advantage that Democratic women have relative to Republican women is their greater numerical makeup of the primary candidate pool (see also Burrell 2014). In the sample here, women constitute 18% of Democratic primary candidates but only 11% of Republican primary candidates, and Democratic women candidates outnumber Republican women more than one and a half to one. This amounts to a difference of about 300 women candidates during this time period (870 Democratic women and 570 Republican women). Of the women who ran, 482 Democratic women and 273 Republican women won (55% and 48%, respectively). Thus, Democratic women win the primary at a slightly higher rate due in part to their liberal ideological leanings; and despite their slight disadvantage in the general election, they are much more numerous in the candidate pool than Republican women. Although factors such as incumbency, campaign resources, and patterns of electoral competition have a far greater impact on election outcomes than candidate sex, ideology and gender do intersect in ways that contribute to the steady increase in the number of the Democratic women and the widening of the partisan gap among women in Congress.

Conclusion

This article builds on the gender and politics literature in several important ways. First, I draw on a new dataset of U.S. House candidates to provide a systematic analysis of candidate sex, ideology, and primary and general election outcomes from 1980 to 2012. Previous research has shown that gender-ideology stereotypes affect the perceived distance between voters and female candidates, yet data limitations have hindered an analysis of gender, ideology, and actual election results. At the same time, a growing number of scholars have suggested that factors other than candidate sex play a more prominent role in American elections, and the divides are often along ideological and partisan lines in the contemporary context. Indeed, I find little evidence that the relationship between candidate ideology and election outcomes differs for men and women. Furthermore, in comparisons of ideologically similar male and female primary competitors, Republican women do not fare significantly worse nor do Democratic women fare significantly better than their male counterparts. Traditional variables such as incumbency, campaign resources, and district partisanship are strongly associated with electoral success. The influence of incumbency in particular in both primary and general elections is consistent with a long line of research and highlights the key role that seat type plays in congressional elections.

Second, candidate ideology and sex do interact and intersect in other ways that contribute to recent partisan trends in women's representation. Democratic women have remained to the left of their male counterparts, and they are advantaged, however slightly, in primaries over Republican women as well as Democratic men. Moreover, liberal Democratic women far outnumber conservative Republican women in the pool of primary candidates. The higher rate of victory for Democratic women and their larger presence in the candidate pool bode well for future patterns



of women's representation in the Democratic Party. By comparison, Republican women are dramatically underrepresented in the candidate pool, and Republican women as a group face much higher barriers to equal political representation than Democratic women. Burrell (2014) also details the large differences in the number and success rates of Republican and Democratic women, and more attention should be given to the partisan distribution of the pool of female candidates in addition to on average victory patterns and rates of candidate entry.

Third, the findings demonstrate how the composition of congressional candidates has changed over the last thirty years. Ideology has become a central part of American politics, and it shapes who runs for Congress as well as their behavior in office (Osborn 2012; Thomsen 2015). Male and female candidates, winners as well as losers, are now first and foremost partisans who adhere to the party line. These ideological shifts have profound consequences for the policymaking process, and particularly for debates on women's issues. In the contemporary partisan environment, male and female legislators enter office with a strong party identity, and they have diverse ideas about how to represent the interests of their constituents (Osborn 2012). While women's issues have historically been associated with feminist values, conservative women are instead likely to pursue policies that are linked with traditional family values (Osborn 2012; Swers 2014). And even in cases where women would be inclined to find common ground, the gulf in the political middle further limits the legislative opportunities for women to do so.

Finally, the results highlight the importance of using a variety of methodological approaches to tackle broad questions in gender and politics. Experimental studies and individual-level analyses of voter perceptions help us to understand the microprocesses that underlie macro-level trends, yet it is also important to examine how these processes map on to the broader political environment. Electoral and partisan dynamics have a significant impact on election outcomes for both male and female candidates, and future research on women's underrepresentation should consider how to include contextual variables more prominently in our designs and analyses. Understanding the linkages between candidate sex and a host of other factors is crucial for considering remedies to the dearth of women in office. The electoral environment intersects with gender in some ways and not others, and it is valuable to test our expectations across contexts and with multiple types of data. Only then can we gain better insights into gender bias in elections and the various causes of women's underrepresentation in elected office.

