SUPPLEMENTARY MATERIAL FOR

Gender Stereotyping and the Electoral Success of Women Candidates: New Evidence from Local Elections in the United States

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A1. Literature Review

The existing literature on gender stereotyping and discrimination in U.S. elections is quite large, and because of that, it isn't possible to provide a comprehensive and detailed overview of all of the relevant published research in the body of our paper (it would take up far too much space). Because of that, our literature review in the paper could possibly leave some readers with unanswered questions, for example questions about how our own study relates to a particular existing study, or about what our study contributes to knowledge above and beyond what has been shown in existing research. To augment the shorter literature review presented in narrative form in the paper, we have done a more extensive literature review presented here in the appendix. We provide a table that briefly describes the relevant studies, discuss key articles at length in the *Findings* section, and then summarize the main points of what we found in the *Takeaways*.

Inclusion Criteria

We focused our literature review on the hypotheses we set out in the paper. For ease of reference, they are:

> **H1: Women will have a larger advantage (or smaller disadvantage) over men in legislative than in executive races.**
> **H2: Women will have a larger advantage (or smaller disadvantage) over men in offices where the policy domains correspond to areas of perceived women's competence than in offices where the policy domains do not.**
> **H3: Women will have a larger advantage (or smaller disadvantage) over men with constituencies that are more liberal than with constituencies that are more conservative.**

To direct our literature review, then, we developed a set of criteria to ensure that we would identify relevant pieces of scholarship that we or others might think have empirically tested one or more of these hypotheses. We used three criteria for our literature search:

1. First, to be included in our list (and therefore the table below), the work must be quantitative (observational, survey, or experimental) and study the U.S. context. This excludes qualitative work (for instance, Dittmar (2015), which uses interviews to examine gender stereotypes in U.S. elections) and related quantitative work on other contexts (e.g., Ono and Yamada (2018), which examines gender stereotypes in Japanese elections).

2. Second, the work must be focused on the role of candidate gender in voter decision-making. This means that work examining voter stereotypes, bias, discrimination, prejudice, double binds, genderism, affinity effects, heuristics, and information, for instance, could all be included. Work that exclusively examines factors like candidate ambition, party recruitment and nomination, media coverage, campaign finance, electoral institutions, quotas, etc. was not, unless it directly links one of those factors to voter decision-making (e.g., Krupnikov and Bauer (2014) examine negative campaign ads' gendered effects on voters, so it is included).

3. Third, the work must include a dependent variable (DV) that is either related to a) election outcomes (using observational data on election returns) or b) vote choice (using surveys or experiments). Election outcomes of interest included whether a candidate won or lost, vote shares, and vote margins. We did, however, include some studies that look at the share of elected officials who are women in different places, even though they only look at people who won their elections and not all candidates who ran. Vote choice measures included questions like "Which candidate would you support if the election were held today?" or "If it were up to you, would you vote for Candidate A or Candidate B?" that asked individuals to

make a choice between two or more candidates or whether they would vote for a single candidate presented. This excludes studies where the DV is, for instance, the percentage of candidates who are women, the number or quality of challengers by candidate gender, or total dollars raised by female candidates relative to male candidates. It also excludes survey and experimental literature that relies exclusively on non-vote choice candidate evaluations (e.g., feeling thermometers, judgments of competence, honesty, warmth, likely effectiveness, etc.). While the latter make up a large portion of the work examining gender stereotypes in elections, the goal of our paper is to examine the net electoral effects of all these evaluations when faced with candidates to select. For instance, work that shows female candidates are stereotyped as liberal by voters (e.g., Koch (2000, 2002)) has been instrumental in generating our hypotheses—but unless that work *also* tests the effect of the stereotype on vote choice in either hypothetical or real elections, it doesn't directly answer questions about the net effect of those perceptions, preferences, or evaluations on the election of women, and would thus not be included for the purpose of this literature review, though many such pieces are included in the theory section of our main paper.

Coding

We identified 58 books and articles that met all three of these criteria, spanning from 1976 to 2021. We read each of these and determined whether the empirical analysis of the article or book examines whether or how electoral support for women varies by executive versus legislative office, issue salience in the election, or the partisanship/ideology of the constituency or voter. If the article tests whether electoral support for women (looking at either election outcomes or vote choice) varies in any of these three ways that correspond to our three hypotheses, we marked a "yes" in the 6th column and explained which of these it evaluates. If it did not, we indicated as much in column 6 with a "no." In addition, for a number of the articles that are "near neighbors"—studying a slightly different independent variable (IV) or DV—we provide a more detailed explanation of the key elements of the relevant analysis in column 7.

In addition to this assessment—central to determining whether the existing article or book carries out tests that are analogous to our own—we code the following for each article or book:
Method: What type of data or methods were used? (observational, survey, experimental, some combination, or something else)
Offices: Which types of offices or contests were studied? (general, primary, special elections, or some combination; president, senate, house, both senate and house, governor, state legislative, judicial, municipal or county offices, or some combination)
Dependent variables: Is the relevant DV individual vote choice, an election outcome, both, or something else?

Note that for each study, we restrict our description of DVs and findings to those relevant to our hypotheses. So, for instance, Kahn's (1996) book contains a number of content analyses that examine media coverage of candidates, but since our interest is in vote choice, we code her relevant dependent variable as "vote choice." This restricted description is particularly common for the books included (e.g., Seltzer et al. (1997), Hayes and Lawless (2016), etc.), as most will feature a variety of analyses, only a few of which may employ one of the DVs we examine. In summarizing these articles and books in this way, therefore, we are in no way saying that the particular analyses we focus on here are the *only* analyses in the article or book—just that they are the analyses closest to our own, and therefore what we focused on.

The results of our comprehensive search are summarized in the table below. Out of the 58 studies included, 47 do not carry out tests analogous to our own—tests of how the effect of

candidate gender on election outcomes or vote choice varies by one or more of the three contextual factors we focus on. For some of the studies, this is because their independent variables differ: for instance, Mo (2015) examines information provision and implicit and explicit genderism; Trounstine and Valdini (2008) study the influence of institutional structures and the size of the underrepresented group; and Bracic et al. (2019) investigate the role of racial and gender attitudes. Other studies may include one of the contextual variables of interest (e.g., voter or district partisanship) but do not carry out a test of whether that variable affects electoral support for women candidates. And for a select few "near neighbor" studies, they may study a similar phenomenon, but with important differences in approach, which we will explain in detail below (e.g., correlating the characteristics of a district with whether the district had any women representatives during a certain time period). To proceed, then, beneath the table we describe in prose the studies that we or others might think come the closest to our own—and how each differs from the analysis we undertake in our paper. As part of that, we address some of the "near neighbor" studies (e.g., Palmer and Simon (2008)) that provide some important suggestive evidence in the direction of our hypotheses but also differ in some key ways.

Authors	**Year**	**Method**	**Offices**	**DV of interest**	**Does study examine how electoral support for women varies by executive versus legislative office, issue salience, or the partisanship/ideology of the constituency or voter?**	**Details on comparisons made (if applicable), and clarifications**
Karnig & Walter	1976	Observational	City council	Election outcome	No	
Darcy & Schramm	1977	Observational, survey	House	Election outcome, vote choice	No	DV is vote share for Democratic candidate in U.S. House races 1970, 1972, and 1974; finds that Democratic women candidates fare better than men but Republican women candidates fare worse compared to men. Also analyzes nominations and finds that districts with more Democratic voters are more likely to nominate women candidates.
Hedlund et al.	1979	Survey	Judicial, school board	Vote choice	No	Survey of voters done in Milwaukee County, WI, in 1976, with 233 respondents. Finds respondents are less willing to vote for women candidates in local judicial races than local school board races.
Welch & Karnig	1979	Observational	Mayor, city council	Election outcome	No	
Burrell	1990	Observational	State legislative	Election outcome	No	
Bullock & McManus	1991	Observational	City council	Election outcome	No	
Burrell	1992	Observational	House primaries	Election outcome	No	
Darcy, Welch, & Clark	1994	Observational	Congress, state legislatures, mayor and city council	Election outcome	No	
Gaddie & Bullock	1995	Observational	Congress	Election outcome	No	
Gaddie & Bullock	1997	Observational	House open and special elections	Election outcome	No	

Seltzer et al.	1997	Observational, survey	Congress, state legislatures, governor, both generals and primaries	Election outcome	No	
Thompson & Steckenrider	1997	Experiment	Senate	Vote choice	No	Mail survey of 425 voters in Westchester area of Los Angeles in 1993; finds that women respondents are more likely to cross the aisle to vote for women candidates, and that stronger partisans more likely to vote for women.
Fox & Smith	1998	Experiment	House	Vote choice	No	Survey of 258 college students in Wyoming and 173 college students in California. Finds that respondents in Wyoming were less likely to vote for woman candidate than man candidate; no such difference in California.
Milyo & Schosberg	2000	Observational	House incumbents	Election outcome	No	
Smith & Fox	2001	Survey, observational	Congress	Vote choice	No	Models vote choice using ANES data, and key IVs include a gender index, partisanship, and ideology, but does not assess whether the effect of gender varies with ideology or partisanship.
Sanbonmatsu	2002	Survey, experiment	House primaries	Vote choice	No	First models respondents' "baseline gender preference" for candidates; finds that respondents' stereotyping predicts this preference and that Democratic respondents are somewhat less likely to have a baseline preference for the male candidate. Also does a survey experiment of two hypothetical U.S. House candidates. DV is vote choice; IVs are candidate gender and its interaction with respondents' baseline gender preference.
Herrnson et al.	2003	Survey, observational	House, state legislatures	Election outcome	No	Focus is on candidates' strategies and whether women are more likely to win when they emphasize "women's issues." DV is whether candidate won or lost; IVs are candidate gender, candidates' strategies as they reported on a survey, and associated interaction terms. Finds that women candidates more likely to win when they focus on women's issues.

Schaffner	2005	Survey	Senate	Vote choice	No	Main focus is on whether candidates focus on "women's issues" in their campaign ads. Also models vote choice using exit poll data; DV is vote for the Democratic candidate. Finds that women voters are more likely to vote for the Democratic candidate the more the campaign mentions women's issues.
Matson & Fine	2006	Observational	Local boards	Election outcome	No	
Dolan	2008	Survey	House	Vote choice	No	Analysis of ANES data on U.S. House races with a man running against a woman; DV is whether respondent voted for woman candidate or man candidate, with separate models for races where woman candidate was a Democrat (running against a man Republican) and woman candidate was a Republican (running against a man Democrat). Finds that 1) Republican respondents are less likely to vote for women Democrats over man Republicans, and 2) Republican respondents are more likely to vote for women Republicans over man Democrats.
Lawless & Pearson	2008	Observational	House primaries	Election outcome	No	Finds that a larger share of Democratic candidates are women than Republican candidates. Models primary candidates' win/loss separately for Democratic and Republican primaries; finds that women aren't disadvantaged in either Democratic primaries or Republican primaries in the modern era.
Palmer & Simon	2008	Observational	House primaries and generals	Whether district has had a woman representative or not	No	Compares the characteristics of congressional districts that elect women and those that elect only men over the course of a decade (doesn't look at likelihood that women/men candidates will win). Finds that both Democratic and Republican House districts that elect women are less Republican (lower Republican presidential vote share) and more liberal ideologically than those districts that elect only men.
Paul & Smith	2008	Survey	President	Vote choice	No	
Trounstine & Valdini	2008	Observational	City council	Election outcome	No	
Fridkin et al.	2009	Experiment	Senate	Vote choice	No	
Alexander	2011	Observational	Mayor	Election outcome	No	
Fulton	2012	Observational	House	Election outcome	No	

Smith et al.	2012	Observational	Mayors, city councils	Share of city councilors and mayors that are women	No	Analysis of share of city councilors and mayors that are women in 236 big cities. DV is proportion of women on city council and presence of woman mayor (not candidates' win rates or vote share). Key IV is ideology, measured by city-level vote share for Democratic presidential candidate. Finds that liberal cities have higher share of women on city councils.
Pearson & McGhee	2013	Observational	House	Election outcome	No	Includes analysis of whether candidate won or not, with key IV being whether candidate was a woman or man, and also controls for presidential vote in the district. However, models do not interact candidate gender with district partisanship.
Burrell	2014	Observational	House	Election outcome	No	Finds no difference in vote share of men or women candidates; controls for whether House district is a safe district or a swing district.
Ditonto et al.	2014	Experiment	Presidential generals and primaries	Vote choice	No	Evaluates how respondents' searches for information about candidates--including information about their competence on certain issues--vary by candidate gender. Also evaluates how reported vote choice in hypothetical races varies by candidate gender, but not how any such effect of gender depends on issue salience.
Dolan	2014	Survey	House	Vote choice	No	Survey of adults whose 2010 U.S. House races had a woman running against a man. DV is whether respondent voted for the woman candidate. Finds that respondents' stereotypical views about women don't affect vote choice; strongest predictor is sharing the political party of the candidate.
Dolan & Lynch	2014	Survey	House	Vote choice	No	Survey of adults whose 2010 U.S. House races had a woman running against a man. DV is whether respondent voted for the woman candidate. Finds that on average respondents' stereotypical views about women don't affect vote choice; strongest predictor is sharing the political party of the candidate. Stereotypical views may matter more for vote choice when the Republican candidate is a woman.