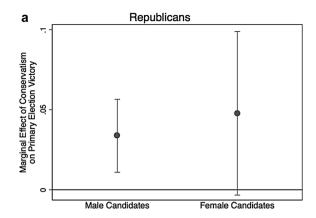
Acknowledgements Previous versions of the article were presented at the annual meetings of the Midwest Political Science Association and the Southern Political Science Association. I am grateful to the Dirksen Congressional Center and the Political Parity Project for their support of the data collection. I thank Rosalyn Cooperman, Melissa Deckman, Chris Faricy, Shana Gadarian, Andy Hall, Katherine Michelmore, and three anonymous reviewers for their helpful feedback. I am grateful to Spencer Piston for his comments on multiple drafts of the article.

Appendix

See Figs. 4, 5, and 6 and Tables 3, 4, 5, 6, 7, 8, 9, and 10.



Fig. 4 Marginal effect of conservatism on primary election victory, by party. *Note* Values are calculated from the models in Table 1. The graphs show the marginal effect of ideological conservatism on primary election victory by party. The effect is positive for Republicans and negative for Democrats, but it does not differ for male and female candidates in either party



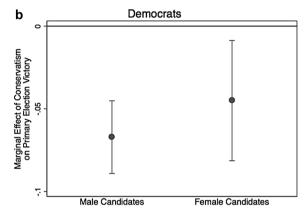
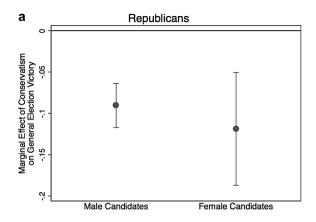
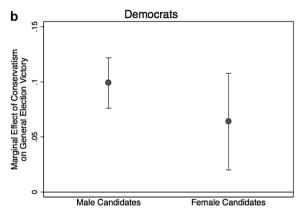




Fig. 5 Marginal effect of conservatism on general election victory, by party. *Note* Values are calculated from the models in Table 1. The graphs show the marginal effect of ideological conservatism on general election victory by party. The effect is negative for Republicans and positive for Democrats, but it does not differ for male and female candidates in either party







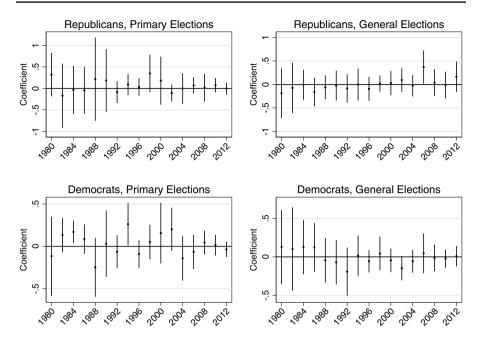


Fig. 6 The interactive effect of ideological conservatism and gender on primary and general election outcomes, by election year and party. *Note* The coefficients and 95% confidence intervals are calculated by year from the party-specific primary and general election models in Table 1. The interaction is significant only three times during this period (democratic primaries in 1984 and 1994 and republican general elections in 2006)



Table 3 Candidate ideology, sex, and primary and general election outcomes, with partisan eras