Fulton	2014	Survey, observational	Congress	Election outcome, vote choice	No	Analyzes candidates' vote shares with main IV being whether candidate was a woman or a man, and does control for district partisanship. Does not interact candidate gender with district partisanship.
Krupnikov & Bauer	2014	Experiment	Congress	Vote choice	No	
Crowder-Meyer & Smith	2015	Observational	Local legislatures (both primaries and generals, county and municipal)	Shares of candidates and winners who are women	No	Examines local legislative elections in Louisiana. DVs are 1) percentage of candidates who are women and 2) percentage of election winners who are women. Looks at the effect of party competition in the locality--not whether locality is more or less conservative or Republican.
Crowder-Meyer et al.	2015	Observational	City council, mayor, clerk	Shares of candidates and winners who are women	No	Main focus is on district versus at-large elections, but in one analysis, DV is the share of winning candidates in a race who are women, and key IVs are whether race was for mayor or city clerk (compared to city council). Finds that a larger share of winners are women in city clerk races; one model shows that a smaller share of winners are women in mayoral races than in city council races.
Mo	2015	Experiment	Judicial elections	Vote choice	No	
Hayes & Lawless	2016	Survey, observational	House	Vote choice	No	In models of vote choice, DV is voting for Democratic candidates in the 2010 and 2014 House general elections. IVs include whether the Democratic and Republican candidates are women and whether respondent is a Democrat or Republican. Models therefore test whether respondent party affects voting for the Democratic candidate but not whether respondent party makes a person more/less likely to vote for a woman candidate.
Pyeatt & Yanus	2017	Observational	State legislative	Gap in women's and men's political participation	No	Focus is on whether gap in men and women's participation is smaller in "women friendly" congressional districts. Similar to Palmer and Simon (2008), district partisanship (vote share for Republican presidential candidate) is one of 12 components of their index of district women-friendliness. The index is the key IV, not district partisanship.
Barnes et al.	2017	Observational	House	Election outcome	No	
Cassese & Holman	2018	Experiment	President	Vote choice	No	

Cassese & Holman	2018	Experiment	State Senate primary	Vote choice	No	Evaluates whether certain trait and issue attacks on candidates reduce willingness to vote for candidates, including whether women candidates are more harmed by attacks on their competence on stereotypically feminine issues (education). Finds that women candidates are more harmed by attacks on "feminine" issues.
Bracic et al	2019	Survey	President	Vote choice	No	
Bauer	2020	Experiment	House, House primaries	Vote choice	No	
Thomsen	2020	Observational	House (primaries and generals)	Election outcome	No	Focus is on the interaction of candidate gender and *candidate* conservatism and party, not the conservativism or partisanship of the electorate or district.
Holman & Lay	2021	Survey	Mayoral primary and general	Vote choice	No	Focus is on whether perceived ideological distance between voter and candidate shapes vote choice. Analyzes data from a survey of 383 respondents in New Orleans during a local election featuring three women candidates.
Huddy & Terkildsen	1993	Experiment	President, congress, mayor, city council	Vote choice	Yes: Tests effect of candidate gender on willingness to vote for a candidate, separately for executive and legislative offices	Lab experiment with 297 undergraduates in 1990. Manipulates gender of candidate in hypothetical race. Finds greater willingness to vote for male candidate than female candidate in mayoral races; no significant difference in council races. Includes perceived competence on certain issues as controls but does not test whether willingness to vote for a woman varies with perceived competence or issue salience.
Ono & Burden	2018	Experiment	President, congress	Vote choice	Yes: Tests whether effect of candidate gender on vote choice varies by executive versus legislative office and party ID of respondent	Conjoint survey experiment in 2016 analyzing vote choice in hypothetical races. DV is whether a candidate was chosen by a respondent. Finds the effect of candidate gender is negative and significant for presidential races (respondents less likely to vote for women) but insignificant for congressional races. Finds that in races where candidates are of the same party (e.g., primaries), effect of candidate gender is negative for Republican and Independent respondents (they are less likely to vote for women) but insignificant for Democratic respondents.

Fox & Oxley	2003	Observational	State executive offices	Election outcome	Yes: Tests whether women's rates of candidacy and winning in races for state executive office vary with the salient policy issue of the race--whether it is an issue of stereotypically male/female competence	Analysis of state executive office general elections 1978-1998. Analysis limited to partisan races where a Democrat ran against a Republican. DVs are (1) whether a woman ran in the race or not and (2) whether the winning candidate in the race was a woman or man. Finds that offices of stereotypically male competence (e.g., comptroller) are less likely to have a woman candidate running but that winning candidates are not less likely to be a women in these races for more "masculine" offices.
Kahn	1996	Survey, observational	Senate	Vote choice	Yes: Tests whether voting for woman candidate in Senate races depends on whether campaign coverage emphasized more "feminine" issues and themes, and also controls for respondent ideology	DV is vote for woman candidate in U.S. Senate races in 1988-1992 ANES. Key IV is share of issues and themes mentioned in CQ reports that are gender stereotypical or counterstereotypical / "male" or "female." Finds that respondents are more likely to vote for women when their campaign coverage is more dominated by feminine issues and themes. Also finds that more liberal respondents are more likely to vote for women.
Ekstrand & Eckert	1981	Experiment	Governor	Vote choice	Yes: Examines vote share received by two hypothetical candidates and breaks results down by subject party ID and ideology	Experiment with 732 students of universities in Florida and Georgia in 1977. Finds no bias towards or against women candidates, nor do vote share patterns differ greatly for liberal versus conservative respondents or Democratic versus Republican respondents.
McDermott	1997	Survey	House	Vote choice	Yes: Evaluates the relationship between conservative respondent ideology and vote share for the Republican candidate, testing whether conservative ideology has an even stronger positive relationship with voting for the Republican when the Democratic candidate is a woman	Analysis of U.S. House races in ANES data 1986-1994. DV is voting for the Republican candidate versus Democratic candidate. Key IVs are respondent ideology and its interactions with two race characteristics: whether there was a woman Democrat in the race and whether there was a woman Republican in the race. Finds that the relationship between conservative ideology and voting for the Republican candidate is even greater when the race features a Democratic woman candidate. No such difference when the race features a woman Republican.

Dolan	1998	Survey	Congress	Vote choice	Yes: Tests whether party ID and ideology of respondents affect whether they vote for woman or man candidate	Analysis of 1992 National Election Study data, focused on House and Senate general election races where a woman ran against a man. DV is whether respondent voted for the woman or the man. Finds that Democratic respondents are no more likely to vote for women than Republican respondents; liberal respondents are somewhat more likely to vote for women than conservative respondents.
McDermott	1998	Experiment	Not specified	Vote choice	Yes: Tests whether willingness to vote for hypothetical woman candidate varies with respondent party ID and ideology	Survey experiment conducted with California residents in 1990. DV is whether respondent voted for the woman candidate. Finds that Democrats and liberal respondents are more likely to vote for woman candidate than Republicans and conservatives.
King & Matland	2003	Experiment	House	Vote choice	Yes: Tests whether respondents are more likely to vote for a Republican candidate when that candidate is a woman rather than a man, and breaks down data by respondent party ID	Survey experiment of 820 U.S. adults in 1993. Respondents presented with one hypothetical Republican candidate profile with gender manipulated. Finds that Democratic and Independent respondents are more likely to vote for a woman Republican candidate than a man Republican candidate; also finds that Republican respondents are less likely to vote for the woman than the man.
Dolan & Lynch	2015	Survey	House	Vote choice	Yes: Controls for respondent ideology in models of whether respondent voted for woman candidate	Survey data from U.S. in 2010 U.S. House elections in which woman ran against man. Estimates four separate models for 1) women respondents and men respondents and 2) races in which woman candidate was a Democrat and races in which woman candidate was Republican. Ideology only significant in model of men respondents when woman candidate was a Democrat: more conservative men respondents were less likely to vote for the Democratic woman candidate than more liberal men respondents. (This result is not discussed in text of article.)

Fulton & Dhima	2020	Survey, observational	House	Election outcome, vote choice	Yes: Examines interaction of candidate gender and respondent party ID in models of vote choice and election outcomes	Analysis of CCES data 2006-2018, DV is whether respondent voted for Democratic or Republican candidate. IVs include whether candidate was a woman (Republican or Democrat) and party ID of respondent. Also includes many interactions, including interaction of respondent party ID and candidate gender. Finds that Democratic women candidates are penalized by male Republican and Independent voters. Similar results obtained in analysis of election outcomes.

Findings

From this review of the literature, we draw three main conclusions. The first is that few of these existing studies evaluate whether electoral support for women varies in any of the three ways that correspond to our hypotheses. The second conclusion is that the majority of the studies that *do* evaluate how electoral support for women varies by context in one or more of these three ways employ surveys and experiments rather than data on election outcomes. The third is that all but one of those few studies that do carry out tests analogous to our own focus on national and state elections—partisan elections. We begin by reviewing those studies that test how electoral support for women candidates varies by one of these three contextual factors, and then expand the focus to the remainder, with a particular focus on the studies that we think qualify as "near neighbors."

There are two studies—Huddy and Terkildsen (1993b) and Ono and Burden (2018)—that carry out tests analogous to our **Hypothesis 1**: whether support for women varies by whether the office being sought is executive or legislative. Both studies are experiments: Huddy and Terkildsen's is a lab experiment done with undergraduates, and Ono and Burden's is a conjoint survey experiment with a national sample. Both find some evidence that women candidates face more of a disadvantage (compared to men candidates) in executive races than in legislative races. Our study thus adds to this very small body of evidence: we examine how real candidates fare with voters in real elections, and in a different environment than the one Ono and Burden focus on, and we find evidence in the same direction as their results.

There are also two studies that carry out tests directly related to our **Hypothesis 2**: whether women's electoral success depends on the issues salient in the election or salient to the office up for election. The first is Fox and Oxley (2003), which finds that women running for stereotypically feminine state executive offices like superintendent of education do not win at different rates than men running for those offices, nor do men win at higher rates for stereotypically masculine offices like comptroller. The authors suggest that this lack of difference is due to political party effects: all of these state executive races examined feature a Republican and Democratic candidate, and Fox and Oxley suggest that voters make decisions in these races based on the party of the candidate, not the gender of the candidate. The second closely related work is Kahn (1996), which tests whether voting for women candidates in U.S. Senate races depends on whether the campaign coverage (as documented by CQ reports) emphasized more "feminine" or "masculine" issues. Kahn finds that respondents are more likely to say they will vote for the woman candidate rather than the man candidate when the campaign was more

dominated by "feminine" issues. Other than these two, there were no other studies in this literature that test whether women's advantage or disadvantage depends on the salience of the issues in the election (and, notably, Fox and Oxley find no such association arguably because of the strength of political party as a driver of vote choice). We therefore add here in three ways: we use data on how candidates fared in real elections (Kahn's study uses a survey-based measure of how individual respondents voted), we examine nonpartisan elections (Fox and Oxley examine partisan elections featuring a Democrat and Republican candidate), and importantly our findings are different from Fox and Oxley—we find that electoral support for women candidates does vary with the issues salient in the election.

There are relatively more studies that test questions related to our **Hypothesis 3**: whether voting for women or women's electoral success depend on either the partisanship/ideology of the voter or the partisanship/ideology of the constituency. Even here, though, the research is not especially well-developed. The studies that specifically examine whether voting for women candidates varies by voter/respondent ideology or partisanship are as follows:

- Kahn (1996), also discussed above, controls for respondent partisanship and ideology in her models of vote choice and finds that more liberal respondents are more likely to vote for women candidates for U.S. Senate (using data from the 1988-1992 ANES).
- Ekstrand and Eckert (1981) examine vote share received by two hypothetical candidates and break down their results by subject party ID and ideology, but they don't find that these vote share patterns for women candidates depend on whether the respondents are Democratic or Republican or liberal or conservative.
- McDermott (1997) evaluates the relationship between conservative respondent ideology and vote share for the Republican candidate, including a test of whether conservative ideology is even more strongly associated with voting for the Republican candidate when the Democratic candidate is a woman (and finds supportive evidence of this).
- Dolan (1998) analyzes 1992 ANES data on how respondents voted in U.S. House and Senate races in which a woman candidate ran against a man candidate. She finds that liberal respondents are somewhat more likely to vote for the woman candidate than conservative respondents, but that Democratic respondents are no more likely to vote for the woman than Republican respondents.
- McDermott (1998) also does an experiment to evaluate whether respondents are willing to vote for a hypothetical candidate and finds that Democrats and liberal respondents are more likely to vote for a woman candidate than Republicans and conservatives.
- King and Matland (2003) do an experiment to evaluate whether respondents would vote for a hypothetical Republican candidate, and they find that Democratic and Independent respondents are more likely to vote for that candidate if it is a woman rather than a man, but Republican respondents are less likely to vote for the candidate when it is a woman rather than a man.
- Dolan and Lynch (2015) analyze vote choice in the 2010 U.S. House elections (using survey data) and do include a control for respondent ideology. Respondent ideology however was only a significant predictor of vote choice in the model of men respondents when it was the Democratic candidate who was a woman, and that result is not discussed in the article.
- Ono and Burden (2018) also test whether the effect of candidate gender on vote choice varies with the party ID of the respondent. They find that in races where candidates are of the same party, such as primaries, Republican and Independent respondents are less likely to vote for a woman than a man, but there is no such difference for Democratic respondents.

- Finally, Fulton and Dhima (2020) examine the interaction of candidate gender and respondent party ID in their models of vote choice and election outcomes, and find evidence that Democratic women candidates are penalized by men Republican and Independent voters.

The broad takeaway of this research, then, is that most of the studies that test for this find that liberal or Democratic voters are more willing to vote for women candidates than conservative or Republican voters, though some find no such partisan/ideology differences in willingness to vote for women candidates. Also, nearly all of these studies use data from surveys and survey experiments. The only such study that looks at how women and men candidates fared with their voters in real elections is Fulton and Dhima (2020), and they examine U.S. House elections. Out of the eight studies that conduct surveys or experiments, moreover, seven examine U.S. congressional or gubernatorial races, and the eighth, McDermott (1998), leaves the office/race unspecified in the treatment manipulation (though some of the non-vote choice DVs explored therein imply the race is for U.S. Congress). Accordingly, we think that there is reasonable evidence from this literature that in the partisan races examined, women candidates fare better with Democratic or liberal voters than they do with Independent, Republican, and conservative voters. Our study adds to this literature in a few ways: we test whether the conservatism of the overall constituency matters for how women candidates fare in elections, using data on election returns, and focusing on nonpartisan elections (which none of these existing studies do).

Finally, we note that none of the existing studies we've identified carry out tests of all three of the dimensions we examine in our analysis. Only two studies (Kahn (1996) and Ono and Burden (2018)) test two of them. We think this is itself a useful contribution: when we see a pattern consistent with gender stereotyping once, perhaps it is easier to dismiss than when we see patterns consistent with gender stereotyping three times (and our findings related to local election timing help to further bolster this account).

Near Neighbors

There are some studies shown in the table but not discussed so far that might seem as though they, too, test for how the effect of gender on vote choice or election outcomes varies by the three contexts we explore. However, a close read of these studies shows that while they might provide suggestive evidence on this score, they don't test these expectations directly—they are instead more focused on other, related questions.

Consider, for example, Hayes and Lawless (2016): using the ANES, they include respondent partisanship as a predictor of vote choice for a Democratic candidate in the 2010 and 2014 general House elections, but do not interact partisanship with their independent variables "Democratic Woman" and "Republican Woman" (see Table A5.5, p. 157). Without the interaction effect, this analysis does not test whether Democratic respondents are more (or less) likely than Republicans to vote for a woman—only whether Democratic respondents are more or less likely to vote for a Democratic candidate. Pearson and McGhee (2013) is another near-neighbor of this type: they control for previous district vote for the candidate's party and district vote for president in their analyses of House primary elections from 1984 to 2010. However, they only interact these variables with candidate gender for their candidate emergence DV, not for election victories (see Table 3, p. 453). Other studies, like Darcy and Schramm (1977), note that Democratic women *candidates* fare better than men and that Republican women *candidates* fare worse than men, but this does not look at the effect of respondent (or constituency) partisanship or ideology, which is what we are focusing on in our hypotheses and analysis.

Some other studies conduct analyses related to ours but look at dependent variables like the share of elected officials who are women—the winners only—or whether a particular district or jurisdiction has elected a woman or not. These studies can be informative but are different from our own in that they are not looking at candidates' chances of getting elected, or respondents' willingness to vote for women candidates (because they aren't looking at all candidates and whether they won or not—they're only looking at the people who won). For example:

- Palmer and Simon (2008) look at whether or not U.S. congressional districts have elected any women over certain periods of time, and they find that districts that have elected women are less Republican and more liberal than districts that have only elected men during those time periods. This could be suggestive of Democratic voters being more supportive of women candidates, but it's not examining the success rates of all candidates—only the gender breakdown of candidates who ultimately won their elections.
- Lawless and Pearson (2008) find that a larger share of Democratic primary candidates are women than Republican primary candidates, and while they do model candidates win/loss for Democratic and Republican primaries separately, their models don't test whether (within party) win rates vary with the conservatism or Republicanism of the district.
- Smith et al. (2012) evaluate the share of all city councilors and mayors that are women and find that more Democratic cities have a higher share of women elected officials. But again, it is not taking into account candidates who lost, or the rates at which women won their elections relative to men.
- Crowder-Meyer and Smith (2015) similarly look at the share of candidates and then the share of winners who are women. They also focus on the effect of party competition in the jurisdiction, not the conservatism or Republicanism of the jurisdiction.
- Crowder-Meyer et al. (2015) look at the share of 1) local candidates who are women and 2) election winners who are women. They find that a larger share of the election winners are women in city clerk races than in city council or mayoral races. This is suggestive but is not directly testing whether women candidates are more or less likely to win (compared to men) depending on the office being sought.

Still others, like Sanbonmatsu (2002), look at how other dependent variables might be correlated with respondent party or ideology—as Sanbonmatsu does for whether respondents report a baseline gender preference for women candidates—but in their models of vote choice, they don't test whether respondent party or ideology are associated with greater likelihood of voting for a woman.

Some studies may point to an effect of partisanship or ideology on voting for women but do not test it directly. For example, Fox and Smith (1998) find in their experiment that students in Wyoming are less likely to vote for a woman than a man candidate, and that the same is not true in California. That may be related to respondents' partisanship and ideology, but that is not tested in the article.

Dolan (2008) includes respondent party ID in models of vote choice, but it is difficult to say from the results how, overall, voters' partisanship would be related to willingness to vote for a woman. The conclusions of that article that are most relevant to our discussion here are that 1) Republican respondents are less likely to vote for women Democrats over man Republicans, and 2) Republican respondents are more likely to vote for women Republicans over man Democrats. It is difficult to determine from this analysis how voter partisanship would affect willingness to vote for a woman candidate.

Pyeatt and Yanus (2017) is also relevant in that they include vote share for Republican presidential candidates as one of twelve components in their index of congressional district "woman-friendliness" (following Palmer and Simon (2008)), but they are testing whether district woman-friendliness (measured with that index) predicts the size of the gap between women's and men's political participation—not whether district partisanship predicts vote share received by women candidates or voters' willingness to vote for a woman.

Thomsen (2020) looks at the interaction of *candidate* conservatism (or party) and candidate gender, but doesn't focus on the conservatism or partisanship of the electorate or district.

Takeaways

In our wide-reaching survey of the literature, therefore, we find there are a number of studies that touch on relevant factors—and are quite informative—but that do not directly test whether voting for women or the electoral success of women candidates varies by 1) executive versus legislative office, 2) the salience of the issues in the election, and 3) the partisanship/ideology of voters or the constituency.

The second takeaway is that of the studies that *do* evaluate how voting for women candidates or the electoral success of women candidates varies by one of these three contextual factors, almost all of them use surveys and experiments. Fox and Oxley (2003) and Fulton and Dhima (2020) are the two exceptions.

The third takeaway from this analysis is that nearly all of this work—whether it uses surveys, experiments, or data on election returns, and whether it tests for varying effects of candidate gender on election outcomes or vote choice depending on context—is done on national elections or other elections (such as state general elections) in which political parties and political party cues for voters loom large. Only 15 of the 58 studies examine local elections, and out of these, only one explicitly tests whether electoral support for women varies by any of these three contextual factors (Huddy and Terkildsen (1993b)), while three (Smith et al. (2012), Crowder-Meyer and Smith (2015), and Crowder-Meyer et al. (2015)) are "near neighbors" looking at different dependent variables, as we discuss above.

This extensive literature review therefore helps to clarify that there has not been a large amount of research on how the effects of gender on election outcomes or vote choice vary in the ways that correspond to our three hypotheses. Moreover, even in the work that has been done on these topics, studies usually examine one of the three contextual features—mainly the party of the respondent or constituency—and primarily have used survey and experimental data, nearly all of which examines national and state elections where party and ideology are strong forces.

A2. Data Collection

The main data for the paper come from the California Elections Data Archive (CEDA), which tracks the results of nearly all local elections in the state from 1995 to the present. Most of the variables used in the analysis come from the annual CEDA data files, including the information on jurisdiction (city or school district) and office, the date of the election, candidate names, ballot designations, specifics about the race such as the number of seats up for election and district or area numbers, the number of votes the candidate received, and whether the candidate won, lost, or advanced to a runoff. We focus our analysis on elections for city council, mayor, and local school board, excluding other elections for other municipal and education-related positions such as city clerk or county boards of education. While there are some uncontested elections in our dataset, some local governments--especially school districts--do not hold an election for uncontested races. (Instead, the sole candidate is automatically elected.) In these cases, the uncontested races do not appear in the CEDA dataset because no election was actually held.

To prepare the CEDA data for analysis, we had to make a number of adjustments. First, we coded candidate gender (see below). Second, there are a small number of cities and school districts that either have primary and general elections or general elections with runoffs for candidates who do not receive majorities in the first round. We discovered a few cases in the dataset in which candidates who advanced from a first to a second round were coded as having won or lost in the first round, and we corrected all such cases. Third, California has several "joint" school districts that span two or three counties, and because the CEDA data are compiled using county election records, candidates running for school board in those joint districts often appear in the dataset two or three times for the same election. We identified all such cases of candidates appearing multiple times, ensured that we were including each candidate-race observation one time, and where necessary corrected the win/loss/runoff indicator to reflect the vote totals across all 2-3 counties.

We also used the information in the CEDA data to code each city council or school board election as either at-large or by district or area. (In districted elections, the city or school district is divided into districts in which only residents of that district can vote for the candidates. In by-area elections, the city or school district is divided up into areas, but everyone in the city or school district can vote for the candidates running in all of the areas, regardless of where they live.) For most at-large elections, the variable "area" in the CEDA data is blank, and for most elections by district or by area, the variable "area" is populated with a number or letter identifying the district or area. However, there were some cases in which the variable "area" was missing for certain elections even though the city or school district had districted or by-area elections in the years both before and after. In these cases, we assumed that the city or school district continued to have by-area or districted elections for the in-between years as well. We also found that cities and school districts with at-large elections often had the "area" variable populated for years in which there were recall elections with candidates running for the potentially recalled seats. We coded such cases as at-large.

We relied on two other data sources in addition to the CEDA. First, to include in our models information on the size of the city or school district, we turned to population data from the U.S. Census of Population. For all city council and mayoral candidates, we assembled place-level Census population data for 1990, 2000, and 2010 and then interpolated within cities over time to approximate city population for the candidates running for office in the in-between years. We located 1990, 2000, and 2010 Census population figures at the school district level from the National Center for Education Statistics (the Education Demographic and Geographic Estimates, available at https://nces.ed.gov/programs/edge/). As with the place-level population data, we interpolated within school districts for the in-between years. For both municipal governments and school districts, there were a few governments for which only a single year's

population information was available; in these cases, we used the population value for that single year.

The second data source was information on presidential vote share from the California Secretary of State's website, which provides presidential election results by county and by municipal government. For the cities in our dataset, we account for city conservatism using the two-party vote share for the Republican candidate at the city level either in the 2004 election or in the most proximate presidential election (e.g., we use the 1996 presidential election results for candidates running in 1995, 1996, 1997, 1998). Presidential election results are not available at the school district level in California, so for the school board candidates in our data, we use vote share for the Republican presidential candidate in the school district's parent county. For joint school districts, we use the presidential election results from the county that makes up the largest proportion of the school district. (In nearly all joint school districts, a single county accounts for the vast majority of the district's voters.)

A2.1. Coding: Candidate Gender

First, we use the genderizeR package in R, which uses the first name of each candidate and U.S. Census data to generate a probability that the person is a woman.[1] We code a candidate as a woman if 80% or more of the people in the U.S. with that name are women, and we code a candidate as a man if 20% or fewer of the people with the name are women. This allows us to code 96% of the observations. For all mayoral, council, and school board candidates not categorized using this rule, research assistants coded them as men or women based on the candidate's first name and, if possible, the ballot designation (e.g., "businesswoman"). In all, we coded gender for 99% of the candidates in all three race types.

A2.2. Coding: Ballot Designation Indicators

In California, all candidates are allowed to supply a ballot designation that indicates their current or recent profession. Candidates are given some leeway within the length constraints (approximately 70 characters), but must have held the job within the past year, or else list themselves as retired. Candidates are also able to list non-remunerative occupations, such as "volunteer," "student," "father," and "mother." In addition, California imposes fairly strict scrutiny on the designations to ensure their honesty.

In the main paper, we code the four government experience variables (mayoral experience, city council experience, school board experience, and other government experience) and the four main occupation categories (business, law, education, and activism) based on a series of keywords. For mayoral, city council, and school board experience, we simply coded the candidates with a one if the ballot designation indicated that the candidate had served as mayor (or vice mayor, deputy mayor, etc.), city council member, or school board member or trustee, respectively. The "other government experience" category is built first with keywords such as "board," "trustee," "judge," "district," "treasurer," "legislator," and "commissioner," and then hand-checked to ensure that the ballot designations identified by the keyword searches are in fact government positions (and that those missed by the keyword searches are in fact non-government positions). Because some positions are elected in some cities but appointed in another, we cannot always distinguish between elected and appointed government positions, but focused this category on positions with policymaking authority, such as superintendent, planning commissioner, and police chief. Government employees such as police officers and public school teachers are coded as zero on the "other government experience" variable.

For business, the keywords were "business," "CEO," "president," "entrepreneur," "merchant," and "owner." Candidates whose ballot designations contained these words were

[1] Kamil Wais (2016). genderizeR: Gender Prediction Based on First Names. R package version 2. 0. 0. https://CRAN. R-project.org/package=genderizeR.

coded with a one for the business variable. The same procedure applies for law ("law," "legal," "attorney," "mediator," "prosecutor," "law enforcement," "law student,"), education ("teacher," "professor," "educat*," "instructor," "adjunct," "lecturer," "principal," "preschool," "tutor," "school employee," and "university"), and activism ("activist," "non-profit," "community," "volunteer," "advocate"). Codings were not exclusive, so a candidate who lists themselves as (for instance) a "teacher/volunteer" would have been coded as having a background in both education and activism.

For additional analysis, we repeated this approach for other categories derived from the most common words used in ballot designations. These categories were real estate, finance, administration, health, agriculture, white-collar professions, blue-/pink-collar professions, police/fire/corrections employees, homemaker, student, self-employed, retired, parent, and missing (no ballot designation supplied). The full list of keywords is extensive and therefore not listed here, but we can provide the complete list upon request. We do not find any evidence that using a more extensive list of professional categories than the four above changes our results.

A2.3. Coding: Mixed-Gender Races

When races contained one or more candidates who we were unable to code as men or women, we assessed whether the races had both men and women candidates based on those we were able to code. There were two races (one city council, one school board) where we were unable to code *Woman* for any of the candidates; those are dropped from our analysis.

A3. Descriptive Analyses

Because little is known about women's candidacies and success rates in local elections, we include in this section some additional descriptive statistics and figures.

We begin by exploring patterns of women's and men's candidacies in California local elections. First we show that the share of candidates who are women varies by office type. While women make up 42% of all school board candidates, they are only 27% of all city council candidates—and those figures are similar when we look only at elections held by district or area (as opposed to at-large). An even smaller share of mayoral candidates are women: 21%. And these cross-office differences are also reflected in the gender composition of races. In total, 76% of school board races feature both men and women candidates (Mixed-gender races), but only 66% of city council races and 38% of mayoral races do. We see these same cross-office differences even when we focus only on city council and school board elections held by district or area: 55% of the school board races are mixed-gender, compared to 46% for city council.

Candidates and races by gender

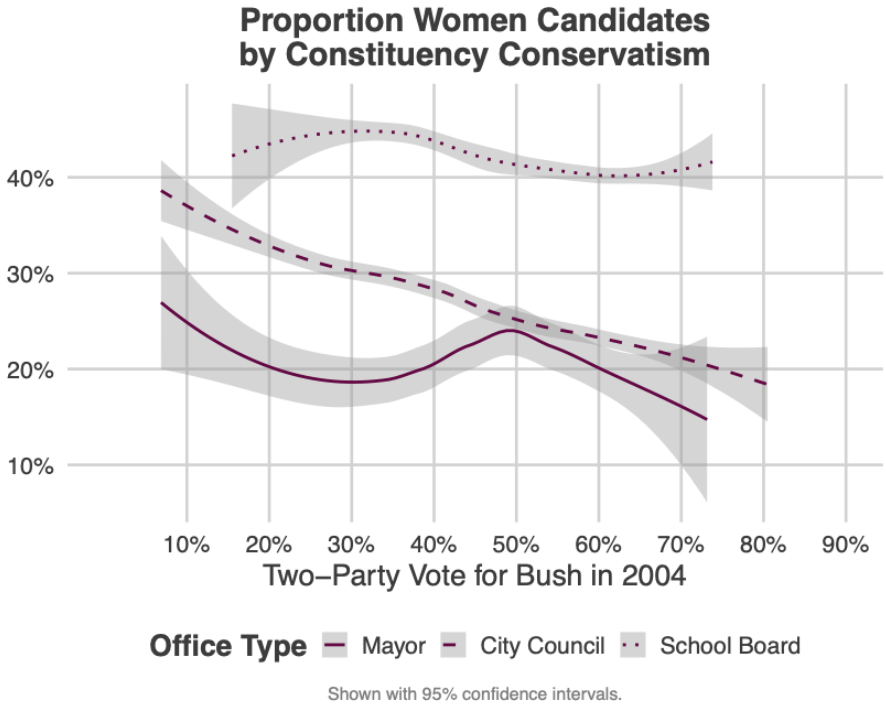
	Council		**Mayor**	**School Board**	
	All	*By district or area*		*All*	*By district or area*
Candidates (N)	27,137	4,382	3,148	29,284	5,257
Female candidates (%)	26.6%	28.7%	20.6%	42.0%	40.5%
Races (N)	6,017	1,652	1,188	7,352	2,066
All-men races (%)	29.8%	44.5%	57.6%	16.7%	30.2%
Candidates per seat	2.06	2.14	2.10	1.96	2.06
Mixed-gender races (%)	66.4%	46.1%	37.7%	75.5%	55.0%
Candidates per seat	2.66	3.41	3.70	2.10	2.50
Races with at least one woman (%)	70.2%	55.5%	42.4%	83.3%	69.9%
Candidates per seat	2.59	3.09	3.43	2.07	2.36

To assess whether races featuring women are more crowded, as Lawless and Pearson (2008) show for congressional primaries, we create a measure of competitiveness, dividing the number of candidates in the race by the number of seats up for election (*Candidates per seat*). Comparing this variable in all-men races to races featuring at least one woman, we find that races with women are indeed more crowded. Moreover, the gap between the crowdedness of all-men races and mixed-gender races varies by office type. It is smallest for school board elections: races featuring a woman have 2.07 candidates per seat on average compared to 1.96 in all-men races. City council races featuring women, however, have an average of 2.59 candidates per seat compared to 2.06 in races with all men—a larger difference. The biggest gap is in mayoral contests, where races featuring women have 3.43 candidates per seat on average and all-men races have 2.10. This mayoral competitiveness gap is still the largest even when we focus only on city council and school board elections held by district or area. Thus, California local elections tend to be more crowded when women run, and that competitiveness gap is largest in mayoral races and smallest in school board races.