	DV: Win Primary Election		DV: Win General	Election
	(1: Republicans)	(2: Democrats)	(3: Republicans)	(4: Democrats)
Ideological conservatism	0.03** (0.01)	- 0.07** (0.01)	- 0.09** (0.01)	0.10** (0.01)
Woman	- 0.04 (0.03)	0.06* (0.02)	0.01 (0.03)	- 0.06* (0.02)
Ideological conserva- tism×woman	0.02 (0.03)	0.02 (0.02)	- 0.03 (0.03)	- 0.04 (0.02)
Incumbent	0.42** (0.01)	0.42** (0.01)	0.65** (0.01)	0.62** (0.01)
Number of primary candidates	- 0.08** (0.01)	- 0.06** (0.01)	0.05** (0.01)	0.04** (0.00)
Number of primary candidates squared	0.00** (0.00)	0.00** (0.00)	0.00 (0.00)	- 0.00 (0.00)
Logged campaign receipts	0.06** (0.00)	0.05** (0.00)	0.02** (0.00)	0.02** (0.00)
Extreme ideologue	- 0.13** (0.04)	- 0.22** (0.03)	- 0.02 (0.04)	0.08 (0.05)
Republican presidential vote share	- 0.11** (0.01)	0.06** (0.00)	0.10** (0.00)	- 0.09** (0.00)
First partisan era (1980–1992)	0.04 (0.02)	0.05* (0.02)	0.04 (0.02)	0.02 (0.02)
Second partisan era (1994–2004)	0.05* (0.02)	- 0.02 (0.02)	0.04 (0.02)	0.00 (0.02)
Constant	0.40** (0.07)	- 0.21* (0.10)	- 0.46** (0.08)	0.29** (0.08)
Number of observations	5097	4933	5735	5973
\mathbb{R}^2	0.34	0.39	0.69	0.70

Source Ideology estimates are from Bonica (2014). Entries are OLS regression coefficients with standard errors in parentheses. All models include state and year fixed effects



^{**}p<0.01, *p<0.05

Table 4 Candidate ideology, sex, and primary and general election outcomes, with south and presidential year

	DV: Win Primary Election		DV: Win General Election	no
	(1: RepublicansRepublicans)	(2: Democrats)	(3: Republicans)	(4: Democrats)
Ideological conservatism	0.03** (0.01)	-0.07**(0.01)	- 0.09** (0.01)	0.10** (0.01)
Woman	- 0.04 (0.03)	0.06*(0.02)	0.01 (0.03)	-0.06*(0.02)
Ideological conservatism×woman	0.02 (0.03)	0.02 (0.02)	-0.03(0.03)	-0.04(0.02)
Incumbent	0.42**(0.01)	0.42**(0.01)	0.65**(0.01)	0.62** (0.01)
Number of primary candidates	-0.08**(0.01)	-0.06**(0.01)	0.05**(0.01)	0.04** (0.00)
Number of primary candidates squared	0.00** (0.00)	0.00** (0.00)	0.00 (0.00)	-0.00(0.00)
Logged campaign receipts	0.06** (0.00)	0.05**(0.00)	0.02**(0.00)	0.02**(0.00)
Extreme ideologue	-0.13**(0.04)	-0.22**(0.03)	- 0.02 (0.04)	0.08 (0.05)
Republican presidential vote share	-0.11**(0.01)	0.06** (0.00)	0.10**(0.00)	- 0.09** (0.00)
Presidential election year	0.04* (0.02)	0.02 (0.02)	-0.13**(0.02)	0.13**(0.02)
South	-0.17**(0.05)	-0.13(0.11)	- 0.04 (0.07)	0.06 (0.08)
Constant	0.36** (0.06)	-0.23*(0.10)	-0.33**(0.08)	0.16 (0.08)
Number of observations	5097	4933	5735	5973
\mathbb{R}^2	0.34	0.39	69.0	0.70

Source Ideology estimates are from Bonica (2014). Entries are OLS regression coefficients with standard errors in parentheses. All models include state and year fixed effects. **p < 0.01, *p < 0.05



Table 5 Candidate ideology, sex, and primary and general election outcomes, logistic regression models