Figure 1 provides a look at whether the share of candidates who are women varies by constituency conservatism. For all municipal candidates, we present LOWESS plots of *Woman* against the city's two-party presidential vote share for George W. Bush in 2004, separately for city council candidates (dashed line) and mayoral candidates (solid line).[2] We do the same for school board candidates (dotted line) except with two-party presidential vote in the school district's parent county (because school district-level data are not available). Looking at the

[2] For presentation purposes, we exclude Industry, which had very high vote share for Bush.

dashed line, we see that women make up a decreasing share of city council candidates in more Republican cities. There is also a negative relationship for school board but a more modest one. We do not find a clear pattern for mayoral candidates. Women therefore appear less likely to run for local office in more conservative places, with the exception of mayoral races, in which women make up a small share of candidates regardless of constituency conservatism.



Next we present data on the experience and backgrounds of men and women candidates. Starting with the simplest measure—incumbency—we find that in both city council and school board races, a larger share of the women than men are incumbents. Women are a smaller share of mayoral incumbents, but that difference is only significant at the 10% level. For non-incumbents, we use information in the candidates' ballot designations to create a series of experience indicators, as we describe in the paper. Below, we show averages of each indicator for men and women as well as the difference between the two, broken down by office type.

Average experience of men and women candidates

	City council		Mayor		School Board	
	Men	Women	Men	Women	Men	Women
Incumbent	0.257	0.291**	0.272	0.238	0.324	0.373**
Mayor or vice-mayor experience	0.006	0.009*	0.037	0.047	0.0001	0.0001
City council experience	0.021	0.027**	0.217	0.385**	0.001	0.001
School board experience	0.008	0.017**	0.005	0.004	0.015	0.017
Other government experience	0.066	0.073	0.047	0.03	0.021	0.007**
Business experience	0.300	0.282*	0.305	0.235**	0.178	0.125**
Law experience	0.052	0.057	0.043	0.038	0.037	0.029**
Education experience	0.076	0.128**	0.076	0.128**	0.220	0.264**
Activism experience	0.029	0.076**	0.018	0.055**	0.022	0.067**

Notes: Analysis using two-sample *t*-tests. ** indicates difference significant at the 1% level, * at the 5% level.

One clear pattern that emerges in all three race types is that women are less likely than men to come from business and more likely to come from education and activism. In school board races, women are also slightly less likely than men to come from law. Non-incumbent school board candidates rarely have previous experience in a government leadership positions;

the only significant difference between men and women school board candidates is that the women are less likely to have "other government" experience—and the difference is small. Similarly, few non-incumbent city council candidates have government leadership experience, but the women on average are slightly more experienced than the men in this regard. Among mayoral candidates, however, there are large differences in men and women's government experience levels. The most common government pathway to mayoral candidacy is serving on city council, and while 39% of the non-incumbent women have experience on city council, only 22% of the men do.

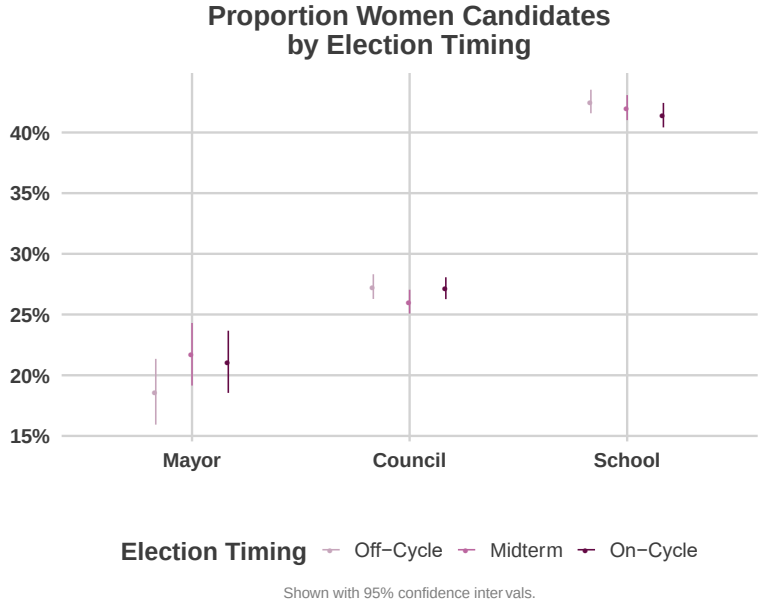
These descriptive findings are important because they shed light on patterns of women's candidacy in local elections, but they also speak to the concerns about selection we discuss in the paper. The kinds of women and men who run are different in ways likely correlated with electoral success. The races they run in are also different, and the differences vary depending on the context. There is also a pattern to the selection, however—one consistent with our hypotheses, and one that suggests that strategic candidate entry likely works against our ability to detect the effects of stereotyping.

Recall that our first hypothesis is that the effect of gender stereotyping will be more negative in mayoral races than city council races. We find here that fewer women run for mayor than city council, that the women who run for mayor appear to be more experienced than the men, and that mayoral races have the largest competitiveness gap between all-men races and races featuring women. Likewise, our second hypothesis is that the effect of gender stereotyping will be more positive in school board races than in city council races: we find that many more women run for school board than city council and that the competitiveness gap is narrower in school board races. Related to H3, we also find that fewer women run for city council and school board in more conservative constituencies.

We cannot know for sure what individual calculations underlie these patterns, but they are broadly consistent with an account in which 1) the effects of gender stereotyping vary in the ways we have hypothesized, and 2) women and men anticipate those varying effects and factor them into their decisions about whether to enter local races. If that's the case, then selection bias should generally reduce our ability to detect the hypothesized variation in the effects of gender stereotyping.

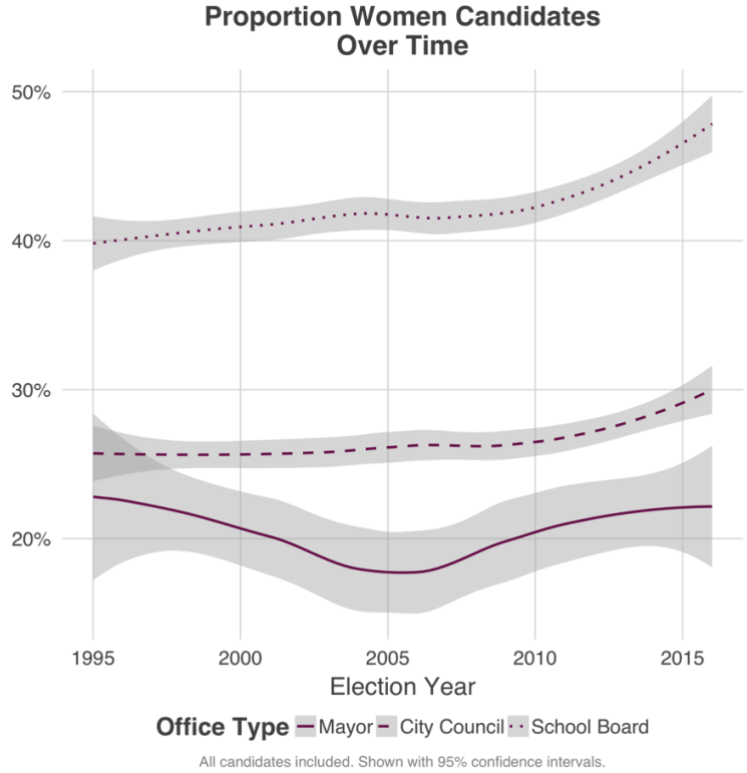
A3.1. Proportion of Women by Office and Election Timing

We do not see significant differences in the proportion of candidates who are women in on-cycle, midterm, and off-cycle elections.



A3.2. Over-Time Change in the Proportion of Women Candidates, by Office

There has been a gradual increase in the number of women running for city council and school board over time, especially in school board races. There has been no steady increase in the number of women running for mayor.



A3.3. Differences in the Electorate in On-cycle and Off-cycle Elections

Existing research shows that electorates in on-cycle and off-cycle local elections are different in ways correlated with election outcomes. If those differences between on-cycle and off-cycle electorates are also correlated with differences in women's and men's electoral performance, we might be concerned that those electorate differences are driving the results in Table 3 of the paper. One such difference relates to the age of the electorate: the average voter in off-cycle elections tends to be older than the average voter in on-cycle elections (Kogan, Lavertu, and Peskowitz, 2018; Anzia, 2019). If younger voters tend to be more supportive of women running for local office, that would suggest that women overall should fare better in on-cycle elections. In the paper, however, we find that this is not consistently the case: while the advantage for women is more pronounced in on-cycle elections for city council and school board, the *dis*advantage for women is also more pronounced in on-cycle elections for mayor. These patterns are in line with our expectations about the effects of gender stereotyping, but they are not consistent with the account that women just do better in all on-cycle elections.

A second possibility worth considering relates to interest group influence. Existing research provides evidence that interest groups with a large stake in the election have greater influence in off-cycle elections than in on-cycle elections (see Anzia, 2014): for example, teacher unions are some of the most active interest groups in school board elections (Moe, 2005, 2006), and policy outcomes are more favorable to teacher unions in school districts that hold off-cycle elections. Similarly, city policies appear more favorable to municipal employee unions of firefighters and police officers in cities that hold off-cycle elections (Anzia, 2014). That said, we have no expectations about whether teacher unions or municipal employee unions would be more or less likely to support women candidates, so it is not clear how their greater influence in off-cycle elections would affect the rate at which women win their races.

Even so, we use data from Moe's (2005) study of California school board elections to assess whether teacher unions tend to favor women or men candidates. In that study, Moe tracked over 200 school board races between 1998 and 2002 and collected data on which candidates in each race were endorsed by the local teacher union. Using his data, we coded the gender of each candidate using the candidates' first names. We were able to code 93% of the observations. As in our own dataset, roughly 40% of the school board candidates in Moe's dataset are women. But a t-test indicates that there is no significant difference in the probability of being endorsed by a teacher union for women and men candidates: 37.2% of the women were endorsed, and 35.5% of the men were. When we limit the analysis to races that featured both men and women candidates (mixed-gender races), we still find that the shares of men and women who are endorsed by the teacher union are statistically indistinguishable. Therefore, at least for school board elections, we have little reason to worry that the increased influence of this interest group in off-cycle school board elections is generating bigger or smaller advantages for women candidates in off-cycle elections.

Anzia, Sarah. 2014. *Timing and Turnout: How Off-cycle Elections Favor Organized Groups*. Chicago: University of Chicago Press.

Anzia, Sarah F. 2019. "When Does a Group of Citizens Influence Policy? Evidence from Senior Citizen Participation in City Politics." *Journal of Politics* 81(1): 1-14.

Kogan, Vladimir, Stéphane Lavertu, and Zachary Peskowitz. 2018. "Election Timing, Electorate Composition, and Policy Outcomes: Evidence from School Districts." *American Journal of Political Science* 62(3): 637-51

Lawless, Jennifer L., and Kathryn Pearson. 2008. "The Primary Reason for Women's Underrepresentation? Reevaluating the Conventional Wisdom." *Journal of Politics* 70(1): 67–82.

Moe, Terry M. 2005. "Teacher Unions and School Board Elections." In *Besieged: School Boards and the Future of Education Politics*, ed. William G. Howell. Washington, DC: Brookings Institution Press, 254-87.

Moe, Terry M. 2006. "Political Control and the Power of the Agent." *Journal of Law, Economics, and Organization* 22(1): 1-29.

A4. Empirical Analyses and Robustness Checks

In the paper, in Table 2, we provide estimates of the main variables of interest, but not the covariates that we also include in our models. The full table is below.

	(1) Council	(2) Mayor	(3) School Board
Woman	0.033***	-0.059**	0.063***
	(0.008)	(0.023)	(0.009)
Republican presidential vote	-0.015	0.048	0.003
	(0.026)	(0.067)	(0.051)
Woman x Republican pres. vote	-0.074	-0.038	-0.178***
	(0.050)	(0.148)	(0.080)
Candidates per seat	-0.061***	-0.019***	-0.106***
	(0.005)	(0.004)	(0.009)
Incumbents per seat	-0.202***	-0.167***	-0.208***
	(0.007)	(0.013)	(0.011)
Ln(population)	-0.041***	-0.036***	-0.030***
	(0.002)	(0.007)	(0.004)
Mayoral experience	0.486***	0.407***	0.618***
	(0.038)	(0.053)	(0.135)
Council experience	0.328***	0.181***	0.162
	(0.025)	(0.022)	(0.123)
School board experience	0.244***	0.102	0.255***
	(0.031)	(0.151)	(0.036)
Other govt. experience	0.163***	0.112***	0.195***
	(0.013)	(0.042)	(0.026)
Business experience	0.058***	-0.017	0.044***
	(0.007)	(0.016)	(0.010)
Law experience	0.069***	0.054	0.014
	(0.014)	(0.044)	(0.021)
Education experience	0.102***	0.035	0.194***
	(0.013)	(0.032)	(0.010)
Activism experience	0.022	-0.054*	0.069***
	(0.016)	(0.032)	(0.018)
Constant	0.940***	0.697***	0.950***
	(0.034)	(0.080)	(0.031)
R^2	0.14	0.21	0.13
N	19,341	2,244	18,851

A4.1. Analyses Using Logit Models

We find substantively similar effects using logistic regression instead of OLS. In the three tables to follow, we show the results of the models from Tables 1, 2, and 3 of the paper estimated with logit. We also estimate a model (below, column 2) where we control for whether the city council election was at-large or by district and interact that with *Woman*.

Table: Analysis for H1-H2 with Logit Models

	(1)	(2) District vs. At-Large	(3) City Fixed Effects	(4) Competitive Mixed-Gender Races	(5)	(6) County Fixed Effects	(7) Competitive Mixed-Gender Races
Woman	0.186	0.207	0.211	0.228	0.162	0.165	0.198
	(0.0422)	(0.0431)	(0.0442)	(0.0469)	(0.0575)	(0.0576)	(0.0681)
Mayor	-0.444	-0.433	-0.475	-0.381			
	(0.0756)	(0.0759)	(0.0774)	(0.120)			
Woman x Mayor	-0.589	-0.610	-0.603	-0.762			
	(0.164)	(0.169)	(0.170)	(0.221)			
Districted election		0.0800					
		(0.0675)					
Woman x Districted Election		-0.157					
		(0.152)					
School board					0.0131	0.00895	0.0586
					(0.0273)	(0.0303)	(0.0275)
Woman x School board					0.153	0.153	0.159
					(0.0703)	(0.0705)	(0.0795)
Candidates per seat	-0.510	-0.509	-0.504	-0.432	-0.589	-0.591	-0.534
	(0.0224)	(0.0227)	(0.0267)	(0.0220)	(0.0271)	(0.0276)	(0.0247)
Incumbents per seat	-1.152	-1.147	-1.215	-1.044	-1.066	-1.065	-1.002
	(0.0380)	(0.0400)	(0.0444)	(0.0426)	(0.0552)	(0.0549)	(0.0568)
Ln(population)	-0.191	-0.195	-0.0754	-0.184	-0.149	-0.125	-0.147
	(0.0123)	(0.0140)	(0.123)	(0.0141)	(0.0129)	(0.0119)	(0.0143)
Mayoral experience	2.461	2.463	2.639	2.506	2.592	2.641	2.637
	(0.214)	(0.215)	(0.236)	(0.256)	(0.331)	(0.342)	(0.343)
Council experience	1.317	1.318	1.422	1.415	1.432	1.448	1.469
	(0.102)	(0.102)	(0.108)	(0.126)	(0.164)	(0.161)	(0.210)
School board experience	1.224	1.230	1.418	1.042	1.189	1.206	1.120
	(0.151)	(0.152)	(0.158)	(0.174)	(0.125)	(0.123)	(0.123)
Other govt. experience	0.848	0.849	0.959	0.906	0.872	0.898	0.934
	(0.0637)	(0.0639)	(0.0691)	(0.0690)	(0.0749)	(0.0826)	(0.0725)
Business experience	0.292	0.291	0.353	0.310	0.284	0.303	0.284
	(0.0378)	(0.0379)	(0.0399)	(0.0428)	(0.0354)	(0.0379)	(0.0325)
Law experience	0.359	0.359	0.452	0.345	0.231	0.259	0.212
	(0.0735)	(0.0731)	(0.0791)	(0.0810)	(0.0545)	(0.0521)	(0.0775)
Education experience	0.545	0.544	0.574	0.559	0.826	0.831	0.840
	(0.0630)	(0.0630)	(0.0653)	(0.0705)	(0.0426)	(0.0430)	(0.0398)
Activism experience	0.0843	0.0831	0.142	0.134	0.240	0.259	0.261
	(0.0907)	(0.0907)	(0.0960)	(0.0992)	(0.0646)	(0.0686)	(0.0680)
Fixed Effects for Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects for City	No	No	Yes	No	No	No	No
Fixed Effects for County	No	No	No	No	No	Yes	No
Pseudo R-Squared	0.147	0.147	0.163	0.127	0.125	0.127	0.117
Observations	21,783	21,783	21,780	16,700	38,390	38,390	31,184
Woman + (Woman x Mayor)	-0.403	-0.403	-0.393	-0.534			
	(0.164)	(0.164)	(0.169)	(0.221)			
Woman + (Woman x School board)					0.315	0.318	0.357
					(0.0501)	(0.0502)	(0.0537)

Table: Analysis for H3 with Logit Models

	(1) City Council	(2) Mayor	(3) School Board
Woman	0.179	-0.373	0.306
	(0.0427)	(0.168)	(0.0456)
Republican pres. vote	0.0193	-0.0321	0.0895
	(0.133)	(0.508)	(0.259)
Woman x Rep. pres. vote	-0.444	-0.0918	-0.841
	(0.259)	(1.414)	(0.376)
Candidates per seat	-0.532	-0.371	-0.651
	(0.0213)	(0.0526)	(0.0292)
Incumbents per seat	-1.131	-1.293	-1.014
	(0.0400)	(0.106)	(0.0618)
Ln(population)	-0.191	-0.206	-0.135
	(0.0124)	(0.0442)	(0.0172)
Mayoral experience	2.576	2.089	
	(0.302)	(0.285)	
Council experience	1.475	1.077	0.762
	(0.135)	(0.133)	(0.564)
School board experience	1.276	0.768	1.151
	(0.158)	(0.869)	(0.172)
Other govt. experience	0.843	0.871	0.926
	(0.0660)	(0.294)	(0.123)
Business experience	0.329	-0.127	0.223
	(0.0393)	(0.135)	(0.0492)
Law experience	0.363	0.445	0.0625
	(0.0736)	(0.360)	(0.103)
Education experience	0.575	0.233	0.922
	(0.0652)	(0.264)	(0.0482)
Activism experience	0.0960	-1.055	0.322
	(0.0930)	(0.612)	(0.0894)
Fixed Effects for Year	Yes	Yes	Yes
Pseudo R-Squared	0.137	0.239	0.107
Observations	19,341	2,244	18,849

Table: Election Timing Analysis with Logit Models

	(1) City Council	(2) Mayor	(3) School Board	(4) City Council	(5) School Board
Woman	0.0612	-0.285	0.230	0.0230	0.180
	(0.0764)	(0.336)	(0.0662)	(0.0753)	(0.0427)
On-cycle	0.0115	-0.176	-0.0325	0.00306	-0.0604
	(0.0965)	(0.234)	(0.175)	(0.0961)	(0.150)
Woman x On-cycle	0.223	-0.121	0.150	0.281	0.236
	(0.108)	(0.437)	(0.110)	(0.107)	(0.0849)
Republican pres. vote				0.0937	0.518
				(0.238)	(0.292)
Woman x Rep. pres. vote				-0.575	-1.338
				(0.512)	(0.353)
On-cycle x Rep. pres. vote				-0.115	-0.721
				(0.313)	(0.419)
Woman x On-cycle x Rep. pres. vote				-0.140	0.612
				(0.724)	(0.672)
Candidates per seat	-0.525	-0.360	-0.642	-0.522	-0.638
	(0.0210)	(0.0536)	(0.0298)	(0.0210)	(0.0296)
Incumbents per seat	-1.134	-1.242	-1.024	-1.132	-1.022
	(0.0402)	(0.111)	(0.0652)	(0.0405)	(0.0638)
Ln(population)	-0.175	-0.196	-0.129	-0.179	-0.136
	(0.0131)	(0.0476)	(0.0158)	(0.0133)	(0.0168)
Mayoral experience	2.544	2.198		2.545	
	(0.309)	(0.295)		(0.308)	
Council experience	1.450	1.108	0.686	1.456	0.693
	(0.140)	(0.136)	(0.642)	(0.139)	(0.639)
School board experience	1.209	0.752	1.190	1.205	1.196
	(0.162)	(0.843)	(0.180)	(0.164)	(0.179)
Other govt. experience	0.851	0.754	0.928	0.842	0.930
	(0.0679)	(0.317)	(0.130)	(0.0686)	(0.130)
Business experience	0.325	-0.139	0.227	0.326	0.231
	(0.0401)	(0.144)	(0.0500)	(0.0401)	(0.0492)
Law experience	0.348	0.340	0.0768	0.345	0.0703
	(0.0764)	(0.359)	(0.0966)	(0.0768)	(0.0993)
Education experience	0.559	0.188	0.926	0.559	0.929
	(0.0669)	(0.271)	(0.0523)	(0.0672)	(0.0519)
Activism experience	0.0863	-1.046	0.317	0.0545	0.290
	(0.101)	(0.625)	(0.0914)	(0.102)	(0.0936)
Fixed Effects for Year	Yes	Yes	Yes	Yes	Yes
Pseudo R-Squared	0.129	0.221	0.107	0.13	0.107
Observations	17,745	1,935	17,940	17,604	17,940
Woman + (Woman x On-cycle)	0.285	-0.406	0.380	0.304	0.416
	(0.0624)	(0.224)	(0.0864)	(0.0618)	(0.0787)
(Woman x Rep. pres. vote)				-0.715	-0.727
+ (Woman x On-cycle x Rep. pres. vote)				(0.384)	(0.613)

Notes: Standard errors clustered by city in columns 1, 2, and 4, and county in columns 3 and 5 in parentheses. All non-incumbent candidates included.

A4.2. Analyses Including Incumbents

In the tables that follow, we provide versions of Tables 1, 2, and 3 from the paper, plus the model that controls for district versus at-large city council elections, but including all candidates and a dummy for whether the candidate is an incumbent.

Table: Analysis for H1-H2 with incumbents included

	(1)	(2) District vs. At-Large	(3) City Fixed Effects	(4) Competitive Mixed-Gender Races	(5)	(6) County Fixed Effects	(7) Competitive Mixed-Gender Races
Woman	0.0325	0.0342	0.0320	0.0420	0.0281	0.0274	0.0341
	(0.00634)	(0.00654)	(0.00659)	(0.00722)	(0.00903)	(0.00909)	(0.0102)
Mayor	0.00710	0.0115	0.00252	0.00632			
	(0.00797)	(0.00802)	(0.00762)	(0.0142)			
Woman x Mayor	-0.0979	-0.0997	-0.0902	-0.126			
	(0.0206)	(0.0211)	(0.0213)	(0.0277)			
Districted election		0.0240					
		(0.00909)					
Woman x Districted Election		-0.0124					
		(0.0208)					
School board					-0.0144	-0.0150	-0.00483
					(0.00382)	(0.00380)	(0.00410)
Woman x School board					0.0293	0.0306	0.0339
					(0.00968)	(0.00977)	(0.0108)
Incumbent	0.562	0.562	0.557	0.557	0.492	0.492	0.493
	(0.0130)	(0.0129)	(0.0128)	(0.0129)	(0.0203)	(0.0204)	(0.0197)
Candidates per seat	-0.0527	-0.0526	-0.0542	-0.0416	-0.0861	-0.0854	-0.0760
	(0.00626)	(0.00628)	(0.00653)	(0.00561)	(0.00653)	(0.00649)	(0.00584)
Incumbents per seat	-0.178	-0.177	-0.172	-0.155	-0.191	-0.190	-0.178
	(0.00554)	(0.00551)	(0.00586)	(0.00574)	(0.00758)	(0.00797)	(0.00774)
Ln(population)	-0.0202	-0.0225	-0.0118	-0.0217	-0.0122	-0.0102	-0.0126
	(0.00257)	(0.00257)	(0.0104)	(0.00259)	(0.00108)	(0.00106)	(0.00132)
Mayoral experience	0.443	0.444	0.459	0.466	0.460	0.462	0.479
	(0.0315)	(0.0316)	(0.0335)	(0.0392)	(0.0425)	(0.0430)	(0.0471)
Council experience	0.223	0.223	0.232	0.239	0.297	0.299	0.305
	(0.0177)	(0.0178)	(0.0183)	(0.0229)	(0.0304)	(0.0301)	(0.0405)
School board experience	0.209	0.209	0.218	0.173	0.233	0.232	0.222
	(0.0312)	(0.0314)	(0.0324)	(0.0369)	(0.0258)	(0.0254)	(0.0274)
Other govt. experience	0.156	0.157	0.166	0.169	0.156	0.159	0.169
	(0.0126)	(0.0127)	(0.0132)	(0.0139)	(0.0124)	(0.0126)	(0.0118)
Business experience	0.0431	0.0433	0.0474	0.0468	0.0405	0.0416	0.0406
	(0.00685)	(0.00685)	(0.00709)	(0.00750)	(0.00691)	(0.00690)	(0.00602)
Law experience	0.0607	0.0611	0.0601	0.0579	0.0364	0.0367	0.0347
	(0.0139)	(0.0139)	(0.0145)	(0.0150)	(0.0121)	(0.0119)	(0.0161)
Education experience	0.0864	0.0863	0.0902	0.0888	0.161	0.162	0.164
	(0.0119)	(0.0119)	(0.0122)	(0.0132)	(0.0101)	(0.0102)	(0.00973)
Activism experience	0.0107	0.00979	0.00586	0.0204	0.0384	0.0387	0.0444
	(0.0150)	(0.0151)	(0.0158)	(0.0165)	(0.0120)	(0.0124)	(0.0122)
Fixed Effects for Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects for City	No	No	Yes	No	No	No	No
Fixed Effects for County	No	No	No	No	No	Yes	No
R-Squared	0.287	0.287	0.293	0.265	0.246	0.246	0.242
Observations	29,746	29,746	29,746	22,000	55,544	55,544	44,565
Woman + (Woman x Mayor)	-0.0655	-0.0655	-0.0582	-0.0840			
	(0.0201)	(0.0201)	(0.0209)	(0.0274)			
Woman + (Woman x School board)					0.0574	0.0580	0.0680
					(0.00815)	(0.00822)	(0.00927)

Notes: Standard errors clustered by city in columns 1-4 and county in columns 5-7 in parentheses. All candidates included.

Table: Analysis for H3 with incumbents included

	(1) City Council	(2) Mayor	(3) School Board
Woman	0.0302	-0.0454	0.0576
	(0.00643)	(0.0203)	(0.00837)
Republican pres. vote	0.00813	0.0242	0.0407
	(0.0155)	(0.0522)	(0.0337)
Woman x Rep. pres. vote	-0.0778	0.109	-0.130
	(0.0390)	(0.131)	(0.0696)
Incumbent	0.544	0.707	0.449
	(0.0130)	(0.0276)	(0.0187)
Candidates per seat	-0.0697	-0.0232	-0.119
	(0.00471)	(0.00488)	(0.00781)
Incumbents per seat	-0.185	-0.177	-0.195
	(0.00571)	(0.0132)	(0.00887)
Ln(population)	-0.0168	-0.0168	-0.00885
	(0.00161)	(0.00381)	(0.00131)
Mayoral experience	0.478	0.406	0.537
	(0.0377)	(0.0523)	(0.132)
Council experience	0.326	0.178	0.148
	(0.0254)	(0.0213)	(0.124)
School board experience	0.224	0.105	0.231
	(0.0324)	(0.152)	(0.0372)
Other govt. experience	0.156	0.101	0.184
	(0.0132)	(0.0405)	(0.0249)
Business experience	0.0517	-0.0198	0.0344
	(0.00723)	(0.0164)	(0.0103)
Law experience	0.0612	0.0436	0.00248
	(0.0143)	(0.0438)	(0.0215)
Education experience	0.0959	0.0314	0.183
	(0.0128)	(0.0307)	(0.0110)
Activism experience	0.00943	-0.0566	0.0601
	(0.0157)	(0.0324)	(0.0174)
Fixed Effects for Year	Yes	Yes	Yes
R-Squared	0.280	0.431	0.214
Observations	26,468	3,064	28,862

Notes: Standard errors clustered by city in columns 1-2 and county in column 3 in parentheses. All candidates included.