	DV: Win Primary Election		DV: Win General Election	
	(1: Republicans)	(2: Democrats)	(3: Republicans)	(4: Democrats)
Ideological conservatism	0.41** (0.09)	- 0.48** (0.09)	- 2.34** (0.26)	1.68** (0.20)
Woman	- 0.26 (0.23)	0.24 (0.17)	- 0.22 (0.50)	- 0.67 (0.47)
Ideological conserva- tism×woman	0.08 (0.20)	0.07 (0.15)	- 0.03 (0.55)	- 0.33 (0.47)
Incumbent	3.18** (0.29)	3.61** (0.23)	4.20** (0.15)	4.05** (0.15)
Number of primary candidates	- 0.47** (0.04)	- 0.36** (0.03)	0.55** (0.09)	0.27** (0.07)
Number of primary candidates squared	0.02** (0.00)	0.01** (0.00)	- 0.03** (0.01)	- 0.02** (0.01)
Logged campaign receipts	0.57** (0.05)	0.41** (0.04)	0.37** (0.04)	0.46** (0.04)
Extreme ideologue	- 1.09** (0.34)	- 1.88** (0.37)	- 3.21** (0.84)	0.21 (0.87)
Republican presidential vote share	- 0.70** (0.04)	0.49** (0.04)	1.86** (0.09)	- 1.84** (0.09)
Constant	- 2.99** (0.65)	- 6.76** (0.72)	- 14.97** (0.98)	2.89** (0.90)
Number of observations	5097	4933	5735	5973
Log-likelihood	- 2379.89	- 2126.48	- 1243.03	- 1185.89

Source Ideology estimates are from Bonica (2014). Entries are logistic regression coefficients with standard errors in parentheses. All models include state and year fixed effects

Table 6 Candidate ideology, sex, and primary and general election outcomes, reduced models

	DV: Win Primary Election		DV: Win General Election	
	(1: Republicans)	(2: Democrats)	(3: Republicans)	(4: Democrats)
Ideological conservatism	0.02 (0.01)	- 0.04** (0.01)	- 0.04** (0.01)	0.08** (0.01)
Woman	- 0.02 (0.04)	0.02 (0.03)	- 0.03 (0.04)	- 0.00 (0.03)
Ideological conserva- tism×woman	0.01 (0.03)	0.00 (0.03)	- 0.01 (0.04)	- 0.02 (0.03)
Incumbent	0.54** (0.01)	0.54** (0.01)	0.75** (0.01)	0.76** (0.01)
Constant	0.40** (0.01)	0.40** (0.01)	0.22** (0.01)	0.23** (0.01)
Number of observations	5097	4936	5735	5981
\mathbb{R}^2	0.15	0.22	0.59	0.63

Source Ideology estimates are from Bonica (2014). Entries are OLS regression coefficients with standard errors in parentheses



^{**}p<0.01, *p<0.05

^{**}p<0.01, *p<0.05

Table 7 Candidate ideology, sex, and primary and general election vote share

	DV: Primary Election Vote Share		DV: General Election Vote Share	
	(1: Republicans)	(2: Democrats)	(3: Republicans)	(4: Democrats)
Ideological conservatism	0.00 (0.00)	- 0.02** (0.00)	- 0.03** (0.00)	0.05** (0.00)
Woman	- 0.03* (0.01)	0.03** (0.01)	0.01 (0.01)	- 0.02** (0.01)
Ideological conserva- tism×woman	0.02 (0.01)	0.01 (0.01)	- 0.02 (0.01)	- 0.03** (0.01)
Incumbent	0.27** (0.01)	0.29** (0.01)	0.18** (0.00)	0.15** (0.00)
Number of primary candidates	- 0.11** (0.01)	- 0.08** (0.01)	0.01** (0.00)	0.00** (0.00)
Number of primary candidates squared	0.00** (0.00)	0.00** (0.00)	- 0.00 (0.00)	- 0.00 (0.00)
Logged campaign receipts	0.02** (0.00)	0.02** (0.00)	0.01** (0.00)	0.01** (0.00)
Extreme ideologue	- 0.07** (0.01)	- 0.10** (0.01)	- 0.04** (0.01)	0.00 (0.02)
Republican presidential vote share	- 0.04** (0.00)	0.02** (0.00)	0.06** (0.00)	- 0.07** (0.00)
Constant	0.57** (0.03)	0.29** (0.04)	- 0.05** (0.02)	0.75** (0.02)
Number of observations	5097	4933	5735	5973
\mathbb{R}^2	0.67	0.68	0.81	0.82