Table: Election timing analysis with incumbents included

	(1) City Council	(2) Mayor	(3) School Board	(4) City Council	(5) School Board
Woman	0.0108	-0.0571	0.0370	0.00451	0.0304
	(0.0115)	(0.0376)	(0.00800)	(0.0115)	(0.00611)
On-cycle	-0.0103	-0.00767	-0.0336	-0.0122	-0.0396
	(0.0101)	(0.0217)	(0.0232)	(0.01000)	(0.0201)
Woman x On-cycle	0.0347	0.00839	0.0403	0.0447	0.0542
	(0.0167)	(0.0522)	(0.0163)	(0.0166)	(0.0129)
Republican pres. vote				0.00235	0.0583
				(0.0331)	(0.0269)
Woman x Rep. pres. vote				-0.0883	-0.185
				(0.0747)	(0.0495)
On-cycle x Rep. pres. vote				0.0168	-0.000184
				(0.0436)	(0.0483)
Woman x On-cycle x Rep. pres. vote				-0.0309	0.0114
				(0.108)	(0.0983)
Incumbent	0.540	0.686	0.452	0.540	0.452
	(0.0130)	(0.0292)	(0.0189)	(0.0130)	(0.0191)
Candidates per seat	-0.0720	-0.0303	-0.117	-0.0720	-0.117
	(0.00422)	(0.00527)	(0.00797)	(0.00422)	(0.00798)
Incumbents per seat	-0.185	-0.178	-0.196	-0.186	-0.196
	(0.00614)	(0.0144)	(0.00910)	(0.00616)	(0.00897)
Ln(population)	-0.0159	-0.0127	-0.00849	-0.0161	-0.00894
	(0.00179)	(0.00347)	(0.00123)	(0.00177)	(0.00133)
Mayoral experience	0.476	0.436	0.548	0.475	0.545
	(0.0392)	(0.0547)	(0.124)	(0.0392)	(0.130)
Council experience	0.322	0.190	0.135	0.322	0.139
	(0.0264)	(0.0230)	(0.150)	(0.0264)	(0.149)
School board experience	0.220	0.0910	0.241	0.219	0.241
	(0.0340)	(0.150)	(0.0387)	(0.0344)	(0.0386)
Other govt. experience	0.161	0.0935	0.185	0.158	0.185
	(0.0136)	(0.0441)	(0.0265)	(0.0137)	(0.0263)
Business experience	0.0521	-0.0231	0.0347	0.0517	0.0352
	(0.00739)	(0.0187)	(0.0105)	(0.00741)	(0.0105)
Law experience	0.0582	0.0424	0.00331	0.0574	0.00301
	(0.0151)	(0.0466)	(0.0209)	(0.0151)	(0.0210)
Education experience	0.0949	0.0281	0.183	0.0949	0.184
	(0.0133)	(0.0349)	(0.0119)	(0.0133)	(0.0118)
Activism experience	0.00931	-0.0696	0.0567	0.00328	0.0534
	(0.0175)	(0.0363)	(0.0184)	(0.0175)	(0.0184)
Fixed Effects for Year	Yes	Yes	Yes	Yes	Yes
R-Squared	0.273	0.414	0.216	0.274	0.217
Observations	24,341	2,716	27,526	24,189	27,526
Woman + (Woman x On-cycle)	0.0455	-0.0487	0.0773	0.0492	0.0846
	(0.00971)	(0.0295)	(0.0149)	(0.00976)	(0.0124)
(Woman x Rep. pres. vote)				-0.119	-0.174
+ (Woman x On-cycle x Rep. pres. vote)				(0.0598)	(0.0973)

Notes: Standard errors clustered by city in columns 1, 2, and 4, and county in columns 3 and 5 in parentheses. All candidates included.

A4.3. Analyses Interacting Candidate Gender with Experience Indicators

We show here that our results are not substantively changed when we interact candidate gender with our indicators for prior experience.

Table: Analysis with candidate gender interacted with experience variables

	H1: Mayor vs. Council	H2: Council vs. School board	H3: City Council	H3: School Board
Woman	0.0231	0.0128	0.0181	0.0521
	(0.0104)	(0.00992)	(0.0107)	(0.00946)
Republican pres. vote			-0.0142	0.000876
			(0.0258)	(0.0518)
Woman x Rep. pres. vote			-0.0794	-0.176
			(0.0505)	(0.0791)
Woman x Mayor	-0.117			
	(0.0227)			
Woman x School Board		0.0407		
		(0.0126)		
Mayor	-0.0308			
	(0.0114)			
Candidates per seat	-0.0433	-0.0752	-0.0611	-0.106
	(0.00604)	(0.00634)	(0.00498)	(0.00865)
Incumbents per seat	-0.193	-0.207	-0.202	-0.208
	(0.00628)	(0.00906)	(0.00657)	(0.0113)
Ln(population)	-0.0440	-0.0337	-0.0406	-0.0301
	(0.00363)	(0.00241)	(0.00247)	(0.00366)
Mayor experience	0.505	0.532	0.536	0.816
	(0.0355)	(0.0526)	(0.0453)	(0.0184)
Woman x Mayor exp.	-0.130	-0.134	-0.135	-0.409
	(0.0572)	(0.0675)	(0.0688)	(0.0366)
Council experience	0.240	0.312	0.323	0.229
	(0.0198)	(0.0362)	(0.0282)	(0.138)
Woman x Council exp.	0.0251	0.0138	0.0208	-0.234
	(0.0346)	(0.0398)	(0.0482)	(0.210)
School board experience	0.258	0.249	0.297	0.219
	(0.0431)	(0.0311)	(0.0441)	(0.0482)
Woman x School board exp.	-0.0686	0.0103	-0.122	0.0874
	(0.0650)	(0.0421)	(0.0664)	(0.0650)
Other govt. experience	0.154	0.172	0.152	0.231
	(0.0149)	(0.0155)	(0.0157)	(0.0232)
Woman x Prior govt. exp.	0.0307	-0.00147	0.0387	-0.189
	(0.0284)	(0.0372)	(0.0293)	(0.0629)
Business experience	0.0414	0.0427	0.0509	0.0305
	(0.00787)	(0.00785)	(0.00826)	(0.0110)
Woman x Business exp.	0.0317	0.0331	0.0290	0.0395
	(0.0154)	(0.0150)	(0.0165)	(0.0201)
Law experience	0.0573	0.0405	0.0552	0.0159
	(0.0163)	(0.0161)	(0.0169)	(0.0286)
Woman x Law exp.	0.0422	0.0257	0.0511	-0.00688
	(0.0323)	(0.0312)	(0.0336)	(0.0397)
Education experience	0.0975	0.156	0.104	0.183
	(0.0149)	(0.0112)	(0.0159)	(0.0127)
Woman x Educ. exp	-0.0111	0.0230	-0.00308	0.0248
	(0.0237)	(0.0137)	(0.0249)	(0.0155)
Activism experience	0.00113	0.0212	-0.00298	0.0556
	(0.0194)	(0.0158)	(0.0202)	(0.0333)
Woman x Activism exp.	0.0472	0.0540	0.0558	0.0211
	(0.0316)	(0.0179)	(0.0335)	(0.0403)
School board		0.0101		
		(0.00666)		
Fixed Effects for Year	Yes	Yes	Yes	Yes
R-Squared	0.143	0.137	0.145	0.128
Observations	21,783	38,390	19,341	18,851

Notes: Standard errors clustered by city in columns 1 and 3 and by county in columns 2 and 4 in parentheses. Only non-incumbent candidates included.

A4.4. Analyses with Squared Republican Vote Share and At-large Districts

Below, we present two analyses not shown in the paper: one that examines whether the relationship between Republican presidential vote share and women's win rates takes a non-linear form for city council candidates, and one that examines whether the results hold when we examine cities and school districts with different institutional mechanisms for electing city council members.

Republican presidential vote squared, and at-large versus by district or area

	(1)	(2)	(3)	(4)
Woman	0.056	0.032	0.034	0.032
	(0.010)	(0.010)	(0.011)	(0.011)
Republican presidential vote	-0.012			
	(0.025)			
Woman × Republican presidential vote	-0.109			
	(0.048)			
(Rep. pres. vote)^2	0.233			
	(0.128)			
Woman × (Rep. pres. vote)^2	-0.927			
	(0.236)			
School board		0.008	0.012	0.009
		(0.007)	(0.007)	(0.007)
Woman × School board		0.04	0.035	0.039
		(0.014)	(0.014)	(0.014)
District		0.028	0.041	
		(0.009)	(0.012)	
Woman × District		-0.025	-0.039	
		(0.017)	(0.024)	
School board × District			-0.026	
			(0.016)	
Woman × School board × District			0.028	
			(0.030)	
District, one vote				0.025
				(0.009)
Woman × District, one vote				-0.025
				(0.018)
R-squared	0.14	0.14	0.14	0.14
Observations	19,341	38,390	38,390	38,390

Notes: Standard errors clustered by city in column 1 and by county in columns 2-4. All models include year fixed effects and the controls from Table 1 of the paper.

First, we present the results of a model of city council non-incumbents' win rates that includes both Republican presidential vote and its square, both interacted with *Woman*. We show those model estimates in column 1 of the table above. There, we can see that both the interaction of *Woman* and *Republican presidential vote* and *Woman* and the square of *Republican presidential vote* are statistically significant. Substantively, these estimates show that for the most liberal cities, the women's advantage in city council races actually grows somewhat as one moves to slightly more moderate (but still very liberal) cities. For the more moderate and conservative cities, however, the women's advantage narrows as one moves to more conservative cities.

Next, we show that the main effects of interest in column 4 of Table 1 are not affected if we account for whether the city council and school board elections were held at-large or by district or area. We show those results in columns 2-4 of the table above.

In column 2, we include an indicator for whether the school board and city council races were held by district or area, as well as the interaction of that indicator with *Woman*. The coefficient on *Woman* × *District* is not statistically significant, suggesting that the women's

advantage is not significantly smaller in elections held by district or area. In column 3, we allow for the possibility that the effect of districted elections on the women's advantage might differ for city council and school board elections; we include a triple interaction of *Woman*, *District*, and *School board* and all component interactions. We again find that there is no difference in the women's advantage in city council elections held by district or area, nor is there a distinct difference in school board elections. Finally, in column 4, we account for the fact that some school board elections that are held by district or area can have more than one seat per district or area--and that the women's advantage may depend on whether voters are allowed to vote for only one candidate or more than one candidate. In column 4, therefore, we interact *Woman* with an indicator for whether the city council or school board elections are by district or area *and* have only one seat up for election. Here, too, we find that the women's advantage is not significantly different in elections with only one seat being contested.

A4.5. Analyses Restricted to Cities with Separately Elected Mayors and in At-Large Districts

We find no evidence that our results are affected by restricting the comparisons between mayoral and city council races only to cities that have separately elected mayors.

Table: Analysis for H1-H2 in Cities with Mayors Only

	(1)	(2) City Fixed Effects
Woman	0.0481	0.0524
	(0.0119)	(0.0121)
Mayor	-0.0349	-0.0409
	(0.0103)	(0.0102)
Woman x Mayor	-0.123	-0.119
	(0.0229)	(0.0231)
Candidates per seat	-0.0341	-0.0366
	(0.00533)	(0.00549)
Incumbents per seat	-0.176	-0.169
	(0.00745)	(0.00791)
Ln(population)	-0.0401	-0.0134
	(0.00446)	(0.0341)
Mayoral experience	0.425	0.442
	(0.0403)	(0.0421)
Council experience	0.236	0.245
	(0.0202)	(0.0208)
School board experience	0.229	0.250
	(0.0386)	(0.0394)
Other govt. experience	0.132	0.141
	(0.0180)	(0.0184)
Business experience	0.0287	0.0398
	(0.00902)	(0.00925)
Law experience	0.0651	0.0753
	(0.0197)	(0.0202)
Education experience	0.0987	0.102
	(0.0162)	(0.0163)
Activism experience	0.00159	0.00263
	(0.0177)	(0.0176)
Fixed Effects for Year	Yes	Yes
Fixed Effects for City	No	Yes
R-Squared	0.151	0.172
Observations	10,796	10,796
Woman + (Woman x Mayor)	-0.0746	-0.0668
	(0.0212)	(0.0215)

Notes: Standard errors clustered by city. Includes all non-incumbent candidates running for city council or mayor.

We also include a version of the analysis where we interact *Woman* and *District*, where *District* equals one for city council elections held by district or area and zero for at-large city council and mayoral races. Most city council and school board races are held at-large, but some are by district, and others are by area (in which candidates run for specific seats but all voters vote on all seats). Some work suggests that districted city elections may be friendlier to women than at-large elections (e.g., Crowder-Meyer et al., 2015), so this model investigates whether the mayor-council gap is primarily driven by the districted cities. We find that it is not. Actually, the women's advantage in districted elections appears smaller than in at-large elections, although that difference is not significant. Regardless, the gap between women's and men's win rates is significantly smaller in mayoral elections than in either districted or at-large city council elections.

Table: Analysis for H1-H2 Comparing Districted and at-Large Council Elections

	(1)
Woman	0.042
	(0.008)
Mayor	-0.024
	(0.012)
Woman x Mayor	-0.122
	(0.023)
Districted	0.032
	(0.012)
Woman x Districted	-0.033
	(0.025)
Candidates per seat	-0.043
	(0.006)
Incumbents per seat	-0.190
	(0.006)
Ln(population)	-0.047
	(0.004)
Mayoral experience	0.464
	(0.032)
Council experience	0.247
	(0.018)
School board experience	0.230
	(0.031)
Other govt. experience	0.163
	(0.013)
Business experience	0.049
	(0.007)
Law experience	0.068
	(0.014)
Education experience	0.093
	(0.012)
Activism experience	0.021
	(0.015)
Constant	0.932
	(0.035)
R^2	0.14
N	21,783

A4.6. Analyses Using Continuous GenderizeR Probabilities

When we use the continuous genderizeR probabilities that a name is female, we do not find substantively different effects than when we use a binary indicator.

Table: Analysis for H1-H3 Using Name's Probability Female

	H1: Mayor vs. Council	H2: Council vs. School board	H3: City Council	H3: School Board
Probability woman	0.0379	0.0291	0.0338	0.0644
	(0.00817)	(0.0109)	(0.00820)	(0.00977)
Mayor	-0.0284			
	(0.0118)			
Probability woman x Mayor	-0.112			
	(0.0235)			
School board		0.00956		
		(0.00638)		
Probability woman x School board		0.0388		
		(0.0138)		
Republican pres. vote			-0.00827	0.00572
			(0.0262)	(0.0523)
Probability woman x Rep. pres. vote			-0.0882	-0.184
			(0.0515)	(0.0820)
Candidates per seat	-0.0433	-0.0756	-0.0613	-0.107
	(0.00609)	(0.00644)	(0.00500)	(0.00884)
Incumbents per seat	-0.192	-0.206	-0.201	-0.208
	(0.00636)	(0.00944)	(0.00670)	(0.0116)
Ln(population)	-0.0443	-0.0335	-0.0409	-0.0298
	(0.00364)	(0.00238)	(0.00245)	(0.00362)
Mayoral experience	0.460	0.484	0.489	0.611
	(0.0321)	(0.0434)	(0.0389)	(0.137)
Council experience	0.248	0.316	0.330	0.163
	(0.0180)	(0.0310)	(0.0254)	(0.122)
School board experience	0.236	0.257	0.254	0.256
	(0.0312)	(0.0238)	(0.0319)	(0.0347)
Other govt. experience	0.163	0.173	0.164	0.195
	(0.0128)	(0.0131)	(0.0134)	(0.0273)
Business experience	0.0504	0.0525	0.0597	0.0427
	(0.00679)	(0.00650)	(0.00712)	(0.0100)
Law experience	0.0676	0.0480	0.0673	0.0163
	(0.0137)	(0.0116)	(0.0142)	(0.0224)
Education experience	0.0942	0.167	0.104	0.196
	(0.0119)	(0.0106)	(0.0127)	(0.0107)
Activism experience	0.0202	0.0459	0.0197	0.0621
	(0.0152)	(0.0120)	(0.0158)	(0.0186)
Fixed Effects for Year	Yes	Yes	Yes	Yes
R-Squared	0.142	0.137	0.144	0.127
Observations	21,486	37,997	19,080	18,718
Woman + (Woman x Mayor)	-0.0744			
	(0.0229)			
Woman + (Woman x School board)		0.0679		
		(0.0106)		

Notes: Standard errors clustered by city (mayor, council) and county (school board). Includes all non-incumbent candidates.

A4.7. Analyses Using Vote Share as the Dependent Variable

In the table below, we replace the win/loss dependent variable with the vote share received by the candidate (votes received by the candidate divided by the total number of votes cast in the race). Because it is common for candidates in multi-seat races to win with a small share of the vote, we limit the estimation to non-incumbents running in races with only one seat up for election. The findings below are supportive of H1 and H2 (columns 1-2) but not H3 (columns 3-4).

Table: Analysis for H1-H3 Using Vote Share as the Dependent Variable

	H1: Mayor vs. Council	H2: Council vs. School board	H3: City Council	H3: School Board
Woman	1.540	0.986	1.223	3.076
	(0.723)	(0.759)	(0.745)	(0.591)
Mayor	-3.248			
	(0.766)			
Woman x Mayor	-3.201			
	(0.998)			
School board		0.451		
		(0.837)		
Woman x School Board		2.081		
		(0.874)		
Republican pres. Vote			1.175	4.114
			(3.101)	(3.886)
Woman x Rep. pres. vote			-0.622	-3.287
			(4.443)	(4.723)
Candidates per seat	-3.674	-5.950	-5.110	-9.717
	(0.570)	(0.539)	(0.460)	(1.104)
Incumbents per seat	-8.254	-7.904	-8.838	-6.799
	(0.511)	(0.489)	(0.668)	(0.600)
Ln(population)	-2.207	-1.508	-1.941	-0.765
	(0.395)	(0.141)	(0.301)	(0.226)
Mayoral experience	22.69	20.38	21.74	-3.424
	(1.886)	(2.805)	(4.491)	(3.000)
Council experience	13.82	16.76	18.62	4.087
	(0.892)	(1.365)	(1.958)	(5.845)
School board experience	11.40	10.66	11.82	8.468
	(1.380)	(1.169)	(1.367)	(1.526)
Other govt. experience	8.455	6.566	7.307	4.286
	(0.932)	(0.933)	(1.053)	(2.792)
Business experience	3.235	2.848	3.482	2.177
	(0.564)	(0.534)	(0.605)	(0.730)
Law experience	4.962	4.260	5.190	1.814
	(1.044)	(0.743)	(1.065)	(0.865)
Education experience	3.698	5.323	4.288	5.999
	(0.771)	(0.591)	(0.802)	(0.585)
Activism experience	2.408	1.651	3.306	-0.0182
	(0.937)	(0.595)	(0.945)	(0.741)
Fixed Effects for Year	Yes	Yes	Yes	Yes
R-Squared	0.422	0.435	0.442	0.443
Observations	6,889	8,546	4,570	3,970
Woman + (Woman x Mayor)	-1.661			
	(0.808)			
Woman + (Woman x School Board)		3.067		
		(0.569)		

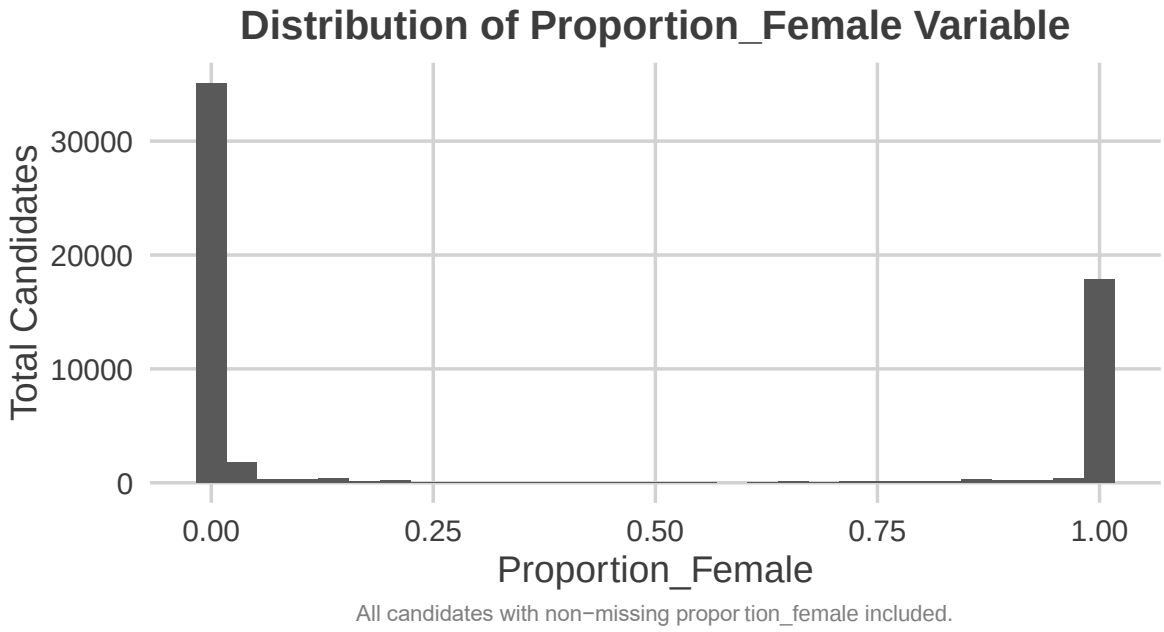
Notes: Standard errors clustered by city in columns 1 and 3, county in columns 2 and 4, in parentheses. Includes all non-incumbent candidates.

A4.8. Analyses Using Ambiguously Gendered Names

One additional robustness check on our results is to examine win rates of candidates with ambiguously gendered names (e.g., "Pat" or "Robin"). If we expect that stereotyping takes place when voters have little information about the candidates—such that they might guess gender from the name—then we should expect the effects of being female to attenuate when voters are unsure if the candidate is indeed a woman. One benefit of such an analysis is that it can help us rule out some possibilities related to selection bias. If we imagine, for instance, that women only opt into certain types of races, and that selection bias is in some way what generates our results, we should not expect the effects to vary based on whether the women's names are ambiguous. Lacking any other theoretical expectation, it is hard to imagine that female "Pats" and "Robins" experience structural constraints like childcare, network effects, etc. differently than "Jessicas" and "Marias" do, nor would we expect them to have a different psychology of decision-making (for instance, being more risk-averse). Name ambiguity therefore has potential to help rule out some of these concerns.

Unfortunately, in our dataset, the percentage of candidates with plausibly ambiguous names is very low. We code names as ambiguous if they have a proportion_female score of less than or equal to .8 (that is, an 80% probability of being female) and greater than or equal to .2. We use these settings because these were the cases that we originally identified as ambiguous and then coded by hand, where possible. As we show in the figure below, however, very few of the candidates in our dataset have ambiguous first names. This limits our ability to carry out and make inferences from analysis that compares women with clearly female names to women with ambiguous names.

Even so, we carry out such an analysis to see what, if anything, is suggested by the results. We divide candidates for which *Woman=1* into two categories: those with ambiguous names (*Woman, Ambiguous name)* and clear female names (*Woman, Unambiguous name*).



Indeed, only 519 women (out of 20,171 women, or 2.6%) fall into the ambiguous category: 21 mayoral candidates, including only 16 non-incumbents; 224 city council candidates, including only 146 non-incumbents; and 274 school board candidates, including only 168 non-incumbents. This prevents us from being able to run any of the analyses with mayors, and to estimate many of the interactions. We therefore focus on the city council and school board elections, and restrict ourselves to more limited analyses where we plausibly have the power to obtain

meaningful estimates. We include the same control variables as all the regressions in the main paper. Each regression has two independent variables of interest: *Woman, Unambiguous name* and *Woman, Ambiguous name*, which together represent all the known female candidates.

The analyses we can run obtain results supportive of our hypotheses. The effect of being female is indeed attenuated—often, eradicated altogether—for women with ambiguously gendered names. Within city council races (see column 1 of the table below), women with clearly gendered names win 3.7% more races than men (two-tailed $p = 0.000$), while women with ambiguous names win at about the same rate—1.3% less often than men ($p = 0.749$). In school board races (see column 2), women with clearly female names win 6.6% more often than men ($p=0.000$), while women with ambiguous names again do not win significantly more often: only 2.7% more often ($p = 0.488$). When we estimate the same model as in Table 1, column 4, of the paper (which compares city council and school board candidates in a test of H2), the results are what we expect: the coefficient on the interaction of *Woman* and *School board* is positive and significant for women with unambiguous names and insignificant for women with ambiguous names. At the bottom of the table, we show that on average, women with clear female names win 7% more often than men in school board races, while women with ambiguous names do not win more often than men in school board races (the combined coefficient, 3.2%, is not statistically significant ($p = 0.404$)).

Looking at the interactions with election timing, we see results similar to those in the main paper (see the second table below). In city council elections (the first column), women with unambiguous names are no more likely than men to win in off-cycle elections but have an advantage of 5.9% in on-cycle elections. For ambiguously named women, the effect is not statistically significant in either off-cycle or on-cycle elections. In school board elections (the second column), we find that women candidates with unambiguous names have a significant advantage over men in off-cycle elections and that it grows in on-cycle elections. For female candidates with ambiguous names, the results are again not significantly different.

In sum, we find evidence consistent with the hypothesis that these effects are due to voter stereotyping. The results we find in the paper for all women candidates do not hold for women with ambiguous names. This is suggestive evidence that at least some of these effects are unlikely to be due to unobserved selection issues, since not all women are affected in the same way. However, the number of women with ambiguous names in our dataset is small, even within city council and school board races where we have many observations. We therefore suggest cautious optimism in interpreting these results: we do not see any evidence that would undercut our main findings, but our confidence in these supplemental estimates must be appropriately low.

Table: Ambiguous Names Analysis

	City council	School Board	H2: Council vs. School Board
Woman, Unambiguous name	0.037	0.066	0.031
	(0.008)	(0.010)	(0.011)
Woman, Ambiguous name	-0.013	0.027	-0.021
	(0.040)	(0.038)	(0.048)
School board			0.009
			(0.006)
Woman, Unamb. x School board			0.039
			(0.014)
Woman, Ambig. x School board			0.053
			(0.066)
Candidates per seat	-0.061	-0.107	-0.075
	(0.005)	(0.009)	(0.006)
Incumbents per seat	-0.201	-0.207	-0.202
	(0.006)	(0.012)	(0.010)
Ln(population)	-0.040	-0.029	-0.028
	(0.002)	(0.003)	(0.002)
Mayoral experience	0.488	0.624	0.491
	(0.039)	(0.132)	(0.045)
Council experience	0.329	0.132	0.317
	(0.025)	(0.105)	(0.030)
School board experience	0.244	0.258	0.256
	(0.031)	(0.035)	(0.023)
Other govt. experience	0.166	0.196	0.178
	(0.013)	(0.027)	(0.014)
Business experience	0.058	0.044	0.056
	(0.007)	(0.010)	(0.007)
Law experience	0.068	0.019	0.054
	(0.014)	(0.021)	(0.011)
Education experience	0.102	0.194	0.166
	(0.012)	(0.011)	(0.011)
Activism experience	0.028	0.071	0.051
	(0.016)	(0.017)	(0.012)
Fixed Effects for Year	Yes	Yes	Yes
R-Squared	0.14	0.13	0.14
Observations	19,695	19,088	38,783
Woman, Unambig.+ Woman, Unambig. x School			.069589 (.0104461)
Woman, Ambig.+ Woman, Ambig. x School			.0324602 (.0386416)

Notes: Standard errors clustered by city (mayor, council) and county (school board). Includes all non-incumbent candidates.

Table: Election Timing Analysis with Ambiguous Names

	(1) City Council	(2) School Board
Woman, Unambiguous name	0.013	0.049
	(0.014)	(0.013)
Woman, Ambiguous name	-0.061	0.036
	(0.062)	(0.068)
On-cycle	-0.003	-0.007
	(0.020)	(0.040)
Woman, Unambiguous name x On-cycle	0.047	0.032
	(0.021)	(0.023)
Woman, Ambiguous name x On-cycle	0.085	-0.044
	(0.098)	(0.107)
Candidates per seat	-0.065	-0.105
	(0.005)	(0.009)
Incumbents per seat	-0.204	-0.209
	(0.007)	(0.012)
Ln(population)	-0.038	-0.029
	(0.003)	(0.003)
Mayoral experience	0.483	0.630
	(0.040)	(0.130)
Council experience	0.324	0.115
	(0.026)	(0.122)
School board experience	0.240	0.267
	(0.034)	(0.036)
Other govt. experience	0.168	0.194
	(0.014)	(0.028)
Business experience	0.058	0.045
	(0.007)	(0.010)
Law experience	0.066	0.020
	(0.015)	(0.021)
Education experience	0.101	0.195
	(0.013)	(0.012)
Activism experience	0.020	0.065
	(0.017)	(0.018)
Fixed Effects for Year	Yes	Yes
R-Squared	0.14	0.13
Observations	17,882	18,166
Woman, Unambig. +	.0592777	.0815444
(Woman, Unambig. x On-cycle)	(.0121874)	(.0183869)
Woman, Ambig. +	.0244242	-.0081073
(Woman, Ambig. x On-cycle)	(.0618703)	(.0636033)

Notes: Standard errors clustered by city for council races and county in school board races, in parentheses. All non-incumbent candidates included.

A4.9. Additional Fixed Effects Models

In this section, we estimate fixed effects models that are described but not shown in the paper. We start with additional models of the city council and mayoral comparisons shown in columns 1-3 of Table 1 of the paper. In column 2 of that table in particular, we present the results of a model that includes city fixed effects (as well as the year fixed effects that are in all models). Here we instead add fixed effects for each city-election date. Perhaps a particular city election had some characteristic (such as a scandal) that made its voters especially inclined to vote for women city councilmembers more so than women mayors. The fixed effects for each city-election date pair partial out the effects of factors that were constant for each election. The estimates are shown in column 1 of the table below. (City population is fixed within city election dates and is therefore dropped from the model.) The results still support H1: the coefficient on *Woman x Mayor* is negative and significant.

In column 2 of the table below, we add fixed effects for each city council and mayoral race. The coefficient on *Mayor* cannot be estimated here because it is constant within races, but we can still estimate the coefficients on *Woman* and *Woman x Mayor*. We again estimate a significant negative coefficient on the interaction, supportive of H1.