Source: Ideology estimates are from Bonica (2014). Entries are OLS regression coefficients with standard errors in parentheses. All models include state and year fixed effects

Table 8 Candidate ideology, sex, and primary election outcomes, with candidate quality (among non-incumbents)

	DV: Win Primary Election	on
	(1: Republicans)	(2: Democrats)
Ideological conservatism	0.03 (0.02)	- 0.02 (0.02)
Woman	- 0.03 (0.05)	0.10 (0.06)
Ideological conservatism×woman	- 0.00 (0.04)	0.01 (0.05)
Quality candidate	0.23** (0.03)	0.19** (0.03)
Number of primary candidates	- 0.06** (0.01)	- 0.12** (0.01)
Number of primary candidates squared	0.00* (0.00)	0.01** (0.00)
Extreme ideologue	- 0.23* * (0.05)	- 0.27** (0.06)
Republican presidential vote share	- 0.11** (0.01)	0.11** (0.01)
Constant	0.85** (0.15)	0.08 (0.16)
Number of observations	1566	1096
\mathbb{R}^2	0.16	0.20

Source Ideology estimates are from Bonica (2014). Quality candidate data are from Pettigrew et al. (2014) and they extend from 2000 to 2010. Entries are OLS regression coefficients with standard errors in parentheses. All models include state and year fixed effects

^{**}p<0.01, *p<0.05



^{**}p<0.01, *p<0.05

 Table 9 Candidate ideology, sex, and primary election outcomes (without interaction)

	DV: Win Primary Election		DV: Win Primary Election	
	(1: Republicans)	(2: Republicans)	(3: Democrats)	(4: Democrats)
Ideological conservatism	_	0.04** (0.01)	_	- 0.06** (0.01)
Woman	- 0.03 (0.02)	- 0.03 (0.02)	0.05** (0.02)	0.04* (0.02)
Incumbent	0.41** (0.01)	0.42** (0.01)	0.41** (0.01)	0.42** (0.01)
Number of primary candidates	- 0.08** (0.01)	- 0.08** (0.01)	- 0.07** (0.01)	- 0.06** (0.01)
Number of primary candidates squared	0.00** (0.00)	0.00** (0.00)	0.00** (0.00)	0.00** (0.00)
Logged campaign receipts	0.06** (0.00)	0.06** (0.00)	0.05** (0.00)	0.05** (0.00)
Extreme ideologue	- 0.12** (0.03)	- 0.13** (0.04)	- 0.20** (0.03)	- 0.22** (0.03)
Republican presidential vote share	- 0.11** (0.01)	- 0.11** (0.01)	0.06** (0.00)	0.06** (0.00)
Constant	0.46** (0.06)	0.40** (0.07)	- 0.13 (0.10)	- 0.21* (0.10)
Number of observations	5097	5097	4933	4933
\mathbb{R}^2	0.34	0.34	0.38	0.39

Source Ideology estimates are from Bonica (2014). Entries are OLS regression coefficients with standard errors in parentheses. All models include state and year fixed effects

Table 10 Candidate ideology, sex, and general election outcomes (without interaction)

	DV: Win General Election		DV: Win Genera	l Election
	(1: Republicans)	(2: Republicans)	(3: Democrats)	(4: Democrats)
Ideological conservatism	_	- 0.10** (0.01)	_	0.09** (0.01)
Woman	- 0.01 (0.01)	- 0.02 (0.01)	- 0.04** (0.01)	- 0.03* (0.01)
Incumbent	0.68** (0.01)	0.65** (0.01)	0.65** (0.01)	0.62** (0.01)
Number of primary candidates	0.05** (0.01)	0.05** (0.01)	0.04** (0.01)	0.04** (0.00)
Number of primary candidates squared	0.00 (0.00)	0.00 (0.00)	- 0.00* (0.00)	- 0.00 (0.00)
Logged campaign receipts	0.02** (0.00)	0.02** (0.00)	0.03** (0.00)	0.03** (0.00)
Extreme ideologue	- 0.01 (0.04)	- 0.02 (0.04)	0.03 (0.04)	0.09* (0.05)
Republican presidential vote share	0.10** (0.00)	0.10** (0.00)	- 0.09** (0.00)	- 0.09** (0.00)
Constant	- 0.59** (0.08)	- 0.46** (0.08)	0.15 (0.08)	0.28** (0.08)
Number of observations	5735	5735	5973	5973
R^2	0.69	0.69	0.70	0.70

Source Ideology estimates are from Bonica (2014). Entries are OLS regression coefficients with standard errors in parentheses. All models include state and year fixed effects



^{**}p<0.01, *p<0

^{**}p<0.01, *p<0.05

References

- Abramowitz, A. I., Alexander, B., & Gunning, M. (2006). Incumbency, redistricting, and the decline of competition in U.S. House elections. *Journal of Politics*, 68(1), 75–88.
- Ansolabehere, S., Snyder, J. M., Jr., & Stewart, C., III. (2001). Candidate positioning in U.S. House elections. *American Journal of Political Science*, 45(1), 136–159.
- Bauer, N. M. (2015). Who stereotypes female candidates? Identifying individual differences in feminine stereotype reliance. *Politics, Groups, and Identities*, 3(1), 94–110.
- Bonica, A. (2014). Mapping the ideological marketplace. *American Journal of Political Science*, 58(2), 367–387.
- Bonica, A., McCarty, N., Poole, K. T., & Rosenthal, H. (2013). Why hasn't democracy slowed rising inequality. *Journal of Economic Perspectives*, 27(3), 103–124.
- Brady, D. W., Han, H., & Pope, J. C. (2007). Primary elections and candidate ideology: out of step with the primary electorate? *Legislative Studies Quarterly*, 32(1), 79–105.
- Brooks, D. J. (2013). He runs, she runs: Why gender stereotypes do not harm women candidates. Princeton: Princeton University Press.
- Burden, B. (2004). Candidate positioning in U.S. congressional elections. British Journal of Political Science, 34(2), 211–227.
- Burrell, B. C. (1994). A woman's place is in the house: Campaigning for congress in the feminist era. Ann Arbor: University of Michigan Press.
- Burrell, B. C. (2014). Gender in campaigns for the U.S. House of representatives. Ann Arbor: University of Michigan Press.
- Canes-Wrone, B., Brady, D. W., & Cogan, J. F. (2002). Out of step, out of office: Electoral accountability and house members' voting. *American Political Science Review*, 106(1), 103–122.
- Carroll, S. J. (1994). Women as candidates in American politics (2nd ed.). Bloomington: Indiana University Press.
- Cassese, E. C., & Holman, M. R. (2017). Party and gender stereotypes in campaign attacks. *Political Behavior*. https://doi.org/10.1007/s11109-017-9423-7.
- Cook, E. A. (1998). Voter reaction to women candidates. In S. Thomas & C. Wilcox (Eds.), *Women and elective office*. New York: Oxford University Press.
- Cooperman, R., & Oppenheimer, B. I. (2001). The gender gap in the house of representatives. In L. C. Dodd & B. I. Oppenheimer (Eds.), *Congress reconsidered* (7th ed.). Washington, DC: CQ Press.
- Crowder-Meyer, M., & Lauderdale, B. E. (2014). A partisan gap in the supply of female potential candidates in the United States. *Research and Politics*, 1(1), 1–7.
- Darcy, R., Welch, S., & Clark, J. (1994). Women, elections, and representation (2nd ed.). Lincoln, NE: University of Nebraska Press.
- Ditonto, T., Hamilton, A. J., & Redlawsk, D. P. (2014). Gender stereotypes, information search, and voting behavior in political campaigns. *Political Behavior*, 36(2), 335–358.
- Dolan, K. (2014). When does gender matter? Women candidates and gender stereotypes in American elections. New York: Oxford University Press.
- Dolan, K. A. (2004). Voting for women: How the public evaluates women candidates. Boulder, CO: Westview Press.
- Duerst-Lahti, G. (1998). The Bottleneck, women as candidates. In S. Thomas & C. Wilcox (Eds.), Women and elective office: Past, present, and future. New York: Oxford University Press.
- Elder, L. (2008). Whither republican women: The growing partisan gap among women in congress. *The Forum*, 6(1), 1–21.
- Erikson, R. S., & Wright, G. C., Jr. (2000). Representation of constituency ideology in congress. In D. W. Brady, J. F. Cogan, & M. P. Fiorina (Eds.), *Continuity and change in house elections*. Stanford, CA: Stanford University Press.
- Frederick, B. (2009). Are female house members still more liberal in a polarized era? The conditional nature of the relationship between descriptive and substantive representation. *Congress & the Presidency*, 36(2), 181–202.
- Freeman, J. (1986). The political culture of the democratic and republican parties. *Political Science Quarterly*, 101(3), 327–356.
- Fulton, S. A. (2012). Running backwards and in high heels: The gendered quality gap and electoral success. *Political Research Quarterly*, 65(2), 303–314.