Table: City council and mayoral races, additional fixed effects models

	City-election date fixed effects	*Race fixed effects*	*Candidate fixed effects*
	(1)	(2)	(3)
Woman	0.046	0.047	
	(0.009)	(0.010)	
Mayor	-0.063		-0.188
	(0.012)		(0.022)
Woman x Mayor	-0.123	-0.135	-0.11
	(0.024)	(0.031)	(0.038)
Candidates per seat	-0.035		-0.027
	(0.005)		(0.005)
Incumbents per seat	-0.148		-0.105
	(0.013)		(0.015)
Ln(population)			0.096
			(0.119)
Mayoral experience	0.547	0.631	-0.091
	(0.039)	(0.044)	(0.054)
Council experience	0.295	0.334	-0.157
	(0.021)	(0.026)	(0.028)
School board experience	0.275	0.303	0.214
	(0.037)	(0.040)	(0.078)
Other govt. experience	0.201	0.21	0.032
	(0.016)	(0.017)	(0.039)
Business experience	0.063	0.071	0.021
	(0.008)	(0.009)	(0.02)
Law experience	0.088	0.092	-0.122
	(0.016)	(0.017)	(0.062)
Education experience	0.105	0.115	0.083
	(0.014)	(0.015)	(0.047)
Activism experience	0.029	0.036	-0.017
	-0.018	(0.019)	(0.04)
Observations	21,787	21,783	10,796

Notes: Standard errors clustered by city in parentheses. Model 3 (with candidate fixed effects) also includes year fixed effects.

One might also wonder whether it is just differences in the women who run for mayor (as compared to city council) that are producing this negative relationship. To evaluate this, we coded unique individual identifiers for all nonincumbent candidates who ran for mayor or city council in cities that have elected mayors. In column 3 of the table above, we limit the sample to these cities and include candidate fixed effects. Here we cannot estimate the coefficient on *Woman* because it doesn't vary within candidates, but we can estimate the coefficients on *Mayor* and *Woman x Mayor*. The coefficient on *Mayor* indicates that the probability of a man winning a mayoral race is significantly lower than his probability of winning a city council race. The negative coefficient on *Woman x Mayor* shows that the gap between the probability of winning a city council race and a mayoral race is even bigger for women. This, too, is supportive of H1.

Next we turn to the models that compare women and men candidates in city council and school board races. As we note in the paper, most school districts in California are not coterminous with municipal governments, which complicates the issue of including jurisdiction fixed effects. In the paper, we include county fixed effects instead (see Table 1, column 5), but here we run some alternative specifications.

We first identify a small subset of school districts that *are* coterminous with municipal governments so that we can include jurisdiction fixed effects—thus comparing the win rates of women and men in school board and city council races within the same area, with the same voters. We first acquired school district and municipal government shapefiles,[3] rounded their land area to the nearest 100,000 square meters (slightly less than 25 acres), and generated a list of 228 districts whose rounded land area matched that of a municipal government. We then researched each of those districts individually to determine whether they are coterminous, using descriptions on school districts' websites, information in districts' Wikipedia pages, and maps of the districts and their component city or cities. We coded cities as non-coterminous if they were described as serving residents from multiple municipalities, when the municipality included multiple school districts serving the same grades, or when maps of the district and city land boundaries were discernibly different. We were able to identify 32 school districts that are coterminous with 31 municipal governments. (One city has both a coterminous elementary school district and secondary school district.)

In the table below, we limit the model from Table 1, column 4 of the main paper to candidates running in these 32 school districts and 31 cities, and we include fixed effects for the 31 unique jurisdictions. We estimate a large, positive coefficient on the interaction of *Woman* and *School Board*. (The coefficient on *Woman* for city council races is insignificant, but again, we do not have a hypothesis about the direction of that effect.) Therefore, even when we compare how women candidates fare (relative to men) in school board races and city council races *in the same jurisdiction*, we find that the gap between women's and men's win rates is significantly larger in school board races.

In column 2 of the table below, we turn back to the full sample and instead include fixed effects for every jurisdiction-election date. Here, however, each school district and city is considered a unique jurisdiction (unlike in column 1). We cannot estimate the coefficient on *School board* because it is constant within jurisdictions, but we can estimate the coefficient on *Woman* × *School board* since *Woman* varies within jurisdiction. We still estimate a positive, significant coefficient on this interaction term, supportive of H2. The same is true in column 3, where we include fixed effects for each individual race. Partialling out the effects of any race-level characteristics, we find that the gap in win rates between women and men is larger in school board races than in city council races.

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[3] The school district shapefiles are from the National Center for Education Statistics, available at https://nces.ed.gov/programs/edge/Geographic/DistrictBoundaries, and the municipal government shapefiles are available through the California Open Data Portal at https://data.ca.gov/dataset/ca-geographic-boundaries. (Both files were accessed in April 2020).

Table: City councils and school districts, additional fixed effects models

	Jurisdiction fixed effects (coterminous only)	*Jurisdiction-election date fixed effects*	*Race fixed effects*
	(1)	(2)	(3)
Woman	0.012	0.037	0.041
	(0.023)	(0.010)	(0.010)
School board	0.013		
	(0.020)		
Woman x School board	0.127	0.042	0.043
	(0.047)	(0.014)	(0.014)
Candidates per seat	-0.08	-0.056	
	(0.013)	(0.008)	
Incumbents per seat	-0.208	-0.156	
	(0.023)	(0.013)	
Ln(population)	-0.009		
	(0.053)		
Mayoral experience	0.411	0.597	0.612
	(0.160)	(0.051)	(0.053)
Council experience	0.343	0.401	0.413
	(0.088)	(0.033)	(0.035)
School board experience	0.186	0.319	0.356
	(0.094)	(0.028)	(0.032)
Other govt. experience	0.197	0.215	0.225
	(0.046)	(0.015)	(0.016)
Business experience	0.078	0.068	0.073
	(0.023)	(0.007)	(0.008)
Law experience	0.069	0.068	0.07
	(0.031)	(0.014)	(0.015)
Education experience	0.098	0.2	0.211
	(0.040)	(0.010)	(0.010)
Activism experience	0.048	0.064	0.064
	-0.043	(0.015)	(0.016)
Observations	2,031	38,635	38,390

Notes: Standard errors clustered by jurisdiction in parentheses. Model 1 also includes year fixed effects.

Finally, in the table below, we estimate the city council and school district models from Table 2 first with jurisdiction-year fixed effects, then with fixed effects for individual races. In columns 1 and 2 of the table below, the coefficients on *Woman* × *Republican pres. vote* are negative, as expected, but not statistically significant. In columns 3 and 4, which model election results for school board candidates, the coefficients on *Woman* × *Republican pres. vote* are negative and significant, supportive of H3.

Table: Constituency conservatism, additional fixed effects models

	City-election date fixed effects	*Race fixed effects (city council)*	*School district-election date fixed effects*	*Race fixed effects (school board)*
	(1)	(2)	(3)	(4)
Woman	0.042	0.045	0.076	0.078
	(0.010)	(0.010)	(0.010)	(0.010)
Woman x Republican pres. vote	-0.069	-0.073	-0.212	-0.238
	(0.060)	(0.064)	(0.079)	(0.084)
Candidates per seat	-0.045		-0.097	
	(0.007)		(0.011)	
Incumbents per seat	-0.157		-0.153	
	(0.018)		(0.018)	
Mayoral experience	0.594	0.607	0.586	0.882
	(0.051)	(0.054)	(0.019)	(0.017)
Council experience	0.403	0.414	0.272	0.232
	(0.034)	(0.036)	(0.157)	(0.168)
School board experience	0.301	0.32	0.362	0.401
	(0.040)	(0.042)	(0.042)	(0.047)
Other govt. experience	0.204	0.209	0.241	0.259
	(0.017)	(0.018)	(0.039)	(0.042)
Business experience	0.073	0.078	0.059	0.062
	(0.009)	(0.009)	(0.013)	(0.014)
Law experience	0.096	0.099	0.026	0.023
	(0.017)	(0.018)	(0.025)	(0.027)
Education experience	0.12	0.129	0.242	0.256
	(0.015)	(0.016)	(0.012)	(0.012)
Activism experience	0.036	0.04	0.09	0.083
	(0.019)	(0.020)	(0.023)	(0.026)
Observations	19,341	19,341	18,851	18,851

Notes: Standards error clustered by jurisdiction in parentheses.

A4.10. Alternative Approaches, Candidate Experience

In Figure 1 of the paper, where we compare the raw win rates of non-incumbent candidates in different races, we find that women and men win at the same rates in mayoral races. This is still supportive of H1 because the gap between women and men's win rates is smaller in mayoral races than it is in city council races (where women do better than men on average). Then, in the models in Table 1 of the paper, we control for candidate experience and race competitiveness, and because women mayoral candidates tend to be more experienced, we find evidence that women mayoral candidates win less often than men with the same experience.

In the table below, we show that when we drop the candidate experience and race competitiveness variables from the model, the coefficient on the interaction term, *Woman X Mayor*, is still negative and significant, which is supportive of H1, but that we do not see that women are less likely than men to win mayoral races: the combination of the coefficients on *Woman* and *Woman X Mayor* is not significantly different from zero. Thus, it is only when we control for competitiveness and candidate experience that we see this latter negative relationship.

In column 2, we approach this in a different way and model mayoral candidates' win rates including only candidates with no city council experience. (We still include the other experience controls.) The coefficient on *Woman* is negative and significant. In column 3, we model mayoral candidates' win rates but only including candidates without any of the most common experiences: mayoral, city council, business, or education. Our findings are substantively the same.

Table: More models of candidate experience

	City council and mayor	*Mayor*	*Mayor*
	(1)	(2)	(3)
Woman	0.054	-0.057	-0.059
	(0.008)	(0.022)	(0.028)
Mayor	-0.035		
	(0.010)		
Woman X Mayor	-0.067		
	(0.024)		
Ln(population)	-0.063	-0.042	-0.04
	(0.004)	(0.007)	(0.009)
Candidates per seat		-0.015	-0.013
		(0.004)	(0.003)
Incumbents per seat		-0.145	-0.118
		(0.015)	(0.021)
Mayoral experience		0.445	
		(0.054)	
School board experience		0.121	
		(0.149)	
Other govt. experience		0.122	
		(0.042)	
Business experience		0.001	
		(0.017)	
Law experience		0.057	
		(0.044)	
Education experience		0.061	
		(0.032)	
Activism experience		-0.041	
		(0.029)	
R-squared	0.05	0.22	0.12
Observations	21,783	1,691	992

Notes: Standard errors clustered by city in parentheses. Models include year fixed effects.

A4.11. Sensitivity Analysis

A common concern with observational studies is that the results found may be "sensitive" to the variables included—and more importantly, not included—in the models. In particular, omitted variable bias is a concern. To address this, we conduct a sensitivity analysis using Cinelli and Hazlett's (2020) "sensemakr" package in R.

A sensitivity analysis helps us answer questions like how "strong" an omitted variable would have to be before the relationships we observe would disappear. Given the number of models that we present across several tables, we restrict our analyses to the significant estimates we obtain for the most basic models we estimate in each table. These are: Table 1, model 1 (our basic test of H1); Table 1, model 4 (our basic test of H2); and Table 2, model 3 (our test of H3 for school boards, which is the only result significant below the .05 level).

Cinelli and Hazlett's (2020) package does not require assumptions about the linearity of the confounders, but instead provides estimates of sensitivity based on the size of the coefficient of our treatment of interest (which in our case are the calculated marginal interaction effects of the type "Female + Female x ____," e.g., "Female + Female x Mayor"), the size of the standard error of that coefficient, and the degrees of freedom in the model.

The "sensemakr" package can output multiple values to understand how sensitive the findings are. What we are most interested in is the robustness value for the t-value, since that the calculation that tells us when we would lose statistical significance. As defined by Cinelli and Hazlett (2020), **the robustness value for the t-value** describes the minimum strength of association (measured in terms of partial R^2) a confounder would have to be to brings the point estimate into a range where it is no longer statistically different from zero. This is therefore a stronger test than one of their other metrics, robustness value for the point estimate (which estimates how strong a confounder would have to be to reduce the estimate all the way to zero); i.e., where would the confidence interval first overlap zero (t-value < 1.96), rather than the point estimate shrinking to zero (t-value ≈ 0).

One useful tool this package provides is bounding based on another covariate in the model: for instance, we can estimate that a confounder would need to be as strong, twice as strong, etc. as the effect of (e.g.) having prior experience as a city councilor to reduce our effect to insignificance. Note that by "X times as strong," what we mean is an omitted variable as related to both the treatment of interest and the outcome as the variable we employ is. If an omitted variable is correlated very highly with being a woman, for instance, but not at all with winning races, that would not reduce the significance of our estimates, since "woman" would absorb the effects of that omitted variable in our regression. Conversely, an omitted variable that is extremely predictive of winning races, but not at all correlated with gender does not confound the analysis either. So when we speculate about an omitted variable that might reduce the significance of our estimates, we must imagine a variable that correlates reasonably strongly with both the treatment and the outcome. We report the bounding comparison in prose below each table.

Table 1, model 1: "Female + Female x Mayor" (comparing mayor to council)

Estimate (SE)	**df**	**Original T-value**	**RV for T-value**
-0.0800 (.0211)	21,743	-3.77	1.23%

Unobserved confounders orthogonal to all included covariates that explain more than 1.23% of the residual variance of both the treatment and the outcome are strong enough to bring the estimate to a range where it is no longer statistically distinguishable from zero at the significance level of alpha = 0.05. We can get some sense of this by comparing this hypothetical confounder to the effect of prior council experience estimated in the same regression. An omitted variable (or variables) would have to be over **three times as strong** as the effect of prior council experience to drop our t-value (originally 3.77) below 1.96.

Table 1, model 4: "Female + Female x School Board" (comparing school board to council)

Estimate (SE)	**df**	**Original T-value**	**RV for T-value**
0.0671 (.0102)	38,350	6.55	2.33%

Unobserved confounders to all included covariates that explain more than 2.33% of the residual variance of both the treatment and the outcome are strong enough to bring the estimate to a range where it is no longer statistically distinguishable from zero at the significance level of alpha = 0.05. We can get some sense of this by comparing this hypothetical confounder to the effect of prior council experience estimated in the same regression. An omitted variable (or variables) would have to be more than **eight times as strong** as the effect of prior council experience to drop our t-value (originally 6.55) below 1.96.

Table 2, model 3: "Female x Republican Presidential Vote" (for school board)

Estimate (SE)	**df**	**Original T-value**	**RV for T-value**
-0.1777 (.0798)	18,851	-2.23	0.19%

Unobserved confounders to all included covariates that explain more than .19% of the residual variance of both the treatment and the outcome are strong enough to bring the estimate to a range where it is no longer statistically distinguishable from zero at the significance level of alpha = 0.05. We can get some sense of this by comparing this hypothetical confounder to the effect of coming from a career in education estimated in the same regression. An omitted variable (or variables) would have to be at least **two times** as strong as the effect of coming from a career in education to drop our t-value (originally 2.23) below 1.96.