- Gaddie, R. K., & Bullock, C. S., III. (2000). *Elections to open seats in the U.S. House: Where the action is.* Lanham, MD: Rowman & Littlefield.
- Grossman, M., & Hopkins, D. A. (2015). Ideological Republicans and group interest Democrats: The asymmetry of American party politics. *Perspectives on Politics*, 13(1), 119–139.
- Hall, A. B., & Snyder, J. M. Jr. (2015). Candidate ideology and electoral success. Working Paper, Harvard University.
- Hayes, D. (2011). When gender and party collide: Stereotyping in candidate trait attribution. *Politics & Gender*, 7(2), 133–165.
- Hayes, D., & Lawless, J. L. (2015). A non-gendered lens? Media, voters, and female candidates in contemporary congressional elections. *Perspectives on Politics*, 13(1), 95–118.
- Hayes, D., Lawless, J. L., & Baitinger, G. (2014). Who cares what they wear? Media, gender, and the influence of candidate appearance. *Social Science Quarterly*, 95(5), 1194–1212.
- Hetherington, M. J. (2001). Resurgent mass partisanship: The role of elite polarization. *American Political Science Review*, 95(3), 619–631.
- Hirano, S., Snyder, J. M., Jr., Ansolabehere, S., & Hansen, J. M. (2010). Primary elections and partisan polarization in the U.S. congress. *Quarterly Journal of Political Science*, 5(2), 169–191.
- Holman, M. R., Merolla, J. L., & Zechmeister, E. J. (2016). Terrorist threat, male stereotypes, and candidate evaluations. *Political Research Quarterly*, 69(1), 134–147.
- Huddy, L., & Terkildsen, N. (1993). The consequences of gender stereotypes for women candidates at different levels and types of office. *Political Research Quarterly*, 46(3), 503–525.
- Inter-Parliamentary Union (IPU). (2017). Women in National Parliaments, 2017. http://www.ipu.org/wmn-e/classif.htm. Accessed June 2017.
- Jacobson, G. (2013). The politics of congressional elections (8th ed.). New York: Pearson.
- Jacobson, G. C. (2015). It's nothing personal: The decline of the incumbency advantage in US house elections. *Journal of Politics*, 77(3), 861–873.
- King, D., & Matland, R. (2003). Sex and the grand old party: An experimental Investigation of the effect of candidate sex on support for a republican candidate. American Politics Research, 31(6), 595–612.
- Koch, J. (2000). Do citizens apply gender stereotypes to infer candidates' ideological orientations? *American Journal of Political Science*, 62(2), 414–429.
- Koch, J. (2002). Gender stereotypes and citizens' impressions of house candidates' ideological orientations. *American Journal of Political Science*, 46(2), 453–462.
- Lawless, J. L. (2004). Women, war, and winning elections: Gender stereotyping in the post-september 11th era. *Political Research Quarterly*, 57(3), 479–490.
- Lawless, J. L., & Pearson, K. (2008). The primary reason for women's underrepresentation? Reevaluating the conventional wisdom. *Journal of Politics*, 70(1), 67–82.
- Levendusky, M. (2009). The partisan sort: How liberals became Democrats and conservatives became Republicans. Chicago: University of Chicago Press.
- McDermott, M. (1997). Voting cues in low-information elections: Candidate gender as a social information variable in contemporary United States elections. *American Journal of Political Science*, 41(1), 270–283.
- McDermott, M. (1998). Race and gender cues in low information elections. *Political Research Quarterly*, 51(4), 895–918.
- Milyo, J., & Schosberg, S. (2000). Gender bias and selection bias in house elections. *Public Choice*, 105(1/2), 41–59.
- Osborn, T. L. (2012). How women represent women: Political parties, representation, and gender in the state legislatures. New York: Oxford University Press.
- Palmer, B., & Simon, D. (2008). Breaking the political glass ceiling: Women and congressional elections (2nd ed.). New York: Routledge.
- Palmer, B., & Simon, D. (2012). Women & congressional elections: A century of change. Boulder, CO: Lynne Rienner.
- Pearson, K., & McGhee, E. (2013). What it takes to win: Questioning 'gender neutral' outcomes in U.S. House elections. *Politics & Gender*, 9(4), 439–462.
- Pettigrew, S., Owen, K., & Wanless, E. (2014). U.S. House primary election results (1956–2010). Harvard Dataverse, V3. https://doi.org/10.7910/dvn/26448.
- Poole, K. T., & Rosenthal, H. (2007). *Ideology and congress*. New Brunswick, NJ: Transaction Publishers.
- Scammon, R. M., McGillivray, A. V., & Cook, R. (1990–2006). *America votes 19-27: A handbook of contemporary American election statistics*. Washington, DC: CQ Press.



- Schneider, M. C., & Bos, A. L. (2014). Measuring stereotypes of female politicians. *Political Psychology*, 35(2), 245–266.
- Seltzer, R. A., Newman, J., & Leighton, M. V. (1997). Sex as a political variable: Women as candidates and voters in U.S. elections. Boulder, CO: Lynne Reinner.
- Stone, W. J., & Maisel, L. S. (2003). The not-so-simple calculus of winning: Potential U.S. House candidates' nomination and general election chances. *Journal of Politics*, 65(4), 951–977.
- Stonecash, J. M., Brewer, M. D., & Mariani, M. D. (2003). *Diverging parties: Social change, realignment, and party polarization*. Boulder, CO: Westview Press.
- Streb, M. J., Burrell, B., Frederick, B., & Genovese, M. A. (2008). Social desirability effects and support for a female american president. *Public Opinion Quarterly*, 72(1), 76–89.
- Swers, M. L. (2014). Representing women's interests in a polarized congress. In S. Thomas & C. Wilcox (Eds.), Women and elective office: past, present, and future (3rd ed.). New York: Oxford University Press.
- Thomas, S., & Wilcox, C. (1998). Women and elective office: Past, present, and future. New York: Oxford University Press.
- Thomsen, D. M. (2015). Why so few (republican) women? Explaining the partisan imbalance of women in the U.S. congress. *Legislative Studies Quarterly*, 40(2), 295–323.
- Thomsen, D. M., & Swers, M. L. (2017). Which women can run? Gender, partisanship, and candidate donor networks. *Political Research Quarterly*, 70(2), 449–463.
- Welch, S. (1985). Are women more liberal than men in the U.S. congress? *Legislative Studies Quarterly*, 10(1), 125–134.

